

SAILPLANE & GLIDING

VOL. 68 NO.2



**TRANSYLVANIA TWIST
FOR GLIDING EXPED**

**TWO GOLDS AND TWO
BRONZE MEDALS FOR
TEAM GB IN BENALLA**

**WHY MINILAK FES IS
SIMPLY GREAT VALUE**

GETTING CENTRED

Top tips to develop a feel for thermal centring

£4.50





First capacitive touch screen flight recorder.

Features:

- Simple handling via touch screen
- More than 15 hours of battery autonomy
- Built in GPS receiver and antenna
- Sunlight readable transfective display
- Wifi and Bluetooth
- TP, APT, TSK with final glide
- IGC flight recorder with ENL

Colibri X
~~£708~~ **£602**



Special prices!

For more information visit www.lxnavigation.com and lxavionics.co.uk or call on 01280 700020.

NEW 8.33 Radio? Partial refund procedure issued by the CAA. (see www.lxavionics.co.uk for a link)



Funke

New ATR833S Lightweight, easy to use, low power consumption, great value. Introductory price to S&G readers
£950.00 Inc. VAT



Transponders

TRT 800H LCD £1,980.00
TRT 800H OLED £2,070.00
BXP 6401 £2,220.00
Trig TT21 £1,668.00



Kanardia Instruments

Horis 80 **NEW** £1,038.00
Horis 57 £930.00



Transceivers

ATR 833 LCD £1,230.00
ATR 833 OLED £1,344.00
Becker AR6201 £1,662.00
Trig TY91 £1,290.00
KRT 2 £995.00



PLB for TMG

Fast Find
220/406 MHz
£199.00
Free UK Delivery



ICOM 8.33 Handhelds

A6E Sport £269.00
A24E Sport £359.00
A6E Pro £399.00
A24E Pro £479.00



FR300 Flight Recorder

Only **£99.00**
Free UK Delivery

Contact us for prices for Clubs or bulk purchases - we will not be beaten on price!



Flarm

Red Box £864.00
Mini Box £822.00
Flarm Mouse £756.00

Power Flarm

Core £1,470.00
Portable £2,172.00



Parachutes

Quality and Comfort
Prices approx. £2,400.00

SOFTIE
EMERGENCY PARACHUTES
THE PROFESSIONAL CHOICE
from Para-Phernalia, Inc.



Air Protect Cockpit Safety Foam

13mm thick £19.00
25mm thick £28.00
50mm thick £42.00

LX Avionics - 15 years

Come and see us at our new Avionics and Pilot Store

INSTALLATION SERVICE: We offer a bespoke avionics and instrument installation service at Turweston that ranges from instrument panel adaptation to the cutting and preparation of new panels, new wiring and more. **Call 01280 700020 for more information**



CONTENTS

- 04 BGA NEWS
- 06 YOUR LETTERS
- 07 BGA TROPHIES
- 18 LOW-COST NAV AID
- 20 DON'T FOLLOW THE LEADER!
- 26 GLIDING GALLERY
- 28 REFLECTION ON LAKES GLIDING
- 32 JOYS OF THIS GLIDING LARK
- 36 THE WOLDS WAY
- 44 BGA CONFERENCE AND AGM
- 48 GLIDING GALLERY EXTRA

CLUB

- 50 DEVELOPMENT NEWS
- 52 CLUB GALLERY
- 54 CLUB NEWS
- 60 CLUB FOCUS: WYVERN
- 62 VINTAGE GLIDING
- 64 FAIRER COMP TASK
- 65 WE CAN LEARN ABOUT FLARM FROM THAT
- 66 ACCIDENT/INCIDENT SUMMARIES
- 68 OBITUARIES
- 71 BGA BADGES
- 72 CLASSIFIEDS
- 74 INDEX TO ADVERTISERS

FEATURES

08 WAYS TO GET THAT FEELING

Tony Cronshaw talks to leading coaches about developing a feel for centring in the second part of this thermal centring series

12 WINNING WAYS

Peter Sheard introduces the Worlds from a crew perspective, with pilots sharing their highs and lows of a competition that saw Team GB bring home two Gold and two Bronze medals

22 IN PADDY'S FOOTSTEPS

Justin Wills fulfils a dream to visit Romania and discover if it's an Elysium for gliding

38 SIMPLICITY: THE MINILAK FES

Mikael Roslund travels to Lithuania to fly the miniLAK FES and finds it easy to handle both on the ground and in the air



MEMBER OF THE ROYAL AERO CLUB AND THE
FEDERATION AERONAUTIQUE INTERNATIONALE



 **THE MAGAZINE OF
THE BRITISH GLIDING
ASSOCIATION**
APRIL/MAY 17 VOLUME 68 No 2

EDITOR: SUSAN NEWBY
C/O BRITISH GLIDING ASSOCIATION,
8 MERUS COURT, MERIDIAN
BUSINESS PARK, LEICESTER LE19 1RJ

EMAIL EDITOR@
SAILPLANEANDGLIDING.CO.UK

TEL: 01763 246657



COVER STORY

"A fine view of the Trossachs." Taken from EB 28 '13' on the way back to Portmoak from Loch Lomond on 1 October 2016, a lovely autumn thermal flight with Ed Downham. (Steve Lynn)

DEADLINES

June/July 17

Articles, Letters, Club News: 7 April
Display advertisements: 21 April
Classifieds: 6 May

Aug/Sept 17

Articles, Letters, Club News: 5 June
Display advertisements: 21 June
Classifieds: 7 July

© British Gliding Association 2017
All rights reserved. Views expressed herein are not necessarily those of the Association nor the Editor

PUBLISHER

British Gliding Association,
8 Merus Court, Meridian Business
Park, Leicester LE19 1RJ
tel: 0116 289 2956 fax: 0116 289 5025
www.gliding.co.uk
email: office@gliding.co.uk

To advertise in S&G: Debbie Carr
debbie@gliding.co.uk
To subscribe to S&G:
office@gliding.co.uk
Or subscribe at www.sailplaneandgliding.co.uk/subscribe
UK £25.75 Overseas airmail £41.50

› The British Women Pilots Association will be awarding up to six scholarships this year. Two of the scholarships, each valued at £1,000, are open to women pilots in any form of aviation, including gliding; one is for new or inexperienced pilots, the other for the more experienced. Full details at <http://bwpa.co.uk/bwpa-2017-scholarships-open/> Applications must be made before 15 April 2017.

› Congratulations to Ed Downham, who has broken his own British National 15m Class 750km Triangle Speed Record. Ed achieved a speed of 146.64km/h flying an ASW 27 from New Tempe, South Africa on 4 December. This beat the record he set 11 years ago by more than 15km/h.

› Congratulations to Lewis Merry-Taylor of Portsmouth Naval GC, who recently gained his Gold height at the age of 15. He is now the youngest to achieve Gold height in the UK, beating previous record holder Ian Tait by a couple of months.

› The CAA has published details of the process for claiming funding to partially off-set the cost of equipping aircraft with 8.33 kHz radios. EU Funding will be allocated on a first-come, first-served basis so, if you are eligible, you are advised to apply at the earliest opportunity. Full details and the online claim form are at www.caa.co.uk/General-aviation/Aircraft-ownership-and-maintenance/8-33-kHz-funding-application/

› A new safety briefing has been published reinforcing the established advice following a winch launch failure to land ahead if it is safe to do so. The existence of heavy sink overhead or close to the launch site is an additional hazard associated with turning after a failed winch launch. Please download and read the leaflet at <https://members.gliding.co.uk/library/safety-briefings/land-ahead-safe>

› The CAA has published *CAP 1434 - UK Flight Information Services*, a leaflet providing guidance to pilots on the types of air traffic services that are available to all flights operating within Class G airspace and, where notified, to VFR flights operating in Class E airspace.

› An RMZ has been established around Hawarden airfield, Wales.

› The latest 1/2 mil southern chart incorrectly depicts Aston Down and Saltby as disused. Please report any other errors to the BGA.

› Exeter airport has published an ACP for controlled airspace at www.exeter-airport.co.uk/acp-consultation/

INFLUENCE OF OSTIV ON GLIDING WORLD

WHILE Team GB was busy winning medals at Benalla in January (see pp12-17), the XXXIII Congress of the International Scientific and Technical Organisation for Soaring Flight (OSTIV) was being held in conjunction with the World Gliding Championships in Australia.

OSTIV is the scientific and technical part of the gliding world, affiliated member of FAI and recognised by EASA and the FAA. It advises industry, regulatory authorities and sports organisations on a range of topics. Topics are commonly the output from one of its three panels: Sailplane Development; Training and Safety; and Meteorology.

To expand awareness of its activities,

OSTIV held outreach sessions during the recent Worlds, covering:

- FES technology development, plus the Initiative Prosegelflieger, which looks to advance crashworthiness in gliding to better parallel advances made in car safety.

- A discussion on the future of the Open Class, with a panel including Oliver Binder, Loek Boermans, Tilo Holighaus, Uys Jonker and Gerhard Waibel.

- A presentation by Morgan Sandercock on the "First year in Argentina with the Perlan 2 glider".

To learn more about OSTIV and for extended abstracts of papers presented at congresses, visit <http://ostiv.org>

A spaceman came travelling



Robert Theil (right) with UK astronaut Michael Foale at Gransden Lodge

UK ASTRONAUT Michael Foale recently revisited Cambridge Gliding Club (after a 30-year break). He flew with Cambridge instructor Robert Theil and re-soloed on the winch. Michael flew with the club, at Duxford and Cambridge, more than 30 years ago, before he moved to the USA.

In June 1983, Michael joined NASA's Johnson Space Center, working in mission

control. He was selected as an astronaut candidate in June 1987. A veteran of six Space Shuttle missions, Michael has enjoyed extended missions on both Mir and the International Space Station.

Continuing on the space theme, Chief Pilot of Virgin Galactic, Dave MacKay, had gliding training in preparation for his role. A feature is planned for a future issue.

How to contribute to a safer year

THERE are only a few types of gliding accident and they frequently repeat themselves. The BGA Review of Accidents in 2016 offers guidance on how everyone can help to avoid a repetition of the more important categories of accident. By understanding the issues and learning from them, we can all contribute to a safer 2017. If you haven't already done so, please obtain a copy either from your club CFI or by downloading from <https://members.gliding.co.uk/?p=28421>

Listening Squawk

THE Future Airspace Strategy VFR Implementation Group (FASVIG) has published a new listening Squawk reference card. Using material prepared by the CAA and approved by the Airspace Infringement Working Group, FASVIG has funded and published 30,000 copies of the reference card, suitable for planning and inflight use by GA pilots. Copies will be included with new charts distributed over the coming year. A copy is also available at: <http://airspacesafety.com/downloads>

Kate's walking on air with an MBE



CONGRATULATIONS to Walking on Air gliding instructor Kate Byrne (pictured second from right) on being awarded an MBE in the Queen's Birthday Honours list.

Kate, formerly a commissioner for the Royal Commission on the Ancient and Historical Monuments of Scotland, received her MBE for services to Heritage Information.



(Left to right) Don Irving, Tom Doherty, BGA Airspace Committee Chairman John Williams and SGU Chairman Bob Petrie (John Dunnington)

■ Don Irving was recently presented with a BGA medal by John Williams at the Scottish Gliding Centre. The medal was awarded for Don's exceptional services to gliding instructing, coaching and examining. He recently retired as chairman of the BGA instructors committee after many years of service and leadership. Don has also been part of a small team addressing the moving target of EASA licensing and training rules helping to ensure that, working with the CAA, the BGA adopts the most proportionate, and least bureaucratic, approach possible. See page 45 for news of other BGA medal and award winners.

DATES

NATIONALS, REGIONALS AND OTHERS

Women's Worlds	Zbraslavice, Czech	17/5-14/6/17
Club Class Nationals	Hus Bos	17-25/6/17
18m Class Nationals	Hus Bos	17-25/6/17
2nd World 13.5m Class	Szatymas, Hungary	29/6-16/7/17
Competition Enterprise	North Hill	1-8/7/17
Europeans	Moravska Trebova,	20/7-6/8/17
(Club, Standard and 20m multi-seat)	Czech	
15m Class Nationals	Aston Down	22-30/7/17
Open Class Nationals	Aston Down	22-30/7/17
20m multi-seat Class Nationals	Aston Down	22-30/7/17
Standard Class Nationals	Aston Down	22-30/7/17
Junior Worlds	Pociunai, Lithuania	27/7-13/8/17
Europeans	Lasham	10-26/8/17
15m, 18m and Open Class		
Junior Championships	TBC	19-27/8/17
Two-Seater Competition	Pocklington	20-27/8/17
UK Mountain Soaring Champs	Aboyne	3-9/9/17
Glider aerobatic competitions		
Dan Smith	Dunstable	21-23/4/17
Saltby Open	Saltby	2-4/6/17
World Games (gliding)	Wroclaw, Poland	20-30/7/17
Aerobatic nationals	Saltby	24-27/8/17
World Glider Aerobatic Champs	Torun, Poland	27/7-5/8/17

SHENINGTON REGIONALS

1-9/7/17

BOOKER REGIONALS

16-23/7/17

HUS BOS CHALLENGE CUP

22-30/7/17

COTSWOLD REGIONALS

22-30/7/17

INTER-SERVICES

29/7-6/8/17

BIDFORD REGIONALS

5-13/8/17

DUNSTABLE REGIONALS

5-13/8/17

BIDFORD REGIONALS

5-13/8/17

BICESTER REGIONALS

5-13/8/17

NORTHERN REGIONALS

13-19/8/17

SAILPLANE & GLIDING



Andy Davis
Competition flying



Paul Whitehead
SLMG



Howard Torode
Airworthiness



Derren Francis
Tugging



Mike Fox
Instructing



Dr Peter Saundby
Medical



Andy Holmes
Winch operating



John Williams
Airspace



Alison Randle
Development



Bruce Stephenson
Vintage gliding

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).

EXPERT ADVISERS

SHARED MEMORIES OF INSPIRATIONAL TV FILM

MIKE MEDLOCK's letter *Riding the Summer Sun*, p7, Feb/March 17, generated a great response from readers, several of whom stated that the TV documentary was also behind their own decision to take up gliding.

A series of short films was the result of the BBC giving its directors the opportunity to produce a film on the sport of their choice. Keith Massey, a founder member of York Gliding Club and who worked with the BBC throughout his decades-long freelance television career, was the director for *Riding the Summer Sun* (first shown on BBC2, 27 October 1981) and a second film, *Girl in a Glider* (BBC2, 26 January 1982).

Richard Blackmore was the pilot in *Riding the Summer Sun*, shown preparing to tackle a Diamond Distance flight from Sutton Bank. (It also inspired a spoof version, made a few years later, called *Last of the Summer Thermals*.)

Richard said: "At the time the film was made I lived in Yorkshire, was fanatically keen on gliding, and flew at Sutton Bank. I was an Ass Cat instructor there, and had just written an article for the club magazine *Horse's Mouth* about a 300km attempt I had made in July 1979. When Keith Massey asked if I would be interested

in taking part in a film the BBC was allowing him to make about his hobby, I jumped at the chance."

The second BBC film, *Girl in a Glider*, saw 16-year-old Judith Mountford being sent solo. Yorkshire GC's Mike Wood is one of the readers who contacted S&G to reflect on his role in the films. He said: "I helped by flying the Rallye Commodore from which some of the aerial shots were taken, at least over York.

"I started gliding in a different way. I was working on aero engines on Lightnings in Germany and, to pass the weekends, I joined the RAF Gliding Club at Geilenkirchen. My first solo was in a Grunau. I became CFI of Anglia Gliding Club in the late sixties. I left the RAF in 1972 and got a job at Yorkshire GC as resident instructor. So you could say I left the RAF to fly. I instructed gliders and motor gliders and flew the tugs. I still fly, not so much now as I am 85, and only gliders."

Many thanks to all those readers who, in response to Mike Medlock's letter, contacted S&G. Mike adds: "What a brilliant response. It is great to hear that my letter generated a little bit of reminiscing for days gone by. I'm very happy that I may get to see again the programme that changed my career path. How good are gliding types?! You may fly solo, but it's the people around you that get you there."

■ See next issue for Richard Blackmore's account of the making of the film *Riding the Summer Sun*.

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 7 April

BGA Courses and Seminars in 2017



BGA maintainer, inspector, club safety officer, instructor and examiner courses and seminars are detailed at

<https://members.gliding.co.uk/courses/>

Bookings should be made via the BGA office
0116 289 2956 or debbie@gliding.co.uk



Among the trophy winners for 2016 (and representatives), who were presented with awards by Patrick Naegeli at the BGA Dinner, were: (left to right) Thomas Seiler, Christof Maul, Graham Paul, Jake Brattle, Steve Jones, Finn Sleigh, Brian Scougall, Moritz Korn, Alan Langlands, Patrick Naegeli, Roy Pentecost, Howard Jones, Roy Wilson, Mark Lawrence-Jones, Julian Bane. Front: Alison Mulder (Paul Morrison)

BGA PERFORMANCE TROPHIES

BGA 1000km Trophy

Fastest Flight over 1,000km

Not awarded

Wakefield Trophy

Longest Handicapped Distance

Graham McAndrew (Lasham GS)

751.8km at 88.1km/h, 14 May, Duo Discus XL

Furlong Trophy

Longest Handicapped Triangle

Graham McAndrew (Lasham GS)

751.8km at 88.1km/h, 14 May, Duo Discus XL

Frank Foster Trophy

Fastest Handicapped 500km

Roy Wilson (Deeside GC)

516.3km at 133.0km/h, 30 November, Ventus 2cx

California in England

Longest Handicapped Flight by a

Female Pilot

Alison Mulder (Bristol & Glos GC)

534.4km at 74.0km/h, 17 April, LS4

Manio Cup

Fastest handicapped 300km

Brian Scougall (SGU)

306.3km at 147.5km/h, 1 Nov, Duo Discus XL

Seager Trophy

Longest Handicapped Distance

in a Two-Seater

Graham McAndrew (Lasham GS)

751.8km at 88.1km/h, 14 May, Duo Discus XL

De Havilland Trophy

Greatest Gain of Height

Nick Norman (Cairngorm GC)

25,427ft @ Feshiebridge, 5 May, ASH 25

Volk Trophy

Longest Handicapped Out & Return

Graham Paul (Shenington GC)

557.8km at 83.7km/h, 23 April, Nimbus 4DT

BGA NATIONAL LADDER TROPHIES

www.bgaladder.co.uk

Enigma Trophy

Winner, Open National Ladder

Edward Downham (Dunstable)

23,800pts

Firth Vickers Trophy

2nd Place, Open National Ladder

Andy Aveling (Lasham GS)

22,803pts

L.duGarde Peach Trophy

Winner, Weekend National Ladder

Roy Pentecost (Lasham GS)

21,236pts

Slingsby Trophy

2nd Place, Weekend National Ladder

Patrick Naegeli (Lasham GS)

20,816pts

Spitfire Trophy

Winner, Junior National Ladder

Finn Sleigh (Cambridge GC)

17,970pts

Chris Wills Trophy

Winner, Wooden Ladder

Adrian Emck (Lasham GS)

18,357pts

OTHER BGA AWARDS

Rex Pilcher Trophy

Earliest Diamond Distance in the Year

Mark Lawrence-Jones (Cambridge GC)

6 August

Phil Lever

Most Promising Junior Pilot

Jake Brattle (Bristol & Glos GC)

John Hands

For outstanding support for the organising and running of competitions

Alan Langlands (Shenington GC)

Goldsborough

Highest placed pilot(s) in previous World Championships

Steve & Howard Jones (Lasham GS)

Bronze WGC 20m Class, Lithuania

University Ladder

Bristol University

15,352pts

Challenge Trophy

For the club that, during the previous year, has the most number of pilots who have qualified to Cross Country Endorsement as a proportion of the number of instructors.

Bristol & Glos GC

Philip Wills National Enterprise Trophy

Awarded by the Enterprise Club for most enterprising flight launching from anywhere in the UK

This year, the trophy is awarded for an epic 10-hour flight from Aboyne, which made British gliding history as the first flight to the Outer Hebrides

Christof Maul/Thomas Seiler (Germany)

Alex Ward Trophy

For services to junior gliding. Awarded this year for his support of the Junior Gliding Centre scheme. Andy works with numerous charities, which has resulted in many scholarships, bursaries and awards for junior pilots and he oversees all of this from his role as vice chairman of the BGA.

Andy Perkins (Bicester GC)

Haywards Trophy

A new trophy for instructing excellence. Awarded this year for his outstanding service as a gliding instructor and coach. He leads Bicester's cadet training, which has resulted in significant numbers of solos and other achievements. Three of the club's junior pilots have qualified as instructors, trained by Julian.

Julian Bane (Bicester GC)

SOLUTIONS TO THERMAL CENTRING - PART TWO

WAYS TO GET THAT FEELING

Tony Cronshaw talks to leading coaches about techniques to help us develop a feel for centring

CENTRING thermals can be a challenge, not just for the newcomer, but for established cross-country pilots if conditions are less than ideal. Tony Cronshaw talks to leading coach G Dale and 11-times world champion Sebastian Kawa about developing a feel for centring

TONY: *What are the key prerequisites in terms of skills and knowledge for successful thermalling?*

G: I say to people that flying solo demands a handling standard about equal to passing your driving test. By comparison, flying cross-country demands a handling standard equal to being a race or rally car driver, ie far higher abilities in how accurately you fly the glider so that you have the chance to pick up the tiny vertical accelerations that you feel as you fly into a core. The clues can be very small accelerations indeed, easily masked by clumsy handling.

TONY: *What's the best way for a newcomer to build up such skills?*

G: I recommend initially learning a simple, reliable

"default" centring technique to help the pilot climb away – most easily from an aerotow – and begin to make sustained local flights. These flights are very enjoyable in themselves, whilst an opportunity to practise centring and handling skills so they become lighter and more instinctive.

TONY: *What handling techniques would you recommend generally when thermalling?*

G: Angles of bank should be tight when we're in the core – my default is 45 degrees. A tight

circle is really important to climb quickly. Reichmann [1] worked it out to be about 40 degrees on average. I use 45 degrees because it is easy to teach – look at the diagonal screws mounting the ASI (figure 1). However, banking steeply doesn't come naturally to the newcomer and will need lots of practice. One rarely needs more than 45 degrees. Only very occasionally do I find it's better to turn flat and slow, depending on the thermal structure.

Secondly, pitch/attitude, not speed, should be constant throughout the circling process. When changing the bank angle, I try to change it quickly because during the process of changing it's much harder to feel the air. I try to "freeze" the attitude as I run out of the sink looking for the core, so I can feel the "going uphill" (surge) sensation.

TONY: *What about the airspeed?*

G: The airspeed should be more or less constant, and just adequate for the higher angles of bank. This means that the glider is close to departure when turning hard, and well away from the stall when the bank is reduced to move the glider around in the thermal. Sebastian Kawa's book [2] explains why: At low angles of bank you can easily fly much slower than the min sink speed for that angle – and therefore generate too much sink, but at high angles of bank the difference between min sink and the stall is tiny. So if at 45 degrees the glider will stall at 50kts, I will fly at 50kts throughout the circle, maybe even faster for good control response.

TONY: *In terms of theory, what's the starting point?*

G: Firstly it's important to define our terminology and understand instrumentation issues: I call "rate of climb" – as shown on the vario – "lift". "Vario lag" has to be understood, of course, and this is variable. "Gusts" on the vario and ASI are shown

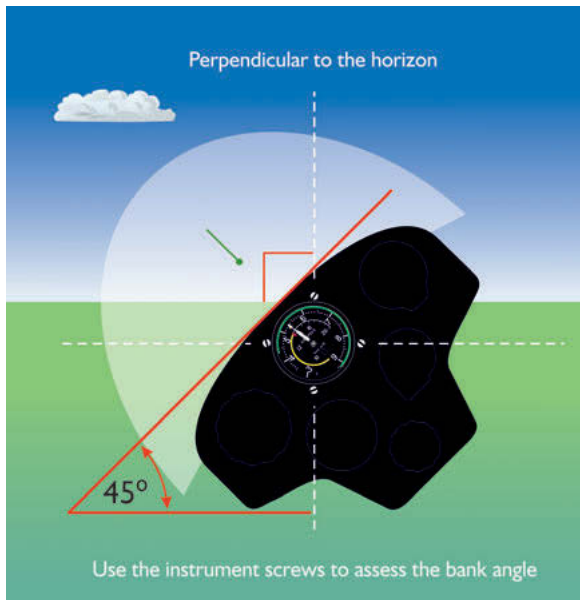


Figure 1

I RECOMMEND INITIALLY LEARNING A SIMPLE, RELIABLE 'DEFAULT' CENTRING TECHNIQUE TO HELP THE PILOT CLIMB AWAY

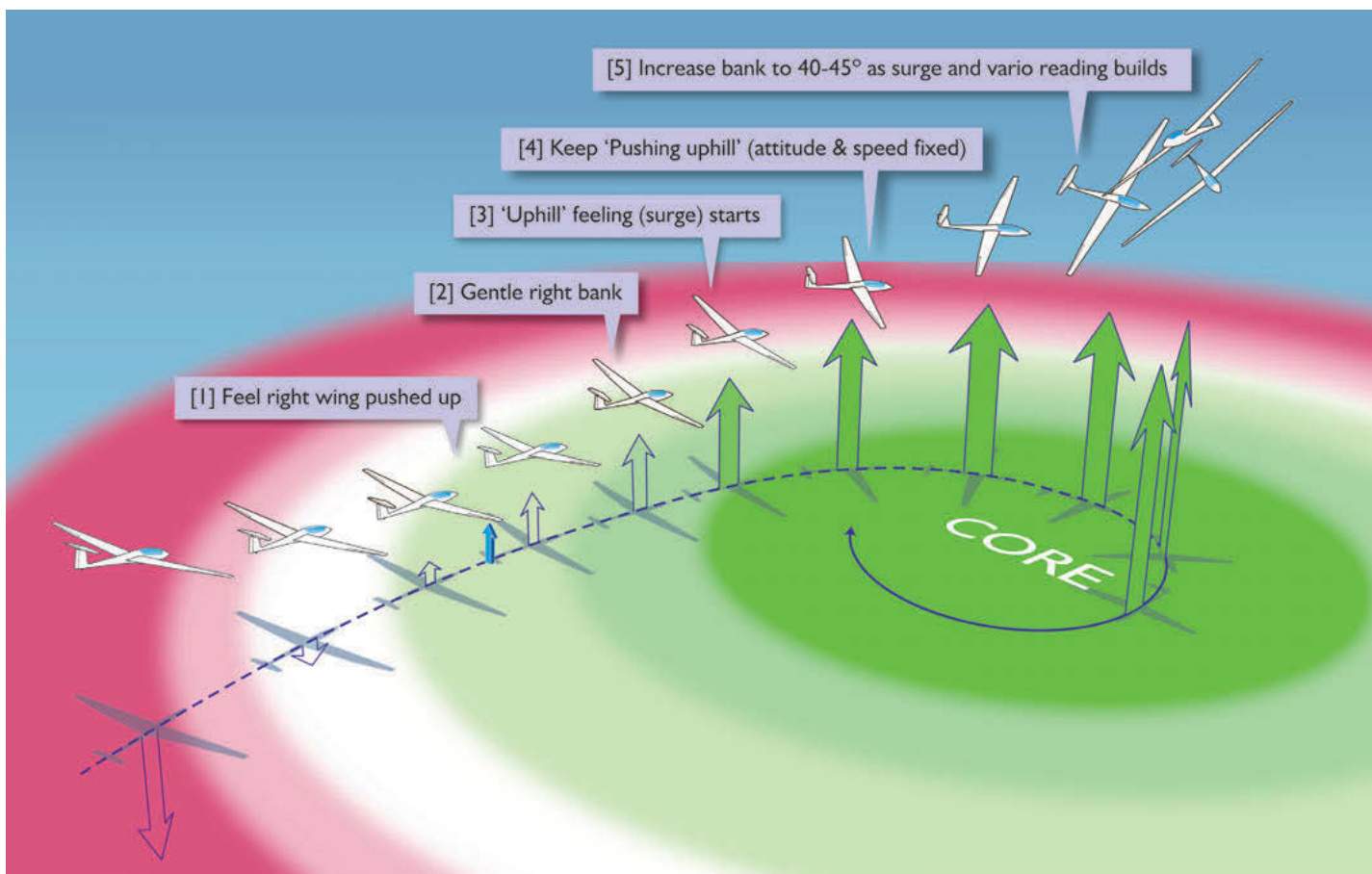


Figure 2
(Illustrations by Steve Longland)

clearly and quickly, but a changing rate of climb is shown slowly and is often hidden by the other noise on the vario signal. One may get the impression that one has a fast vario, but this is not true. And it's not possible to remove vario lag when it is responding to a changing rate of climb.

Secondly, I call the sense of vertical acceleration/surge "going uphill" (figure 2) because that's what it feels like and it's the sensation that triggers us to know that better "lift" (a higher rate of climb) is coming.

TONY: For the centring technique itself, what method do you recommend as a reliable default?

G: My default is the method given in BGA Instructor Manual together with a specific training process. This is straightforward to learn and requires minimal situational awareness of the surrounding thermal structure. It's not the fastest way to get centred, but more sophisticated methods can come later. The method requires the pilot to react promptly to changes in the vario, plus feeling the "going-uphill" which precedes the vario rise, to know when to add bank – and conversely when the vario starts to fall,

to reduce bank. These changes in the bank angle are all that's required to move the circle progressively towards the core. This was described with diagrams recently in S&G [3].

But can I just emphasise LISTENING to the vario, and NOT LOOKING AT IT ALL THE BLOODY TIME!!!! Keeping our heads out of the cockpit is important for controlling the attitude and bank. And for safety, it's vital to look out for traffic.

TONY: Can you talk through your training process?

G: The first step is a ground school session. My approach is to use a lot of humour, fun diagrams and questions, and my students really enjoy learning like this. I put a big "W" on the white board and ask what it is, adding a hint about the Average White Band's album covers for those of that vintage. It takes a while before someone twigs "it's your arse!" and the whole discussion about feeling the going-uphill sensation becomes entertainingly memorable.

Once we're in the air, I remind students of Sebastian's and Bernard Eckey's advice [4] about flying away from sink – this is vital. If you spend much of your circle in sink ↘

I CALL THE SENSE OF VERTICAL ACCELERATION/SURGE 'GOING UPHILL' BECAUSE THAT'S WHAT IT FEELS LIKE AND IT'S THE SENSATION THAT TRIGGERS US TO KNOW THAT BETTER 'LIFT' (A HIGHER RATE OF CLIMB) IS COMING



Tony Cronshaw is an Ass Cat instructor at Cambridge Gliding Centre with over 1,000 hours gliding. His enthusiasm for helping the next generation of pilots includes running courses for visitors and members, and supporting CGC's recruitment and retention sub-committee



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 coaches for Glide Omarama in NZ each winter, and is one of Lasham's DCFIs in the summer. G's tutorial *The Soaring Engine, volume one*, was first published in 2015 and *volume two* is now also available

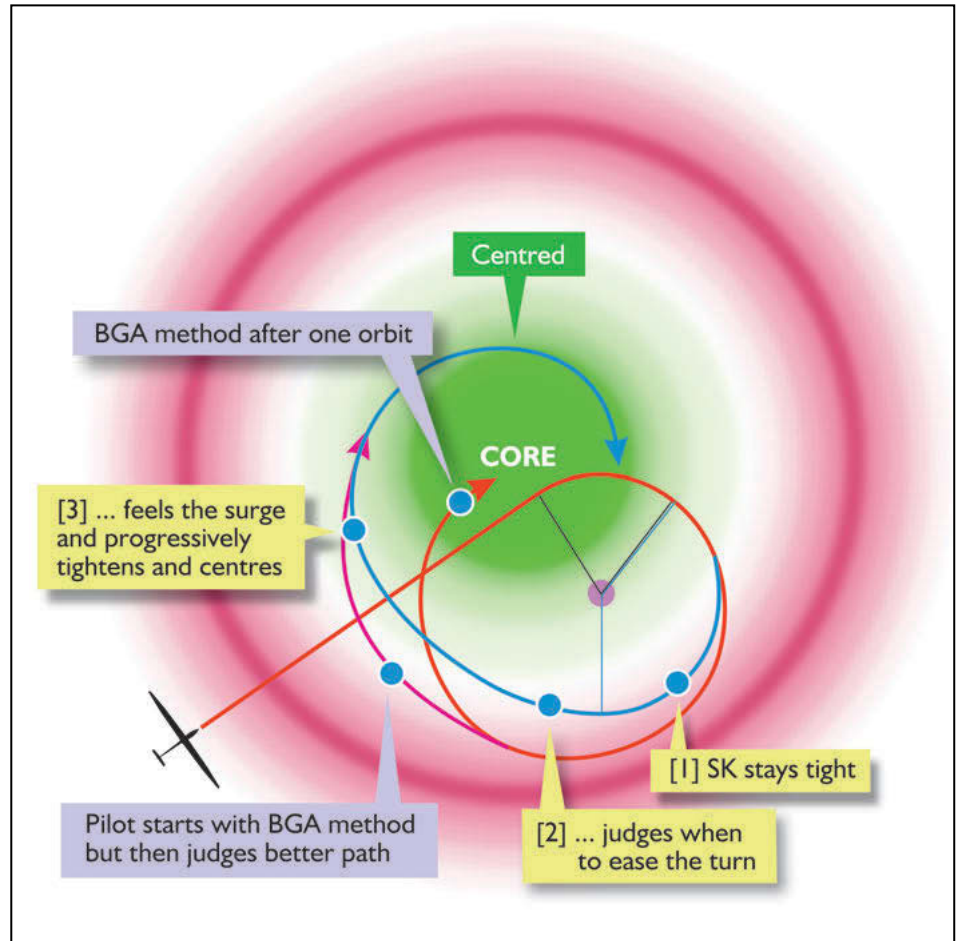


Figure 3 (Illustrations by Steve Longland)

☞ you are in the wrong place to get any sort of decent climb – I will always make a big move away from it. Sebastian taught me to do this and it was incredibly helpful, both for my own flying and for my students.

I then start teaching how to change the bank angle in response to the vario as we pass in and out of the core. Once a pilot can do this reliably, I try to get the pilot to feel the accelerations and improve the timing of when to add bank.

My tip here is to turn the vario down really quiet for a start, so you can hear it but it doesn't dominate the cockpit. That makes it easier to recognise the subtle seat-of-the-pants sensations. This idea came from Ingo Renner and he knows a thing or two! The advantage of reacting promptly is a much better chance of getting banked tightly in the core.

A delayed or inconsistent reaction can mean the next circle doesn't get any closer and the path becomes a random clover leaf.

TONY: *This reminds me of how Rémy*

Desbenoit teaches mountain soaring. In one exercise he covers the panel and TURNS OFF the audio. Now the student is forced to use head-out-of-the-cockpit judgement to handle the glider – and is completely reliant on vertical sensations to centre the thermal.

G: I agree it's all about getting a feel for centring. Gabrielle Briffe used to do the same thing when teaching mountain soaring out of Omarama – take all the instruments away. I tell students to modify the BGA method by “pushing the glider uphill” whenever they feel the “going uphill” sensation. Push, because we specifically don't want to raise the nose and wash off speed.

TONY: *What's the next step in developing more advanced thermalling skills?*

G: The above is a reactive and mechanistic way of modulating the bank. Beyond this, for the pilot to become much faster at centring we need to be much more observant and proactive, look for clues, get oriented and make intellectual decisions about what to do next.

TONY: Finally, what's your advice on how to enter a thermal?

G: As for entering the thermal, I find that dolphin flying spoils the chances of finding a core. I will pull up in lift if I think it will go on for a long time, or if I am trying to find a core, but I will not follow a speed director. I move the glider around to stay "poised" to snap into the circle in the right place.

Here's an analogy: Imagine Homer Simpson on a squash court waiting to hit the ball. Flat feet, gut out, dumb expression, racquet down. That is what you will be doing if you pull up straight and slow in the core: Just dead in the water. Now imagine someone poised to receive service: Up on their toes, alert, leaning forward a bit, racquet up and ready. So to find the core I come up into the thermal in a gentle curve (figure 2) as even a clumsy two-seater will snap into a tight turn quickly from a shallow one. I've already decided which way to go (another problem) and I fly a constant attitude, very slightly ballistic trajectory to intersect where I think the core will be, "a searching turn" with constant attitude and constant g. If I feel a surge upwards (the going uphill feeling) I turn hard, immediately. If not, I might leave or move around a bit, still going at a reasonable pace.

TONY: If I can turn to you, Sebastian, you mentioned last time [3] that the advanced pilot should be able to get centred in one or two orbits. Can you explain how?

SEBASTIAN: Let's consider the situation where we have passed through the core for

the first time and the vario is now showing that we are starting to leave the core. My technique is to keep the circle tight initially then judge when to open out into a shallow turn back to the core. Figure 3 illustrates the principle, although I actually stay tight for longer than shown. I increase bank again when I feel the surge. Sometimes I anticipate and tighten just before the surge is felt.

Another option for the pilot following the BGA method is to ease the turn (figure 3) so the path joins up with the path I just described. My first technique just means we fly a bit less in the weaker lift. However, both options need good situational awareness of where the core is located and good flying skills/judgement to successfully modify the trajectory. Just one final point, I recommend that all changes in bank are small and the turn is continued smoothly whilst looking for clues and choosing where/when to modify the turn.

[1] *Cross-country Soaring* by Helmut Reichmann (1978)

[2] *Sky Full of Heat* by Sebastian Kawa (2012)

[3] *Thermalling: Core Basics*, S&G Feb/Mar 2017

[4] *Advanced Soaring Made Easy* by Bernard Eckey (4th edition 2016)

■ In the next *Ask the Coach* Tony talks to leading coaches about centring methods based on "open-out-in-the-surge" and optimising how to enter a thermal

MY TECHNIQUE IS TO KEEP THE CIRCLE TIGHT INITIALLY THEN JUDGE WHEN TO OPEN OUT INTO A SHALLOW TURN BACK TO THE CORE



Sebastian Kawa has been gliding in Poland since 1988. He is 11 times World Champion, current World Champion in 15m Class, European Champion in the 18m Class and number one in the FAI world rankings. Sebastian's autobiography and advanced gliding tutorial *Sky Full of Heat* was published in 2012

Forbes Insurance
Always Thinking Ahead

Tel: 0116 238 8874
info@forbesbrokers.com
www.forbesbrokers.com

Don't fly your glider over the winter?
Then why pay for full flight risk cover?
Contact Forbes for a reduced premium
including winter ground risk only cover

At Forbes our friendly team offers:-

- ✓ Highly competitive pricing for individuals and clubs
- ✓ Sound advice you can trust
- ✓ A proven smooth claims handling service
- ✓ Exclusive policy wording only available to Forbes
- ✓ 65 years of gliding/100 years of insurance experience
- ✓ The experience of a former Club CFI, current BGA Full Cat and CAA SLMG Instructors
- ✓ Competition/Mountain/Overseas Experience
- ✓ Many years of service on Club Committees
- ✓ All aspects of aviation and business insurance
- ✓ 24/7 Mobile Phone Availability

If your broker answers no to any of the above points then please talk to Forbes



Team GB are joined by George Lee (third from right), who represented GB in the late 70s/early 80s, winning three consecutive world championships before moving to Australia. There are four world champions in this photograph, who hold eight titles between them

WINNING WAYS

Peter Sheard introduces the Worlds from a crew perspective, with pilots sharing their highs and lows from Australia



Max Kirschner collects the Gold medal for Team GB. France took Silver, and Germany the Bronze

HEAVY rain greeted our arrival in Benalla; very unseasonal and one of four such days during the competition. Sue and I had travelled out by train and coach from Melbourne on 29 December to be met by our pilots, Ed Johnston and Derren Francis, who had arrived earlier in the day.

We drove round the corner from the station to our home for the next three weeks. A charming cabin in the back garden of Reg Gardner, ex-member of Cotswold Gliding Club at Aston Down and his Australian partner Marion Mallinder.

Reg and Marion were key members of the weighing team during the competition, but also became unofficial members of the British Team when hosting two BBQs and making a huge contribution to the International Evening. Our team captain, Max Kirschner, and his wife Sue had been in Benalla for a while. Sue worked in the competition office for the duration.

Max had been busy, amongst other things, arranging for our use of two hangars to accommodate the six team gliders. The

container, which had been fitted out at Lasham by Max and Steve Jones, was here, but yet to be unpacked. We had a low sideways loading hangar for the two JS1c of our Open Class pilots, Andy Davis and Russell Cheetham, and the 18m ASG 29E of Mike Young. The other hangar was large, high and open at the front. But it did have attached an office space on either side, one of which became our team HQ. The hangar space easily accommodated Ed's 15m ASG 29E, Derren's 15m Ventus 2a and Steve's 18m Ventus 3T.

On our second day in Benalla there was a cracker of a thunderstorm over the clubhouse. There was heavy flooding on the airfield and I managed to bog our car near the hangar and needed towing out. Derren, having written a hundred letters to various organisations, was loaned a new Toyota HiLux Ute (Aussie Pickup) by Toyota Benalla and was able to tow me out.

The remainder of the team arrived over the next few days, with Mike being the last to arrive the day before unofficial practice started. The practice days were spent shaking the team down. The pilots had some excellent flying with high cloudbases and speeds up to 160km/h. One priority

was the begging and borrowing of trailers. Particularly for Derren as he had the only glider without an engine. For Ed we had offers of, and attempted to fettle, two other trailers before borrowing Kerrie Claffey's ASG 28 Cobra trailer, which required only slight modification to take Ed's ASG 29.

The competition was directed by Terry Cubley with his light touch and dry sense of humour. On one practice day briefing he put up a picture on the big screen of a fuel cock and asked "Does anyone know what that is?" to general laughter.

Andy Davis had admitted that he landed out the day before because he forgot to turn on his fuel. Terry used that to make the safety point that most of us had travelled a long way, were not used to the heat and were possibly still jet lagged. In other words "take care out there". In fact, surprisingly, that was the only time we needed a trailer.

The last 15m crew to arrive was Paul 'Baldrick' Mason, who was then designated as Derren's crew. Baldrick, as he prefers, knew everyone and everyone knew Baldrick. I said to him: "I've been flying nationals since 1977, how come I've never met you?" "Oh, I only do Europeans and Worlds," said Baldrick.

Interestingly, four of the crew had military backgrounds. Baldrick was a truck driver in the RAF and has over a 1,000 hours gliding. Mike recruited Matt Heritage via social media. Matt, an Australian and, at 21, by far the youngest in the team, is ground support in the Army Aviation Corp. Based in Darwin, he glides at Kingaroy, 1,000 miles away!

Andres Tamme, crewing for Steve, was born in Cardiff, but lived in Adelaide from the age of 13. Retired from the RAAF, where he was aircrew on P3C Orions, he now spends the English summers at Bidford and Australian summers gliding at Gawler, near Adelaide.

Andy Smart, crewing for Russell, was born in Kenya, but is as English as they come. An ex-RAF technician, he used to glide at Keevil, but now flies paragliders all over the world.

Pami Davis met Andy on a Chicago nightstop. She hardly knew what a glider was, but has spent most of the years since crewing for Andy.

At 72, I was the oldest in the team with lots of gliding experience, but not much crewing. However, I was partnered by my wife, Sue, with her many years of crewing all round the world.

The days which followed were mainly hot and blue with climbs of 3-5kts and an

inversion between 4-6,000ft. Of course this resulted in enormous gaggles, sometimes including the whole task group. On 12 January, two gliders touched paint in the cruise. Both landed safely and were able to continue competing.

At briefing on the 14th, a safety presentation was given by pilot safety committee member Ronald Termaat, flying in the 15m Class for the Netherlands. He started by showing a humorous clip from Monty Python's *The Life of Brian* in which Brian proclaims: "Don't follow me, don't follow anyone". He then showed various traces of close encounters in thermals and one where two pilots followed each other in close proximity for 6.5km without being aware of the presence of the other. Rather prophetic, as later that day Steve O'Donnell of Australia and Michael Eisele of Germany – both in 15m Ventus 2s – collided in the cruise and bailed out. The first they knew of the other's presence was a loud bang. Other 15m pilots stayed overhead to relay information and pass the position. A helicopter picked up both pilots and took them to Canberra Hospital. The day was cancelled in the 15m Class, which was particularly disappointing for Derren, who was up with the leaders.

A few days later, Steve O'Donnell came to briefing a chastened man, surprised and very grateful to be alive. Not in the first flush of youth, having flown in the 1987 Worlds at Benalla, it took him 3,000ft of the 4,500ft available to get out. Only when he got one leg over the side was he dragged out by the airflow. Steve weighs 95kg and when he looked up at the 24-foot canopy he said

WORLDS RESULTS, BENALLA, 8-22/1/17

Open Class

- 1 Russell Cheetham (GBR) JS1c
- 2 Michael Sommer (DEU) EB29R
- 3 Andy Davis (GBR) JS1c

18m Class

- 1 Killian Walbrou (FRA) JS1
- 2 Mario Kiessling (DEU) Ventus 3T
- 3 Mike Young (GBR) ASG 29E
- 7 Steve Jones (GBR) Ventus 3T

15m Class

- 1 Sebastian Kawa (POL) Diana 2
- 2 Makoto Ichikawa (JPN) Ventus 2a
- 3 Lukasz Grabowski (POL) Diana 2
- 6 Derren Francis (GBR) Ventus 2a
- 32 Ed Johnston (GBR) ASG 29

■ **Congratulations to Team GB, awarded the Team Gold medal and trophy**

Team GB are pictured below with their haul of medals
(Photos by Max Kirschner)



ED JOHNSTON, 15M CLASS

It's an easy game when things go well – I found it rather difficult... Here are a few impressions of the contest:

● **Gaggles!** Large, ever present gaggles, often with 20 or even 30 gliders in them, and the frustrations of not getting the best out of them.

● **Weight:** This is the first international I have been to where nearly every day it was better to fly lighter, despite 100+ kts between thermals.

● **Tactics:** Try to go over hot spots, follow river lines, avoid wet areas, run the hills. No; just go straight on track and wait for the bump.

● **Roll the dice:** You could beat the gaggle most of the time, preferably in company of five or fewer. But on your own, roll the dice often enough and get snake eyes.

● **Relief:** Watching sickened as Steve O'Donnell's struck glider seemingly fell for ever after a mid air, and the pure relief of eventually seeing him get clear.

● **Desperation:** The struggle to climb and press to complete the task and just running out of day, desperate concern for the team cup, pure relief when other landouts kept us top.



Andy Davis won the Bronze medal in the Open Class

✎ it looked like a beach parasol. He landed very heavily, crushing three vertebrae and, despite having quick release buckles, received more injuries as he was dragged along the ground.

Michael also landed heavily, breaking bones in the vicinity of his ankle. He spent rather longer in hospital.

The best day of the competition occurred on 17 January. Open Class were set a 747km racing task to the north; 18m had a five-hour AAT also to the north; and 15m a 484km racing task into the weaker conditions to the west. Someone was heard to say: "Pass me the telescope, I want to see what planet the task setter's on." In fact, Tobi Geiger, as well as being task setter, was also the sniffer in his unballasted LS4. On one of the practice days after sniffing he went on to fly his own 887km task in approximately 8 hours 20 minutes.

In Open Class that day, all but two got round. Michael Sommer started at 14:08 with Russell and Andy starting at 14:09. Pilots were heard at 13,000ft. Michael won at 161km/h. Not such a good day for Russell and Andy, but still 800+ points each. In 18m Class, Steve and Mike came 5th and 6th within 22 points of winner Wolfgang Janowitz flying for Austria. In 15m Class the winner was Uys Jonker in his JS3 Rapture at 137km/h. Derren was 7th for 917 points at 131km/h.

For Sue and me it was a privilege to be part of a happy and well organised team. In no small part thanks to the leadership of Max Kirschner, but also thanks to the team spirit of all involved.

ANDY DAVIS, OPEN CLASS

IFLEW in the Standard Class in the previous WGC in Benalla 30 years ago and my memories are of competition days flown in the blue, typically 4-5kt thermals to around 5-6,000ft. Tasks were flown in large unpleasant gaggles and the competitive penalty for trying to go it alone was quite severe.

As I prepared for another WGC in Benalla, I hoped that the organisers' requirement to carry oxygen (mandatory above 10,000ft) and predictions of cumulus with high cloudbases would materialise into some fantastic flying and we would experience the promised strong cumulus conditions and fast cruising speeds that would favour our 21-metre JS1C against the new EB29R.

The practice period did indeed produce some excellent soaring days with cumulus, and Russell and I completed two practice

tasks in excess of 150km/h. Unfortunately this was not to last into the competition itself and, apart from three days when there were cumulus for part of the task, the remainder of the flying days were blue and not very high or strong, with typical climbs averaging 4kts to around 5,000ft asl (4,500ft agl) and with long glides between climbs. The blue conditions, relatively weak climbs and good visibility all resulted in most tasks being flown, once again, in unpleasantly large gaggles, although I believe the Open Class gaggles were rather less stressful than in the other classes.

Whilst the soaring conditions were nothing to get excited about, the reception in the town of Benalla and surrounding area was quite the opposite. The townspeople really went overboard to welcome us. Everywhere we went there were glider signs, national flags and everybody seemed genuinely pleased to see us and would ask about the day's flying and commiserate whenever we had a non-flying day. Russell, Mike, Russ's crew Andy Smart, Pami and I all stayed in a lovely homely and comfortable house just five minutes' walk from the airfield. The owner, Beck, welcomed us into her house on 28 December and then moved out for the four weeks of our stay.

Russell and I have now flown several competitions together as a team and, with both of us recognising the value of close team flying in the blue conditions, we quickly slipped back into our usual routine of starting together and staying as close as reasonably possible whilst allowing flexibility for the other to do something different if he really wanted to. If we got separated, the stream of information from the leading glider would enable the following glider to catch up again to our mutual benefit.

During the practice period and the first half of the competition, it became obvious that Russell was much more in tune with the blue conditions than me, consistently making better decisions and also climbing better in the gaggles. I did feel that his JS1C performed rather better than my newly delivered JS1C, which clearly suffered from a shortage of fettling time before packing of the container for shipping to Australia. Russ was almost always a little higher as we approached final glide and finished most days a couple of km ahead.

As for the threat of the newly developed EB29R, it became apparent during the practice period that our JS1C was marginally better at 110kts plus, but that at all slower

speeds, and in the climb, the EB29R was clearly slightly superior and every time we slowed down to cross a large gap the EB would float away from us. In order to beat the brilliantly flown EB29Rs of Michael Sommer and Tassilo Bode we would have to do something significantly different; if we simply flew around in the same gaggle they would beat us. Of course, from their perspective, all they had to do was start just behind us and chase us until the extra glide angle caught us. And so the pattern was set, with Michael and Tassilo starting just behind us on most days. With a short start line, good visibility, only one thermal source near the start line and the EB climb performance enabling them to float to the top of the pre-start gaggle, there was little we could do to escape from the EBs except when there were clouds and we made good use of the opportunity afforded by the cumulus days.

Russell and I were generally consistently quicker than our competitors, with the exception of the 750km task when we both had a bit of a nightmare getting low for different reasons just as we reached the tricky bit of the flight. And so it was that, as we took off on the final day, Russell was in 1st place overall – a handful of points above me – and I was a few points ahead of Michael Sommer. We were all far enough ahead of everybody else that we were only under serious threat of losing our podium positions if we made a big mistake.

Russ and I had agreed to stick with our successful strategy of starting together, but this time to make sure we started behind the German EB29R pair if possible. They in turn were determined to start behind us and so the pre-start game went on until Russell and I decided it would be catastrophic to wait any longer and we felt obliged to start, already ridiculously late on a day forecast to die early after 6pm. The EBs, of course, waited another two minutes and started behind us and we were able to see them joining at the bottom of every thermal just as we left until approaching the 2nd TP when we all slowed down and compressed in the weaker conditions and with the superior glide angle they caught and passed us. Fortunately, a couple of relatively good climbs allowed us to catch up again and, with 50km to go, we were all dumping water and scraping in the dying thermals to get onto final glide.

A long glide along the length of the Warby range of hills, where previously we had found good evening thermals, was unproductive and as we were approaching



the final control point just below final glide Russ and I split, with Russ taking the direct route to the control point and me continuing to follow the ridge line. Just as it looked like all was lost, Russ found the vital 1kt climb at the control point that lifted him onto final glide and, having called me over, I arrived some 500ft below and started to climb slowly onto final glide.

Fortunately, Michael Sommer had followed me down the ridge line and was in the same predicament so whilst the glide angle of the EB29R placed him above me in the final climb he was also well below Russell. One by one we set off for the finish ring some 20km away, finishing in that order. To illustrate how close we had been to disaster, Michael's team-mate, Tassilo, who had been just above me approaching the control point, was forced to start his engine approaching the finish ring and I had to pull up from cruising at best glide in order to pass over the finish ring minimum altitude. Whilst well beaten on the day by the earlier starters, Russ held on to his lead to take a well deserved individual Gold, Michael Sommer nicking Silver medal position and me both disappointed and pleased to

Open Class world champion Russell Cheetham holds his trophy high, flanked by Germany's Michael Sommer (right), who took Silver, and Andy Davis with Bronze (photos by Max Kirschner)



■ Scan this QR code to read Peter Sheard's full report on the Worlds, or visit www.sailplaneandgliding.co.uk/current-issue



Derren Francis (left) and Ed Johnston represented Team GB in the 15m Class

DERREN FRANCIS, 15M CLASS

A major high for me was being selected to represent my country in the World Gliding Championships; a huge honour to be part of our great team. I knew the importance of being selected for our team and, from the outset, I put everything into preparing myself for the event.

During the event itself, the biggest high would have been being placed in 1st after a blistering flight, this would put me in medal contention. Unfortunately this ended up being the low point for me as the day was cancelled due to an accident between two of the competitors (thankfully they were OK).

I have learned a tremendous amount during the Worlds, I now hope to take this experience forward and win a medal for my country next time.

I think it's important to mention the people who made it possible for me to go to the Worlds and their support. Thank you Owain Walters, Tony World, Matt Scutter, John at Benalla Ford/Toyota, my team mate Ed, Baldrick my crew, Mat Wakelin and all those who voted and put their trust in me and, lastly, my lovely wife Anne, George and Emily... thank you!

✎ finish with Bronze.

Russell's and my objective had been to get two podium positions. I doubt if either of us realistically expected to achieve it and I am sure we would both have been satisfied with one medal between us. To win two medals in the Open Class, Russell's Gold, Mike's Bronze in the 18m and, thanks to an excellent overall team performance, Team Gold for Team GB was beyond our wildest dreams. Thank you to the other team pilots, crews and Max Kirschner, our super organised and unflappable team captain, for your invaluable contributions to a great team result.

RUSSELL CHEETHAM, OPEN CLASS

I HAVE always believed that preparation of equipment and provision of a stress-free environment are notable key ingredients to competition success, so it was particularly pleasing that Andy and Pami Davis were able to source a comfortable house for me and crew Andy to share and also a suitable trailer for possible emergency land-out. Team captain Max, with all his contacts from years of management at Benalla had been able to secure excellent hangarage for all team members, much to the envy of other less fortunate teams, as well as seamlessly managing the shipping and fitting out of our container. We were in good shape to succeed right from the start.

As the competition unfolded, there were three key moments for us in Open Class. Day 4 allowed me and Andy in our JS1Cs to break into the lead following a task of 557km with blue and shallow cumulus that brought us in a full 8km/h ahead of the next fastest competitors. Significantly, the German pilots Michael Sommer and Tassillo Bode, who both had the latest EB29R no compromise Open Class machine made especially for this event, and were very much in contention, started late and struggled in rapidly decaying evening thermals, resulting in a virtual land-out for Tassillo and a slow speed for Michael presenting us a 200 point breathing space at the top of the leader board.

Our significant lead was short lived as on Day 6 with a 747km task and an earliest start time after 2pm, despite 148 and 146km/h from me and Andy, we knew we hadn't had a really clean flight having got separated. The German pair blitzed the field at an outstanding 160km/h, cutting our lead to just a handful of points.

On the final Day 8, the Germans seemed prepared to land out rather than start before us. We did start eventually, but much later

than we would have chosen, with the Germans following on a couple of minutes later. The flight unfolded as expected with all of us struggling for the last two climbs as the day shut off. Fortunately for me I was above Michael Sommer in the final fortuitous 1 knotter when it looked like we would all land out, so I knew he was beaten and I was possibly champion.

After landing, we wondered if early starters much further down the leader board had pipped us. Fortunately, this was not to be although, sadly, Michael did jump ahead of Andy, depriving him of the Silver medal. Despite being ecstatic with my Gold, I was left wondering if perhaps we should have used different tactics that might have protected Andy's even more slender points lead by perhaps splitting on the last day thus preventing the German team from inevitably starting behind us both. It is testament to Andy's unwavering commitment to our performance as a team that this option was never realistically considered as we continued with the team flying techniques that had served us so well to that point.

I am very grateful in particular for the support of the BGA, Max Kirschner, Andy Davis, my diligent crew Andy Smart, my wife Helen and all other team members – all of whom were essential to our success in Benalla.

MIKE YOUNG, 18M CLASS

THIRTY years ago, I was given a fantastic opportunity to crew for Dave Watt in the 1987 World Gliding Championships at Benalla. It was a turning point in my life. I resigned from my job in the Meteorological Office and left for Australia on a new adventure. It was too good an opportunity to miss and was the catalyst to my pursuing a career as an airline pilot.

The details are a bit vague, but I recall eating chicken and chips every night, swimming in the river at Benalla, with Dave washing his hair with mud, singing 'mud mud glorious mud', and Brian Spreckley becoming world champion.

It therefore seemed somewhat surreal that three decades later, I find myself on a British Airways flight on my way to Sydney, with Dave and Phillipa Watt sat next to me. They were on their way to Australia for a holiday and I was flying out to represent GB in the 2017 World Gliding Championships.

I find that flying a long international competition is all about getting into a good rhythm and I was very happy that by the

time the competition started my flying was starting to flow. It's very hard to explain, but it is the point at which flying the glider becomes effortless, you feel totally relaxed and the glider seems to fly itself.

You can't pull a rabbit out of the hat, but if you are flying well then you should at least perform to your potential. I knew from previous experience that meant I would be at least in the running and with a bit of luck should be able to make a podium position.

There is no doubt that having a good team can only improve your performance and, although I have never flown as a team with Steve Jones, I felt immediately comfortable with the dynamic. Steve is perhaps one of the most relaxed people to team fly with, never fazed, giving a friendly chuckle and encouragement when you tell him that you've found a good climb behind him and are still in the game. In simple terms, he is a pleasure to fly with.

With almost entirely blue conditions throughout the competition, the opportunities for making any big gains were relatively limited and it was a case of winning by not losing. There were several big fallers, but even so by the final competition day at least 10 competitors were still in the running in the 18m Class.

The conditions on the last day around Benalla were not easy, and I was afraid that if we didn't get going we might not even get the opportunity to make a proper start and complete the 280km task. Our best hope of victory would be if the pre-start gaggle delayed starting sufficiently that they struggled to complete the task. We started shortly after the line opened and drove hard to the first TP, leading a small group of gliders. Steve missed a couple of bubbles and fell behind a few km. On the second leg, I found myself making all the running again, but still finding good lift. However, the time taken to find the thermal cores meant that I was unable to break away from the gaggle.

Turning the final TP and heading into a strong headwind, I was now back in the pack. With the conditions weakening, it was good to have company to find the more and more elusive lift. The new tactic was to sit and wait until I felt that it would be worth taking a risk and pushing for home. Steve had caught back up, but got low and had to take a weak climb to stay in the game. As we approached the Warbys (a line of hills) relatively low, I decided that I would have an opportunity to make a break whilst others stayed in weak lift. On all the previous days, I had found



good energy and was sure that it would be worth a risk at this stage in the flight.

The ground loomed closer without anything worth circling in until I was finally forced to fly away from the hills into the flatlands. Again nothing! Oh well, a call to team GB to say that I was landing out, wheel down, turbo electrics on and, just as I was about to erect the engine, the air became lively. Almost immediately I was climbing in 3kts. Certainly my lucky moment of the competition and with one more climb I was on final glide.

I was relieved to make it home and even more pleased to find out that I had retained my third place overall. Perhaps the greatest pleasure though was to be able to pour a bucket of water over my friend Russell, the new Open Class World Champion.

Mike Young (left) won the Bronze medal in the 18m Class. French pilot Killian Walbrou took Gold, and Germany's Mario Kiessling the Silver (photos Max Kirschner)

THERE IS NO DOUBT THAT HAVING A GOOD TEAM CAN ONLY IMPROVE YOUR PERFORMANCE

Team captain Max Kirschner and crew members were all vital to the success of Team GB in Benalla



LOW-COST NAV AID SOLUTION

PART 2

Neville Almond returns with a short update on Kobo/XCSoar developments since his article in the Oct/Nov 16 issue of S&G

THE range of sunlight-readable Kobo eReaders many pilots use with XCSoar as flight instruments/navigation aids seems to get updated on an annual basis, typically with around three models being available at any one time. During 2016, production of the very popular 6" Glo HD ceased, but has been replaced by a worthy successor, the new 6" Aura Edition 2. Here's a bulleted summary of the main differences:

- Resolution: At 212dpi, the Aura Edition 2 screen resolution is higher than the older 170dpi Mini/Touch units, but not as high as the 300dpi Glo HD it replaced. Despite this, when placed side-by-side (see picture top right) clarity and definition of the Glo HD and Aura Edition 2 appear identical.

- Touch Screen: To date, all Kobos have used an infrared-controlled touch screen (which work with gloves on), but the Aura Edition 2 has a capacitive screen, so gloved pilots will need a capacitive tip/stick (like users of phones/tablets/Oudies) or some glove juggling.
- Battery: The Lipo battery capacity is 1200mAh, higher than the older Mini/Touch models, but not as high as the 1,500mAh Glo HD and Touch 2.
- On/Off switch – an improved push button on the rear of the case (this supersedes the narrow/tricky switches on the thin edge of other units).
- Kobo internals – the serial port is now right next to the Lipo battery – please be careful when soldering. The unit is also 1mm thinner,

More for less



Contact Haywards to find out if you can get more for less. Our new rates and policy covers could mean you get more insurance cover for less money.

Call Nigel, Tim or Liam on **0207 902 7800** or e-mail info@haywards.net

Please quote F1609

Aviation insurance people, working for you



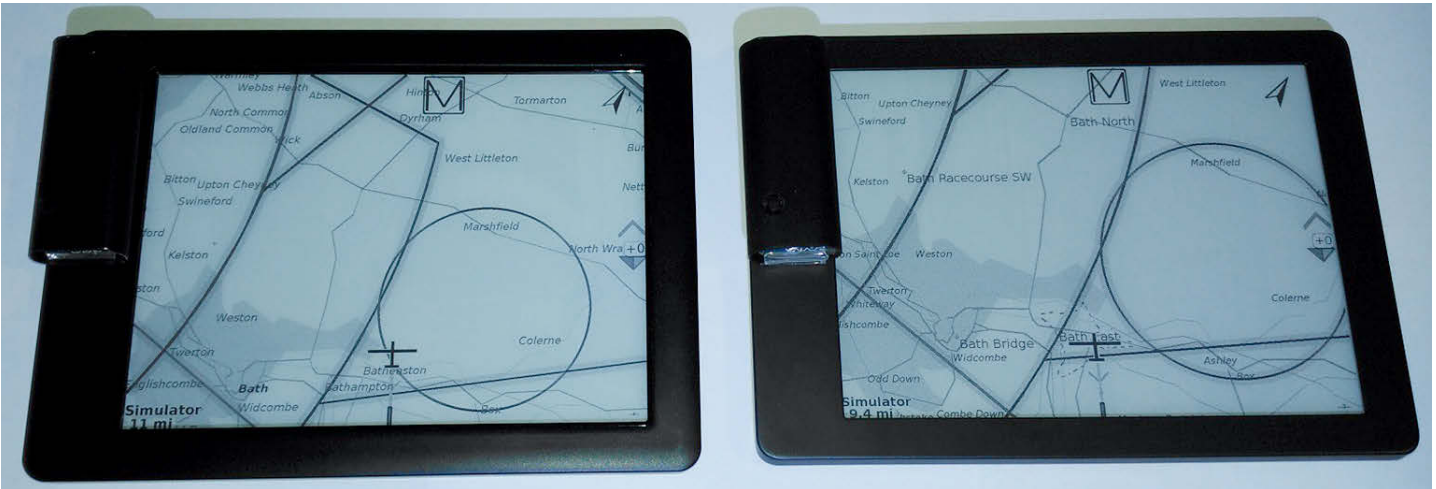
HAYWARD AVIATION IS A TRADING NAME OF JLT SPECIALTY LIMITED

THE ST BOTOLPH BUILDING • 138 HOUNDSDITCH • LONDON EC3A 7AW
TELEPHONE: 020 7902 7800 • FAX: 020 7928 8040



JLT SPECIALTY LIMITED IS A COMPANY REGISTERED IN ENGLAND
REGISTERED OFFICE AS ABOVE • COMPANY NO 01536540 • VAT NO 244 2321 96
A MEMBER OF THE JARDINE LLOYD THOMPSON GROUP • AUTHORISED AND REGULATED BY THE FINANCIAL CONDUCT AUTHORITY

HAY/0117/1032



so minimal ~1mm wiring is a must, as is removing a couple of small flanges on the rear cover that will otherwise sever the wires!

For users wanting the original/infrared touch screen control, there is still the current Kobo Touch 2, another current 6" Kobo, albeit with a screen resolution of 170dpi like the older Kobos. During 2016, XCSoar developers changed the code to work on both of these newer models and, after months of testing, the software is now stable and fully functional. One discovery during testing the new Kobos was that 'slowing down' the frequency of barometric data being passed from Bluefly GPS/Vario to Kobo/XCSoar (from 50hz down to 5hz – still pretty fast!) has a positive effect on reducing the load on the Kobo processor, and makes other Kobo/XCSoar functionality (like touch screen controls) much snappier. Details of how

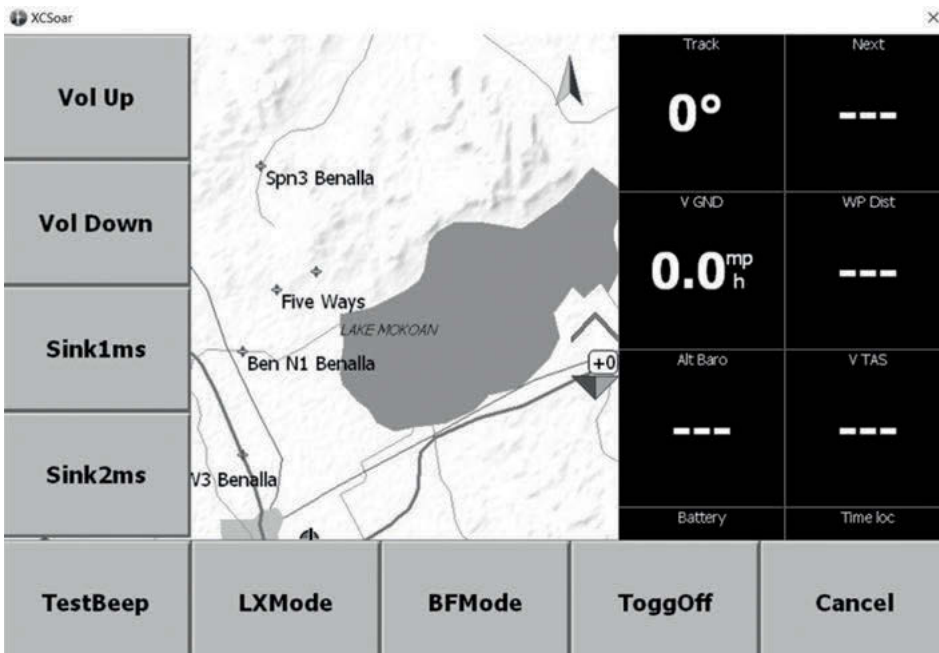
to achieve this (or indeed acquire a Kobo/XCSoar unit) are available from my website at www.gethighstayhigh.com

A further XCSoar development is the ability to create custom XCSoar menus (the techy name for this is XCI files, an abbreviation of 'XCSoar Initialisation'). To create custom menus, an XCSoar user can either put aside a couple of hours and define from scratch, or simply copy/load someone else's XCI file to perform common/useful functions. An example menu is shown below, which allows the Bluefly volume to be turned up/down, choose a sink alarm setting, and change the output mode (and data frequency, as described earlier, for performance improvements). Email me at getkobomini@hotmail.com to get a copy of this file, along with a few simple instructions to get it working.

Above: Kobo Aura Edition 2 and Kobo Glo HD – identical clarity and a worthy successor

Below left: Example 'user tailored' XCSoar menu for controlling the Bluefly Vario

A FURTHER XCSOAR DEVELOPMENT IS THE ABILITY TO CREATE CUSTOM XCSOAR MENUS



Neville Almond has been flying for 38 years (hang-gliders and sailplanes). He is a regular contributor to the XCSoar forum and the "Kobo/XCSoar" Facebook user group. Neville currently flies a 22:1, 50kg 15-metre carbon fibre rigid wing hang-glider, holds a few UK cross-country records and represented the UK in the hang-gliding world championships in Macedonia

DON'T FOLLOW THE LEADER!

Finnish pilot Timo Nurminen returns from the Worlds with a suggested task for increased safety and a focus on individual flying



AN OPPORTUNITY FOR LARGE NUMBER OF PILOTS TO PERFORM AERIAL STALKING OF TOP PILOTS, WITH THE AIM OF TAILGATING THEM ON THE TASK

THE World Gliding Championships for the 15m, 18m and Open Classes were held this January in Benalla, Australia. The competition itself will surely be remembered as one of the most well organised and operated with nearly faultless tasking, meteorology forecasting and daily operations.

Yet, unfortunately for the WGC 2017, its lasting legacy will be something far more controversial. What quickly became evident was that the competition highlighted faults that now manifested themselves in midair collision safety issues.

The trouble in the blue Benalla skies comes down to something that has plagued modern competition gliding for a long time already: prevailing FAI competition rules cause pervasive gaggle flying, as well as enabling ruthless pilots to tailgate others. This, by default, results in a large number of gliders flying aggressively in constant extremely close proximity to one another over extended periods.

The skies over Benalla at times resembled an aerial combat zone! Massive gaggles began to form across all classes. One pilot allegedly quit the competition because he considered the conditions to be too dangerous.

Few pilots simply chose to fly alone, away from the gaggles, as a safety measure at the cost of risking lower average speeds due to flying alone in the blue thermals.

Broken system

It is unprecedented to have two midair collisions, many near misses and pilots quitting out of safety concern in one competition. Some may argue that we as the pilots are at fault, but this argument fails once we analyse the causes in greater depth.

It should not come as a surprise to

anyone that the current rules and format of FAI gliding championships don't help. The single biggest problem is the start line rules and procedures, which allow the formation of dangerously big gaggles, as well as giving every opportunity for large number of pilots to perform aerial stalking of top pilots, with the singular aim of tailgating them on the task. Pilots fly and exploit the current existing system and, when the system is faulty, accidents will happen regardless of piloting skills.

Then there is the moral issue of sportsmanship. No one denies the right of a competition pilot to take advantage of fellow competitors. This is part of the sport, as well as prudent strategy at times. However, there are pilots in the modern day championships who do not make a single decision of their own regarding start time, route, thermals, final glide, or any other aspect of the flight. Instead they collectively wait and see what a few of the top IGC ranked pilots do and then follow and mimic their every move throughout the whole task. The 15m Class world champion, Sebastian Kawa, became so frustrated that he publically criticised certain pilots of unsportmanly conduct.

We need a system where more pilots fly by themselves, and for themselves, without being put at a disadvantage to the aggressive gaggle flying and tailgaters.

Start time window

Alarmed by the events and outcomes of the Benalla WGC, the Finnish gliding team came up with the concept of a pilot selected start time window (STW). Start line will open and operate as normal, except that each pilot needs to arm their own STW 10 minutes before their intended start by pressing the time marker of the flight recorder or the computer. STW becomes active 10 minutes after the pilot has pressed the time marker and the window is active only for two minutes.

A pilot's start time used for scoring is the time he/she crosses the start line within the

active two-minute window.

Pilots can arm the STW as many times as necessary, but only the last armed STW will be active. If the pilot starts either before his two-minute STW is active or after it has already closed he can still start, but he will incur extra time penalties.

A pilot selected start time window achieves two key improvements. First of all it will reduce the dangerous gaggles. None of the pilots are aware when others have planned to have their individual STWs active, so flying in the big gaggle hoping to be able to follow someone becomes completely irrelevant.

Pilots will depart whenever their own STW is active and we will also start to witness more individual flights and pilot to pilot competition instead of groups following few selected pilots. Not only is the STW an effective method of reducing the pre-start gaggles, it also will disperse gliders into the task itself at wider and safer intervals as pilots are likely to choose varying STWs.

There are still unanswered questions as to how does a pilot also activate STW in his second back up logger, and how do we avoid manipulations? These issues can be dealt with inventive rule making work, as well as technical developments in the flight recorders and loggers. Indeed, as IGC specifications and loggers have a pilot initiated time marker/event function, we are already half way there.

In the light of unprecedented safety lapses and outcomes in the Benalla WGC, it is time for the IGC to become innovative again instead of just discussing safety. Modern



There were two midair collisions in Benalla

flight recorders allow easy and automatic data-analysis to penalise certain types of dangerous flying, such as joining an existing thermal and circling in an opposite direction to others. Also, extreme tailgating can be easily detected and should be penalised as endangering flight safety.

Pilot selected start time window is likely to be tested in the Finnish National Championships in 2017 and we encourage other competitions to test the concept. Every single pilot who has been introduced to the idea of STW has been supportive and believes it will have a positive safety impact, as well as bringing back more individualistic performances and pilot to pilot competition.



Timo Nurminen represented Finland in the 15m Class at the Benalla WGC. He has 1,600 hours and he flies a Ventus CXA from Räyskälä, Finland

GLIDEomarama.com
New Zealand

The World's best
Mountain Soaring

Ridge, Thermal, Wave - October through March

IN PADDY'S FOOTSTEPS

Transylvanian landscape: rocky upper slopes descend into scrub and then fir trees, which in turn become great forests of beech and oak containing the largest population of European brown bears (Justin Wills)

Justin Wills fulfils a dream to visit Romania and to discover if it's an Elysium for gliding



Gillian Wills with some of the flowers left around the trailer by locals wishing to show their appreciation for the visit (Justin Wills)

I HAVE wanted to visit Romania, and particularly Transylvania, ever since I read Patrick (Paddy) Leigh Fermor's book *Between the Woods and the Water*. Paddy's description of the Transylvanian landscape, with its backcloth of snow covered Carpathian mountain ranges, limestone wooded hills, occasional broad valleys and warm summer weather, made it sound like the last European Pastoral Idyll and an Elysium for gliding.

It was a remarkable literary coincidence that three of the best-known British travel writers set out in the 1930s and subsequently wrote classic accounts of their journeys: Eric Newby signed on the sailing ship *Moshulu* (*The Last Grain Race*), Laurie Lee wandered across Spain playing a violin (*As I Walked Out One Midsummer Morning*) and Paddy, starting in December 1933, walked from the Hook of Holland to Constantinople (*A Time of Gifts* and its sequels).

Paddy's journey was perhaps the most ambitious in terms of cultures, languages, politics and landscapes. Leaving as an 18-year-old he was away for four years, returning to Britain briefly in 1938 with a beautiful Moldavian Princess and then again at the outbreak of World War 2, during which he became an SOE (Special Operations Executive) hero on Crete.

His account of his time in Romania was written some 50 years later and I suspected it must inevitably have been rose-tinted by nostalgia and the knowledge that so many of the people and places he visited had been swept away during World War 2 and its appalling aftermath. It is interesting that the Romanian dictator Ceausescu was the only former Eastern Bloc leader to be executed in the 1989 revolution that swept over those countries. Reportedly the last words he and his wife spoke to the soldiers of their firing squad were "but you are our children". Such is the isolating effect of absolute power.

Since then Romania has struggled to become a more market driven economy whilst still largely dependent on its agrarian production. Milestones have included joining NATO in 2004, and the EU in 2007. The latter has resulted in the adoption of EASA rules and made me realise that taking a glider to Romania was now a viable option.

Friends in Hungary put us in touch with Bogdan Manoiu, a Romanian gliding enthusiast now living in Britain, and in no time we were receiving welcoming emails from the small local gliding community. Gliding activity in Romania is divided into two camps: firstly, the state-owned aero clubs operating from long-established airfields,

training young people up to solo and aerobatics. Cross-country flying is not widely taught nor encouraged. Most of the gliders are Romanian IS-28 metal two-seaters, and the tugs are exclusively Polish Wilgas. Secondly, there is a small number of private clubs flying from strips with their own gliders and winches. Any lack of facilities is more than made up for by immense enthusiasm. This convinced us to go.

Before setting off we studied the *Lonely Planet Guide to Romania*. The first thing we realised was that it is a long way from the UK. By the time we reached the Romanian border on 20 May, 2016, we had crossed 26 degrees of longitude and two time zones, having driven steadily for four days (it took Paddy five months on foot). The country itself is roughly rectangular, similar in area to Britain and a population of only 20 million. It borders the Black Sea to the east, whilst the Danube forms much of its southern frontier with Bulgaria. The Prut river, which joins the Danube just above its Delta is the north eastern border with Bessarabia (now largely Moldova, not be confused with Moldavia, which is a region of Romania), whilst further north lies the Ukraine. The western border approximately follows the river Tiza, another tributary of the Danube, which flows southwards through Hungary.

But the outstanding feature is the Carpathian Mountains running southeast from Slovakia and then curling round clockwise like a gigantic fish hook which encompasses Transylvania. Many peaks are over 8,000ft. and snow covered for much of the year. The rocky upper slopes descend into scrub and then fir trees, which in turn become great forests of beech and oak containing the largest population of European brown bears.

These central highlands are drained by two main rivers, the Mures and the Olt. The former flows westwards through a comparatively wide valley to join the Tiza, and thereafter the Danube. However, the adjoining Olt plunges through a narrow defile that runs due south through the Carpathians to the Danube and the Bulgarian border, a shortcut of 400 miles compared with the Mures.

After studying all the above we decided to base ourselves initially at the small city of Deva, which lies on the inside of the south western bend of the Carpathians. It was at Deva station that Paddy had waved goodbye to a beautiful Hungarian girl with whom he had explored Transylvania and had had a passionate affair. It also has good roads from the Hungarian frontier, which was a

factor as we had heard alarming stories about driving in Romania. These turned out to be only partly true: having been a province of Rome the Romanian language evolved from Latin, and the driving style seemed somewhat Italian; white vans exhibited total faith, when overtaking a line of traffic towards a blind corner, that someone would make a space to prevent a head-on collision. It seemed to work. Road surfaces varied greatly and over short distances, with sudden potholes threatening our rather low slung new car. However, on the country roads most of the traffic was horse and carts transporting wagon loads of hay which had been cut by hand; we saw hardly any tractors.

Our gliding contact in Deva was Norbert Scarlet, one of the very few competition pilots in Romania (he came 13th at last year's WGC in Lithuania). Thanks to Romania's excellent cellphone and internet coverage he guided us to the local aero club, where the acting chief Gratian Tinc greeted us wearing a GlideOmarama hat. To our delight he confirmed we could fly from the airfield and proudly showed us its excellent facilities. We had fallen on our feet.

Even better, Norbert's father led us to a small village nearby with a castle that was now a five star hotel, complete with lovely gardens, marble bathrooms, gourmet food and endless superb wines, all for the equivalent of £30 a day full board.

When we returned to the airfield next morning, we found an array of flowers and hampers containing local produce around the tailgate of our trailer. We discovered these were gifts from locals who wanted to show their appreciation that we had come.

We rigged our Antares and Norbert's Discus 2a and planned to fly together. Although conditions started earlier over the snow-covered Retezat Carpathians visible 50km to the south, Norbert's local knowledge suggested we fly initially northwards over the Apuseni mountains, which peak at 6,000ft, from which we could glide out over lower country to a turnpoint near the Hungarian border 150km to the north west. We would then fly back close to Deva, cross to the Retezat mountains and follow them eastwards as far as seemed prudent before turning for home.

Airspace in Romania is somewhat complex, but simpler at weekends when military areas are deactivated. There is an airway ↗

**TO OUR DELIGHT
HE CONFIRMED
WE COULD
FLY FROM
THE AIRFIELD
AND PROUDLY
SHOWED US
ITS EXCELLENT
FACILITIES. WE
HAD FALLEN ON
OUR FEET**



Easy 7kt thermals (Justin Wills)



Carpathian autumn wave (Norbert Scarlet)

THE TOPS OF THE HIGHEST MOUNTAINS WERE ALMOST IN CLOUD, BUT RUNNING THE SUNNY EDGE WAS EASY, WITH REGULAR 7KT THERMALS UP TO 8,500FT



Carpathian convergence
(Justin Wills)



Hunedoara Castle, only 20km from Deva, is one of three edifices claiming to be the source of the Dracula stories (Justin Wills)

✎ overhead Deva whose base is 8,000ft, and a general restriction on flights above 10,000ft. Although we did not plan to fly in controlled airspace Norbert still filed a flight plan for both of us.

The winds were very light (as they were throughout our visit) and we watched as cumulus formed ever nearer to the airfield. Airborne at midday, we quickly found a convergence line running on track. Whilst it was marked by a step in the cloudbase it was easy to follow, but as we approached the higher mountains with more cloud cover I lost it and, slightly unnerved by the proximity of the terrain below, turned westwards towards lower ground and sunshine. Norbert did better than I, remaining higher, whilst I found the individual smaller cumulus rather unreliable with very short-lived thermals.

As a result, I did not see Norbert again until halfway back to Deva as we re-approached the Apusenis. I was reasonably comfortable with the sight of an escarpment facing the sun and a long cloud edge above. However, my attempt at contour flying proved totally unsuccessful and I soon followed Norbert's example of searching over the limestone gullies and promontories for tantalising bubbles of lift which yielded disappointingly low average climbs. I kept looking for something better whilst Norbert remained patiently in the thermal we had shared and reconnected with the cloud above much sooner. As a result he reached the Deva area 20km ahead of me and continued to follow high ground towards the Retezat mountains. I then made the classic mistake of crossing the Mures Valley where it was wider and had to repeat my earlier experience of scratching around in the foothills north of the main range.

By the time I finally reached cloudbase at 8,000ft I was rather demoralised, and soon thereafter decided to return to Deva. Norbert arrived 45 minutes later having flown 580km, 80km further than I. Clearly, I had a lot to learn.

Norbert explained that, whilst it had been only a moderate day, the conditions were fairly typical. Local convergences were common, where moister air meets drier air depending on the orientation of the valleys below and the time of day. They are particularly strong in the afternoon on the north side of the highest mountains, which tend to become cloud covered as the day

progresses, and the lift is often marked by ragged lower clouds which can provide climbs up to 2,000ft beside and above them. The lack of wind makes ridge running unviable, especially when they are in shadow from the clouds above. However, if one could start early, perhaps by using an SLMG, one might make rapid progress along the tallest southern ridgelines. He emphasised that staying high paid dividends, and that lower down it was very often a slow process climbing up.

The following day, after another sybaritic night in the castle, the weather looked better and Norbert proposed a 620km "L" shaped task, again starting to the north. I fitted my bug wipers (I had forgotten how many insects there are in eastern European thermals) and off tow climbed in strong lift beside the convergence clouds to 7,500ft. I then flew quite slowly, staying high and avoiding gaps even if it required up to 30° course deviations. As a result, I had no difficulties and could admire the magnificent scenery. The Apusenis are almost entirely wooded, but the western slopes drop steeply into wide valleys that drain to the distant Hungarian plain. These valleys are characterised by traditional strip farming, with most fields running crosswise presumably to provide stockwater from the rivers for the multiple landowners. Outlandings looked straightforward, although some of the cut fields had haycocks stacked around a central pole and would need to be avoided.

Our first turning point was at the end of a lower ridge where the cloudbase dropped accordingly, but still allowed steady progress weaving under the darker areas. Turning south I found a good climb to step up to the higher bases, where I was surprised to see another glider soaring: it was an IS-28 from the private club at Pioneni, which we were to visit later.

Arriving back near Deva I climbed to the 8,000ft base of the airway which allowed an easy crossing to the Retezat mountains.

Our second TP was a ski resort (abandoned in summer) which had a 30m lattice iron cross on the slopes above it, exactly below the local convergence. The tops of the highest mountains were almost in cloud, but running the sunny edge was easy, with regular 7kt thermals up to 8,500ft. Some earlier overdevelopment had produced showers and resultant low cloud in valleys below whilst the convergence continued to work above. Despite an impasse with Sibiu ATC, the task was easily completed in 5hrs 20m with an 85km final glide.

During this, I had observed a picturesque monastery built beside the mountain lake of

Oasa. As the weather had deteriorated, we drove to it the next day up an unmade road. The small church, which was made entirely of wood, including its tiles, was in the middle of a large quadrangle. At first the place appeared deserted, but as we entered the church a bearded monk hurried forward and appeared delighted to practise his excellent English. He was also amused to learn my name since the church contained a relic in the form of a shin bone of Saint Justin, who was martyred following his death in 165 AD, apparently at the behest of an enraged Roman senator, whose wife he had converted to Christianity.

Whilst the monk was describing the religious significance of the various icons a tapping noise sounded outside. He explained that this was the summons to prayer starting in 10 minutes time. The sound was made by a semantron, consisting of a plank struck by a wooden mallet, to replicate the signal used by Noah to summon the animals to the Ark.

During the second half of May and early June, the weather in Europe was dismally poor for gliding and Romania fared only slightly better. It had been very good during the last 10 days of April and, after we left, the gliding throughout August was outstanding. Nevertheless, we managed further flying at Deva and also visited three private clubs. The first was Toploveni, which is on the south side of the Carpathians on the western edge of the Danube plain and accessible from Bucharest. Two hangars contained German registered gliders, a winch, and a magnificently restored 1953 Ferguson tractor to pull out the cables. Sadly the weather prevented any flying, but we were showered with hospitality, particularly by the chairman Ion Botarca and his wife Oana. The club fleet includes a Twin Astir which could be flown by foreign pilots. A privately owned ASG-29 has made several prodigious flights, initially using the south-facing Carpathian slopes and then thermals over the Danubian plain, where cloudbase can exceed 12,000ft.

Toploveni is close to the southern end of the Trans Carpathian Fagarasan Road, made famous in the UK by Top Gear. Gillian wanted to be the first English woman to drive a glider trailer over it. The locals warned us that it was still officially closed due to winter snows, but we set off anyway. As we hair-pinned our way upwards the grey skies produced a deluge of rain, great waterfalls erupted from the mountain sides and scuds of mist reduced visibility to a few yards. Almost at the top of the pass we suddenly encountered a six-foot wall of snow blocking the road and had to

admit defeat. After turning round we drove one kilometre and encountered an enormous boulder in the middle of the road which had not been there 15 minutes earlier.

We also visited the club at Pioeni, the brainchild of Sorin Chisu, who is an air traffic controller at Cluj Napoca. Ideally situated in the northern Apuseni mountains, the club has two IS-28s, and a K-8. If enthusiasm generates success it will be a huge one. Finally, on 4 June we drove westwards via the club at Kings Land Ineu, close to the Hungarian border. This has been brilliantly promoted by Patrick Puskeiler, who lives near Kirchheim Teck. The airfield has a hangar which contains a German registered Cessna tow plane and a resident tug pilot. It is expanding rapidly, will soon have attractive on-site accommodation and holds organised camps for foreign pilots and their gliders. Although 80km west of the Apuseni, flights in excess of 650km have been achieved.

The unusually poor weather made our visit to Romania as much a social and cultural experience as a flying one. Nevertheless, it was clearly an area of enormous gliding potential. Norbert suggested that starting in northern Transylvania near the Ukraine border could produce thermal flights in excess of 1,000km. The potential for wave in the autumn, when there is wind, is also evident from the photograph Norbert subsequently sent us.

Culturally we found both the history and the architecture fascinating. Hunedoara Castle, only 20km from Deva, and one of three edifices claiming to be the source of the Dracula stories, is still, in Paddy's words: "a building so fantastic and theatrical that, at first glance, it looks totally unreal".

Paddy made friends with an astonishing range of people thanks to his boyish enthusiasm and curiosity, remarkable facility for learning languages, and the romantic notion behind his extraordinary journey. We achieved something similar simply by arriving with a glider trailer. Everyone was friendly, helpful, and almost all the younger people spoke English. Having quickly developed defensive driving skills we always felt safe and secure, and were amazed by how inexpensive everything was. But, above all, the enthusiasm of the Romanian gliding community reminded us of the real strength and resilience of those with the urge to soar. It is why we keep doing it.



Above and below: Attempting to travel the hairpins of the Trans Carpathian Fagarasan Road, Justin and Gillian were met with a deluge of rain. Great waterfalls erupted from the mountain sides and mist reduced visibility to a few yards (Justin Wills)



Approaching the Retezat Mountains (Justin Wills)

■ www.klc.aerodromineu.com

■ www.glidingtransylvania.ro

■ www.xcro.ro/aerodromul-toploveni

■ www.aeroclubuldeva.org



This page, clockwise from top left:
Wyvern members next to the club's LS8, with a K-21 in the background, on 18 February at Upavon (Alec Watt)

Crossing the Thames Estuary, near Southend and off the coast of Brighton, during an epic August flight around London TMA from LAS with Merv Saunders in DG-1000t 'E6' (Paul Bramley)

Winter flying at The Park in 2016, making the best of the day (Sudip Nair)

November sunset at Wormingford (Steve Codd)

Facing page, clockwise from top:
Three photos taken during a Glide Omarama mountain soaring course with Gavin Wills: QQ above the Hooker Glacier, in front of Mount Cook with the Tasman Sea in the distance; over Lake Hawea while crossing the Hunter Valley to the McKerrow Mountains about 40km west of Omarama; The Remarkables, Queenstown (Kees van Schaick)

October wave fun over the Usk Valley, photographed by Colin Broom of South Wales GC

Wave days at Feshie (Peter Smith)

Taken near Sterling during low-level thermal flight from Portmoak to Loch Lomond and back, on 1 October 2016 (Steve Lynn)

Waiting for wave during a Staffordshire GC expedition to Borders in October 2016 (Nigel Frost)



■ If you would like your previously-unpublished photographs to be considered for inclusion in Gliding Gallery, send them to: editor@sailplaneandgliding.co.uk or upload to: www.sailplaneandgliding.co.uk/dropbox





REFLECTION ON LAKES GLIDING

Ron Linton looks back at a dramatic introduction to gliding in the Lake District in 1962, and events that led him back to gliding

I HAVE been an enthusiast of aviation for as far back as I can remember, building my first 'own design' chuck glider from a sheet of balsa when I was eight years old. For my 17th birthday, in 1962, my parents booked me onto a week's gliding course with the Lakes Gliding Club at Tebay, a few miles north-east of Kendal.

The club's site was actually on top of Tebay Fell, a north-south ridge which was subject to very difficult weather conditions. Because the useable area of the site was narrow, we had the space to launch only into a northerly or southerly wind; in addition, an easterly wind could drop us straight down the hillside into Tebay village! To compound the difficulties, the weather in that area was subject to very sudden changes – and this is how the 'dramatic introduction' arose.

Driven by my father, I arrived at the site on a sunny Sunday evening, where flying was still in operation. The club's only two-seater was a Venture – very similar in layout to a Slingsby

T-21, but with a lower wing pylon. (I believe that only two of these gliders were ever built, the other going to South Africa.) As we excited course members gathered, we watched the Venture being winched southwards, from where it progressed a little further south to hold a bit of ridge lift over Tebay Point.

And then it vanished! Although we newcomers couldn't understand what had happened, the vagaries of the Tebay weather had resulted in a sudden condensation of cloud over The Point, and around the glider – which, of course, had no blind-flying instruments. Radios, too, were a rarity in those days, and the club had none; consequently there was no way of contacting the glider's occupants. Understandably, the club members tried to keep the seriousness of the situation from us newcomers, but we gathered that the police had been notified, and presumably the ambulance and mountain rescue services. The course members were given their evening meal, and eventually we retired to our dormitory bunks, having been assured that "everything would be OK".

Not for any heavy sleepers, it wasn't! At 6 o'clock the next morning, at first light, we were shocked from our slumbers by an almighty racket right outside the dormitory window. We fell out of our bunks to find a Westland Whirlwind helicopter from Air-Sea Rescue settling down on the grass! We saw the crew talking to some of the club members and then, with an even louder noise, it took off and flew towards where the glider had last been seen.

Over an early breakfast, the whole story was unfolded to us. The sudden formation of cloud was not uncommon, and on earlier occasions aircraft had been able to fly out of it back to launch point. On this occasion,



Above: The T-31. Ron in the front seat, Jim Torode in the instructor's seat. The posterior belongs to Geoff Wood (photo: Howard Torode)
Below (l-r): Westland Whirlwind helicopter from Air-Sea Rescue; The T-31 being rigged on the Tuesday morning; The wreck of the 'Venture'



however, the cloud had been exceptionally dense and the air within the cloud very turbulent. The glider had been tossed about, and the pilot had lost all sense of direction. Visibility, it transpired, was down to a few yards, for the glider suddenly smashed into a hillside with no chance of evasive action.

The wing had sheared off its pylon and landed on top of the two pilots, trapping one of them. The other, with a badly-injured leg, had been able to crawl out. At about 2 o'clock in the morning he had found a farmhouse, from where the alarm had been raised with the police. Subsequently, as we knew all too well, the Air-Sea Rescue had appeared, found the wreckage, and taken the injured pilot to Kendal hospital (where its landing on Kendal Green caused as much excitement as had the landing at the club!). Both pilots recovered from their injuries, but I do not think that they flew again.

So, this was now the first day of our course. We were introduced to our instructor, Jim Torode, and to his son Howard, who had come along as willing helper for the week. OK, we've got an instructor – but no glider. Even we novices could sense that this situation might be problematic. And so, whilst Jim entertained us with lectures about gliding and aerodynamics, the club's officers desperately negotiated the loan of a glider from Blackpool and Fylde Flying Club. (It rained all morning, so we couldn't have flown, anyway!)

Later that day we witnessed the arrival of a trailer, and the following morning the rigging of a Slingsby T-31 'Tandem Tutor'. Now the Tutor had originally been built as a single-seater, and doubtless performed acceptably in this role. However, probably as a post-war stop-gap measure, Slingsby had cut a hole in the fuselage and fitted a second seat and set of controls under the CofG (and under the wing!). Unfortunately, Slingsby neglected to increase the wing area, and the net result could best be



described as a 'flying brick'!

Jim was not impressed with this aeroplane. He was particularly concerned about the crashworthiness in the rear cockpit, seated directly above the wheel and under the wing. (He had previously exited a T-31 sideways in a landing accident at Farnborough!)

But it was all we had and, as most of us had never been airborne before, it was still exciting for us course members. The club's winch – an ex-wartime barrage balloon winch with a Ford V8 Pilot engine – could lift the glider to 700-800ft, from which we could just make a single circuit to a landing! Looking at my log book for those days, the flights lasted from just three to four minutes; nothing longer!

Later in the week, when rain stopped play, Howard and I, and a couple of other lads off the course, joined with two of the club members in trudging over the moorland to inspect the wreckage. Looking at the mess, we were astonished that the two occupants had not been decapitated by the wing, as its leading edge had been right behind their heads! We salvaged what instruments and useful bits we could, and then a few days ↻

Above: Ron Linton in the front seat of a K-21 at YGC; Albert Newberry instructor

THE CLUB'S WINCH – AN EX-WARTIME BARRAGE BALLOON WINCH WITH A FORD V8 PILOT ENGINE – COULD LIFT THE GLIDER TO 700-800FT

Below (l-r): The club's only single-seater – an EON Olympia. Howard Torode holding the wing. Jack Paley the pilot; the 1962 course members (left to right): Geoff Wood, Ric Jones, Jim Torode, Ian, John Torry, Ian. With backs to the camera are Howard Torode, Rolf Halde and Charles Boucher (believed to be flying at Long Mynd during the 1980s); The club's 'new' T-21, later in the summer of 1962





Ron Linton had his first airborne experience, in a De Havilland Fox Moth, at Blackpool in 1953. In 1962 he joined Lakes GC. As a 50th birthday gift, Ron had hang gliding sessions in the Peak District. In 1999 he had a training session in a Boeing 737 Flight Simulator, and in 2002 a power lesson in Cessna 150. Ron had two winch launches with Derby & Lancs GC in 2013 and is now with Yorkshire GC

■ With thanks to Howard Torode for his contribution to this article

✎ later the airframe was burnt.

Howard spent the entire week as batman, wingman, cable retriever, tractor driver, and willingly taking on every other difficult job that cropped up. On the last afternoon of the course, we eight course members unanimously voted that the last opportunity to fly should be given to Howard, as a sincere 'thank-you' from us all for his willing support throughout the week!

With the insurance payout, the club was subsequently able to acquire a Slingsby T-21, which was a dream to fly. I'd love to fly in one again – lying in a deckchair, with a roof over your head and lots of electronic gadgets to look at may have its advantages, but it doesn't have quite the same atmosphere as leaning over the side of an open cockpit to shout "Last launch before lunch!" to the winch driver below! I have every sympathy with Miss Mallam's enthusiasm for vintage gliders (See S&G April/May 16, pp62-63) and am very jealous of her opportunities!

Sadly for me, the difficult moorland terrain and the unreliable weather conditions (sometimes there would be no flying at all over a weekend) forced the club to seek a better site, and eventually they moved to

the airstrip attached to the Vickers factory on Walney Island, off Barrow-in-Furness. This journey was out of my reach and, but for one visit after I was married, I had to lose contact with the club that had given me such a precious experience.

Years passed

I had no further contact with Jim or Howard – I knew only that they had come from some considerable distance. Years passed. I got married, and honeymooned on the south coast. On our way home from our honeymoon, my wife and I saw a signpost to Lasham Gliding Centre, and so we made a detour just so that I could watch aeroplanes for a while. Now I have no wish to be indelicate, but the following coincidence simply has to be detailed. Needing a call of nature, I made my way to the club's toilet block. Whilst I was attending to the matter, another person came and stood at the stall right next to mine. I turned round, to find myself face-to-face with Howard!

To plagiarise Humphrey Bogart: "Of all the stalls in all the loos in all the world, he had to stand next to mine!"

After much welcoming and handshaking, Howard took me to find Jim, where again we had a rapturous reunion – and following which I was promptly put in the next two-seater to take off!

Over the years, I had occasional flights at various clubs, but marriage, family and expenses precluded any regular involvement. That is, until three years ago.

I have always been a keen mountain walker and one day, having driven past Sutton Bank a couple of times, I thought that I would have a day out at this spectacular ridge. There I was, strolling along the footpath, when to my great surprise I found myself walking past a glider! Needless to say I stopped to talk to the people around it, and so discovered Yorkshire Gliding Club.

I was back the following week with my ancient log book – a log book whose first pages are filled with Jim Torode's name!

So now I am flying once again, after – effectively – a 50-year absence! It's still a long journey from my home in Manchester (over 100 miles), but a fast car beats a slow bicycle! Having many other regular commitments, I can't get up very often, but the welcome that I have received from everybody at YGC has been tremendous, and my visits are always a delight. At my age, I am unlikely to go solo now, but I shall keep flying as long as YGC's patient instructors will put up with me.

ZULU GLASSTEK LTD

ZULU GLASSTEK SOLE UK AGENT TO ALEXANDER SCHLEICHER SAILPLANES
14 VARIANTS OF PURE, SUSTAINER AND SELF LAUNCHING SAILPLANES

New variant ASG29/18es proving extremely popular
with the early birds!



Photo credit: Tobias Barth Photographie

SALES, REPAIRS AND MAINTENANCE CONTACT:

Zulu Glasstek Ltd...Peter & Sally Wells, Baileys Farm, Westfield Road, Long Crendon, Bucks HP18 9EN
Tel: Pete/Workshop 01844 208157 - Office/Fax 01844 201028 -
email: zuluglasstek@clara.net - Parts Office Hours Mon, Tues, Thurs & Fri 9.30am-12.30pm
www.zuluglasstek.co.uk - www.twister.airshows.org.uk

GLIDER/AIRCRAFT INSURANCE?

Contact:
Tony Fidler

Glider pilot for 35+ years
40+ years insurance
experience

ANTHONY FIDLER & CO INSURANCE CONSULTANTS

27 High Street, Long Sutton
Spalding, Lincs PE12 9DB

Tel: 01406 362462

Fax: 01406 362124

E-mail: robin_fidler@yahoo.co.uk

*Authorised and regulated by the
Financial Conduct Authority*

The Premier Motor Gliding School

- Courses by the hour for NPPL, SLMG & TMG PPL. Ground school available.
- Bronze C Cross County & Field Landing Checks.
- Convert your BGA Licence to an NPPL SLMG.
- RT/AGCS Examination Centre.

Competitive Prices



www.enstoneaerodrome.co.uk
Telephone 01608 677208



Oudie IGC at £795 inc VAT is now in stock with full IGC approval, ENL sensor, vario and 10 hr internal battery plus all the features of Oudie 2

Oudie 2 at £495 incl VAT has full version of See You Mobile fully loaded with world wide data & lifelong free upgrade.

Oudie 2 Lite at £295 incl VAT is ideal if you already have a See You Mobile Licence or want to run XC Soar or LK8000.

BGA and IGC Approved Calibration Centre for all types of GPS Flight Recorders £19 + £6 return post
Dickie Feakes

Bicester Aviation Services

11 The Poplars, Launton, Bicester OX26 5DW
07710 221131 or 01869 245948
dickie@bas.uk.net www.bas.uk.net



f.u.n.k.e.
AVIONICS GMBH

Available from LX avionics – official UK distributor for f.u.n.k.e avionics their new ATR833S 8.33 Transceiver

The ideal 8.33 Radio for your glider!

- Easy to use
- 6 W transmit power
- Easy to see in all light conditions – proven LCD display with back light
- Very lightweight at 350g
- Low power consumption (150 mA standby. 1.8 A on transmit)
- Adapters available to use your existing wiring connectors.



Introductory offer for S&G readers - £950.00 Inc. VAT and delivery

Contact: info@lxavionics.co.uk or call 01280 700020

www.lxavionics.co.uk

Black Mountains Gliding Club

The premier UK site for soaring

- Bookings now being taken for individual visitors, small groups or expeditions for March through until end of October 2017. Please contact the office
- Develop new flying skills at BMGC
- Open daily from mid March until late October
- Over 100km of local ridges - think ridge, think wave, think thermals
- Airspace - we have loads of room
- Located in the National Park - so the scenery is breathtaking
- So, bag a badge, height - duration - distance

Please contact us at: enquiries@blackmountainsgliding.co.uk

Tel: 01874 711463 (weekday mornings) www.blackmountainsgliding.co.uk



JOYS OF THIS GLIDING LARK

Roy G (PW to his friends) reflects on “another case of having my backside handed to me on a plate by Wilson”



Ben Nevis is regarded by the author as a little beyond ‘local soaring’

I SET MY CAP AT A JAUNTY ANGLE, SET FLAP FULL NEGATIVE AND HOWLED MY WAY NOISILY IN THE DIRECTION OF MY START POINT

IT WAS a slow start to the day, waiting for the dregs of a front to clear and the instability associated with the front to go forth and multiply before the wave would set up.

Wilson set off at the crack of early afternoon, I was up next. Aboyne’s bravest tug pilot nailed into the ‘Fox. As I was being towed out, anything not actually bolted down in the cockpit was floating around the canopy in random directions, depending on where the most recent gust had come from. As I was marvelling at how manoeuvrable the ‘Fox is, Wilson sallies forth on the radio with chapter and verse about where the wave is, how it’s only 8 up but he anticipates better, to which I reply... “Busy!” (and I was busy, looking like a truly deranged Porridge Wallah, stirring the stick for all I was worth, to little or no real effect).

At about that point, I thought Donnely (the tuggie) had decided to put us both out of our misery by ending it all; the ‘Fox commenced a truly impressive dive of outstanding duration

during which I was spectacularly failing to put slack in the rope despite the precipitous nose-down kamikaze dive we were both in. Then the inevitable moonshot by the ‘Fox as the forward part of the gust got him (while I was still in the kick up the tail part of it). Cue ‘Fox shooting up as my airspeed was still buried in the “Go faster, stupid” part of the ASI. Ah, the joys of southerly wave in Scotland!

By the time the vario was going off the clock, in a generally “Up” direction, I’d had enough of this aerotow lark and pulled the bung. Peace and tranquillity rained forth (along with my sandwiches, water, map, loose change, DI book and task sheet).

This being my third ever flight in the LAK, I thought I’d be a good boy and actually do an engine run before setting off, just to be

sure (just to be sure it was still there after the thrashing we’d just had).

The LAK seemed a bit noisy and not very keen to gain speed, but the manual (kind of) states “Extract motor such that it may see, dive vigorously at the ground in order to frighten the engine, whereupon – yea verily – it will burst into life and propel thee homewards!” So, after the second sluggish dive at the mountains, the donkey coughed and wheezed itself into a decent impersonation of something likely to do more good than harm. I shut it off, put it away, set my cap at a jaunty angle, set flap full negative and howled my way noisily in the direction of my start point.

As seems to be my talent, I have a knack for setting at least one turnpoint in the sink. Today I’d managed to put the start in the lee of a wave cloud... and I wanted to start low (-ish). Cue cloud flying at 2’6” in order to get a good start (hint – watch what Wilson does: he sets sensible turnpoints!). Anyway, start duly done, a bit of wave squatting to get a view down track, and the Dee Valley looked like a milk run down to Linn of Dee, so off I went.

Fast, and loud. By the time I got to Linn of Dee, this “loud” part was starting to get to me a little. I’m not used to this glider, but it did seem a bit draughty, a bit loud and a bit sluggish (but I’ve been flying an ASH 25 Mi for the past three years, so it’s a bit hard to tell. Everything seems sluggish by comparison to that, unless you are actually trying to turn...). But at Linn of Dee, I really had to jump a bar into wind and wasn’t really that high and the gap really was quite big. This involves using complex wave and wind compensating formulae worked out and promulgated by J Williams Esq. The formula can be quite hard to understand, but bear with me, I’ll give you the full version here.

In lift, fly FAST.

In sink, fly FASTER.

I’m now 50-odd km down track, and have been flying fast. I need to jump some sink, into wind, meaning I need to fly VERY FAST

INDEED. So I did; the noise was horrific, hmmm. Looking round the cockpit I decided that, perhaps, raising the gear at this point might help matters?

What a difference (oddly enough).

Sometimes I, too, am surprised that I'm allowed out unsupervised.

A fairly uneventful run out towards Fort Bill ensued, bar getting slightly lost and ending up one bar too far south (happens, shrug). I jumped north to get into what I thought was the Loch Laggan run (it wasn't, but it worked anyway) and dived in behind Ben Nevis. Proper lift into the low teens of thousands of feet... and I could see a run back towards N560.

To get some perspective, a biff like me sees Ben Nevis as a little beyond "Local Soaring", so I have to break it down into three parts (on a good day). The run up the Dee Valley to Linn of Dee (easy, follow the valley), crossing N560 (erm, not got this nailed yet so make it up as I go along, and it's different every time. It's also a bugger of a place – semi controlled airspace, not predictably lifty, and too far to just glide across, so a bit of a pain in the hoop really). Then there is the run down Loch Laggan as part three. It's like the Dee Valley; an absolute doddle, assuming you can find it (which is not always as easy as you would assume; the wave clouds can be very confusing crossing N560, so finding Loch Laggan is a bit hit or miss. Given the size of the place, that probably says more about how bad my navigation is than anything else, but hey ho).

Coming back from Ben Nevis had been a doddle, but I was slightly hypoxic. I could tell as I was getting irked by the music I was playing, getting irked by how the phone was positioned, had bonkers cold feet, my E-Cig was bugging the hell out of me, my radio was starting to play up as the cold was affecting the voltage the batteries were delivering, and it took four attempts to change the monitoring frequency – at which point I knew I was starting to lose it.

Flying the mountains in Scotland takes a bit of self control. You can't just "blunder on" and hope for the best. If you crash out there, assuming you survive the crash (it's never going to be a "landing"), then the night-time temperatures will get you. You have to bear that in mind and, when it's not right, simplify things.

Wilson had last been heard on the radio muttering about the "mass of clouds"; he was referring to his final turnpoints, having managed to set one in the sink somewhere,



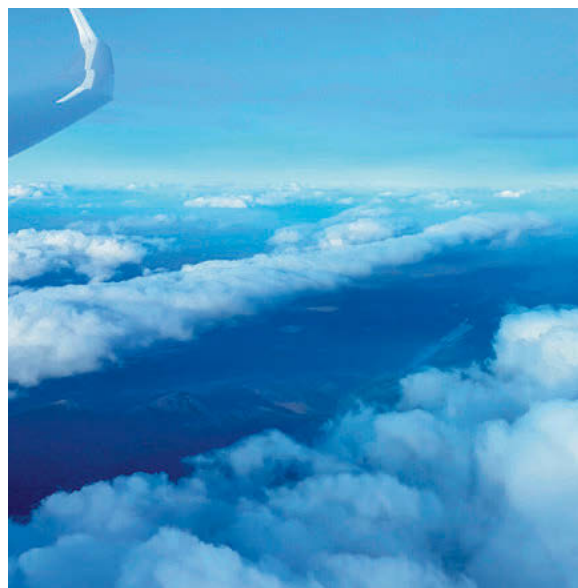
but all I heard was "Mass of clouds". I knew I was in no fit state to attempt a cloud descent and could see that to the south (towards Tummel Bridge) it was blue, whereas towards Aboyne (home, sweet home) it was massively unstable, possibly 8/8ths, but I couldn't tell as I couldn't get high enough to look down on it.

So, I bailed.

And ran for Portmoak (which was about 70-ish km away) and ended up undershooting (due to flying too fast). With a now dead radio, I joined in circuit at Perth behind (and well above) two spam cans doing what all spam cans do, which is interminable circuits and landings. They were doing circuits you could get a 747 inside of and dragging themselves along on their donkeys. Now back to normal, I was following along muttering about wannabe 747 captains, but being a good boy because it was their playpark and I couldn't talk to them (due to radio stubbornly refusing to transmit through Coldbatteryitis).

First spam can landed, second spam can following along, piping up on the radio "Spamcan xy Delta Golf Julie Fandango, going around!" ("cos the first ☹️

Crossing N560 looking for the Loch Laggan run



Regulation check for Nessie in Loch Ness



PROVIDERS OF INSURANCE FOR GLIDERS, MOTORGLIDERS AND LIGHT AIRCRAFT SINCE 1991



PRIVATE GLIDER
& MOTORGLIDER
INSURANCE



PRIVATE &
TUG AIRCRAFT
INSURANCE



GLIDING & FLYING
CLUB AIRCRAFT
INSURANCE



HOT AIR
BALLOON
INSURANCE

T: 01765 690777 • E: info@hillaviation.com
Unit 1a, Sycamore Business Park, Copt Hewick, Ripon, HG4 5DF

www.hillaviation.com

Shark eS (FES System)

The sky is not the limit For your dreams




G-RIFD OK 0067 DG5

For information contact your **new** HPHUK Agent :
John Gilbert (Essex Sailplanes) john@essex-sailplanes.com

Shark MS - Shark SJ - Shark eS - Twin Shark


www.HpHUK.co.uk



If you're serious about your flying... Please subscribe

Subscription only £16 p.a. including UK postage and a digital version. Quarterly.

- Keep up with the latest developments towards greater safety
- Read about recent AirProxes, GA Occurrences and AAIB accident reports
- Follow the well informed commentary in our articles and letters
- Help us with our work at GASCO



Go to www.gasco.org.uk
or phone **01634 200203**
Editor: Nigel Everett

☞ spam can had only just exited the very last taxi way and it would – obviously – be dangerous for him to land behind it... given that he only had about 1,000ft of horizontal separation (I know he's not allowed to according to the ANO, but, c'mon... really?). So I followed in then hoiked a sharp left turn at 50ft and landed at the end of the grass strip they have. The tower called blind and informed me that someone would come to get me, so I waited.

Five minutes later, I could see from all the smoke rising by the tower that either one of the spam cans had spontaneously self-immolated through terminal embarrassment, or a new Pope had been elected. But no! From the smoke, stoor and general mayhem, a fire engine appeared, lumbering purposefully in my direction, in the process making enough smoke to hide a small flotilla behind it. I'm guessing they don't get to play with the fire engine very often at Perth...

The guys arrived, looked stern and gave me a lift back to the tower. The stern looks faded as I was having none of it, taking

selfies in the fire engine (as really I'm still at the mental age where a ride in a fire engine is just about as cool as it's ever going to get).

There then followed the usual logistics faff of getting the glider and trailer reunited (wifelet refusing point blank to haul the trailer, then lifts to the trailer, driving to the glider... yawn). Anyway, 10 hours after landing 50 miles from my house, I'm back home with glider in trailer parked outside.

I didn't do the 500km I'd hoped for.

I didn't do the fallback 300km I'd resigned myself to.

I didn't get back to Aboyné.

I did have a brilliant day out.

Nobody died.

Nothing got bent.

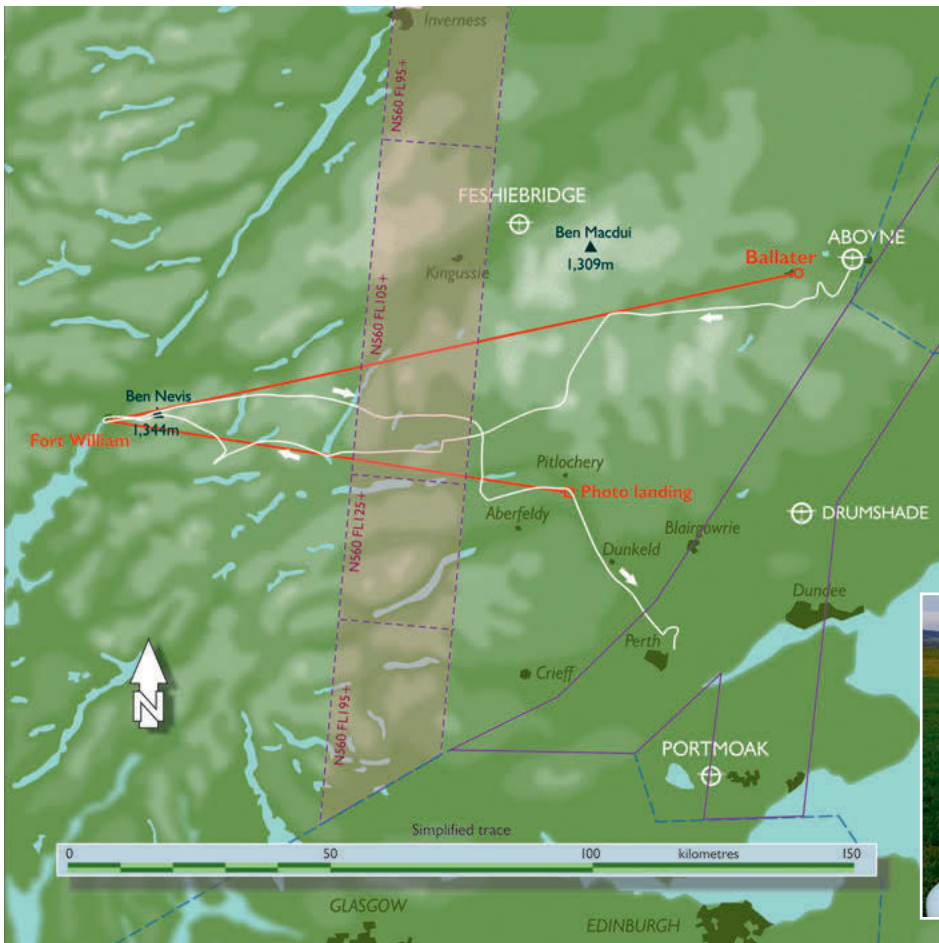
On the downside, Wilson handed me my backside on a platter, again...

Sigh...Good this gliding lark, innit?

Cartoon of PW by the late great Matt Wright



Roy G (PW) is an ex hang glider pilot. He is an Ass Cat/tuggie, with three Diamonds and a firm belief that good thermals are what you wear when flying in wave



FROM THE SMOKE, STOOR AND GENERAL MAYHEM, A FIRE ENGINE APPEARED, LUMBERING PURPOSEFULLY IN MY DIRECTION



The fire engine arrived and, with stern looks, PW was escorted to the tower at Perth

Not quite as planned, but certainly a grand day out!
(Illustration by Steve Longland)



Yorkshire Wolds Way presenter Paul Rose experiences the joy of gliding with Wolds GC's chairman Graham Wadforth (photo courtesy of the BBC)

THE WOLDS WAY

Graham Wadforth extols the virtues of welcoming a TV company to film at your club



Paul Rose chats with tug pilot Eddie Room (photo courtesy of the BBC)

■ **Yorkshire Wolds Way** was transmitted regionally (Yorkshire and Lincolnshire) on BBC1 in January, but look out for a network repeat on BBC2 in April

IT ALL began when a very nice young lady from the BBC turned up at the airfield one sunny Tuesday morning. She was a research assistant, and she told me about the programme they were intending to make and wondered if gliding was something they ought to include.

Naturally I then embarked on a full charm offensive and we chatted for about an hour. I told her all about the club and its activities

and offered her a flight, which she refused as she was afraid of flying.

She must have been reasonably impressed because I later met the producer, Paul Greenan, who came to do a recce. I took him for a flight over the Wolds in our Venture motor glider, and suggested that filming during our annual Two-Seater competition would

provide more of a spectacle than more mundane weekend flying.

They duly came to do the filming over two days and I had numerous aerotows with the presenter Paul Rose, an excellent character who is very easy to get on with. Google him to see his extremely interesting career.

When they turned up on the second day to do some more filming, they all had long faces. It turned out that they had lost one of the GoPro cameras the previous night when they were camping on the cliff top at Filey after filming another section of the programme. It still had in it the SD card containing some of the gliding footage.

The glider we were using was entered in the competition, and it was clearly going to be a task day, so we had to very quickly re-fit the cameras and sound equipment and then get airborne again to re-shoot what was lost.

As it turned out, that footage wasn't used. In fact it was surprising that two days of filming ended up being condensed into about six minutes. Nevertheless, it was a great advertisement for the Wolds Gliding Club and also for East Yorkshire.

The day after the programme was shown on TV, a lady phoned the club to say that she was so taken with the idea of flying a glider that she wished to purchase a flight voucher.

So if the BBC knock on your door, welcome them with open arms. All it will cost you is time and a few gallons of Avgas and your club can also have its five minutes of fame.

The BGA Shop



www.bgashop.co.uk

**Going to the Alps?
Then you need**



"Dancing with the Wind" by Jean-Marie Clément

All about the wind, why, where and how, local breezes, convergences etc.

Explaining tricks and tips of slope soaring and real dangers, from the first slope flying records by Karl Striedieck in the USA until today.

All about the theories of the formation of waves, from Queney to Scorer, including atypical waves and Hydraulic Jumps (Bidone's jump). Specific techniques to use lee waves, especially non conventional ones. Theory and application of the "Speed-To-Fly" concept

in strong winds.

£37.50

**Dancing with
the wind**



**SOARING SEASON
IS NOW OPEN!
WWW.BGASHOP.CO.UK**

**In Flight Plumbing
(Your Comfort is Guaranteed!)**



The BGA Shop - our goal

Our commitment is to supply a diverse range of items to meet the needs of clubs and pilots along with an excellent level of service. Watch our website for the newest gliding essentials!

Visit us on-line at www.bgashop.co.uk

Come see us at **Bicester airfield** or

Call us on **044 (0)1869 571814**

SIMPLIC

MI

Mikael Roslund travels to Lithuania for a test flight of the miniLAK FES and enjoys its easy handling, both on the ground and in the air

THE miniLAK is a new generation of FAI 13.5m Class gliders. Since it flew for the first time in 2015, more than 10 gliders have been sold. The miniLAK is built of hybrid composite materials, such as Kevlar, carbon fibre and glassfibre. The wing spar is composed of modern carbon rods that have been glued together. The wings weigh a mere 38kg each. The landing gear is retractable with the handle on the right side of the cockpit. The hydraulic wheel brake uses the brake lever on the stick. Elevators, ailerons and flaps are automatically coupled during rigging as other modern gliders. Both the rudder pedals and the backrest are adjustable, also in the air.

FES (Front Electric Sustainer)

An electric motor in the nose, some batteries in the back and a 'volume knob'. How hard can it be?

The FES installation is identical to installation in the LAK-17 and Schempp-Hirth Discus 2C FES, but none of these are self-launchers. The guys from LAK on the field had "test started" the LAK-17 as a SLG with the FES and it had gone very well, they told us, although the starting distance was a bit longer than for the MiniLAK with 13.5-metre span. After all, the empty weight differs, with about 120kg between the two.

The operation is incredibly easy. Flick on the power switch, move your hand four cm upwards and turn the 'volume knob' to the left and you have 20kw (30 HP) that pulls you forward. It all takes about three seconds. If you want to save time, you can leave the power switch on and then it takes only two seconds from standstill to full speed propeller.

In the early models, the power switch was located on the right hand side of the cockpit (under the landing gear lever), but some clever test pilot retracted the landing gear at about 100m agl – his shirt sleeve got stuck in the switch and the engine stopped! After that LAK decided to move the switch to the dashboard next to the engine instruments. There is also a ventilation system to



> **SAILPLANE & GLIDING**
APRIL/MAY 17

> **FEATURE**
THE MINI LAK

CITY

MINI LAK FES



With thanks to *Nordic Gliding* for sharing this article
All photos by Jens Trøholt, *Nordic Gliding*

THE PROPELLER ALSO SITS ON THE FIELD OF VIEW SO YOU CAN SEE ALL THE TIME WHAT IT IS DOING



Stasis Skalkis charges the 2 LiPo batteries with the 1200w chargers



↳ cool the engine, but it may be left open all the time.

The FES system also received the Lindbergh Prize for Best Electric Propulsion in 2011.

Pre-test flight

I travelled to the factory with Jens Trabolt, editor of *Nordic Gliding*, and had planned to fly the FES in the same afternoon, because our flight home would depart from Vilnius about lunch time the following day. There was not a lot of time to get things done. But when we got to the factory, we discovered the glider was lying upside down in the workshop.

The glider we would test fly was about to be delivered to Norwegian pilot Trygve Rushfeldt the next day, but the landing gear had collapsed when he landed after a check flight. He was not so impressed, and that was understandable. Now the guys were in hot water. The aircraft was to be delivered the next day. I do not know the standard working time in Lithuania, but I think a light was on in the workshop all night.

“The landing gear is redesigned and it will be ready at one o’clock at the latest,” they told us at breakfast the next day. We had to leave for the airport no later than two o’clock to catch our flight, so now we were a little worried. At exactly 1300 hours, the LAK was finished and transported to the runway. The test pilot was shoved backwards into the glider and given a short briefing on the the management of the FES-system. When the test pilot had closed the canopy the designer asked through the ventilation opening: “By the way, do you have any previous experience with SLG”? The test pilot nodded and advanced the throttle.



Flight test

I did the usual checklist, though in Lithuanian, and then all that was left to do was flick the power switch and turn the “volume knob” to the max. The engine normally provides 20kW (30 HP) at full throttle, but you can get 23kW for take-off and shorter climbs.

Considering engine power, I was impressed by the acceleration. With my weight, 90kg with parachute, and the 220kg of the LAK, I was airborne in less than 200 metres on the asphalt runway with a slight headwind. Not bad for 30 “horses”. Once up in the air at a safe altitude, I pulled back a little and, with about 20kW of power, climbed steadily at 2m/s. The engine does not need to be cooled when stopping, so at 500m I pulled off to about 5kW and then a quick turn fully to the left and the engine stopped.

According to the FES website, the glider is able to cruise at 5kW for up to an hour/90km, or climb to 2,000m.

There are sensors that detect if the propeller stops correctly and it is automatically placed it in the correct position after a few seconds. The propeller also sits on the field of view so you can see all the time what it is doing. A far cry from the system of a conventional SLG in which the pilot must devote his or her full capacity to look at a tiny vibrating mirror and additionally operate a rubber coated mechanical propeller brake.

The propeller is folded against the nose and this naturally generates some drag, but according to the designer the drag is less than when you are reaching out through the ventilation opening when you are taking a ‘selfie’. I tried to start and stop the engine several times and it is just as easy to raise and lower the volume on the radio; turn the ‘volume knob’ fully right and the glider climbs 2m/s – ‘volume knob’ fully left and the engine stops. All engine information is displayed on a (FCU) FES Control Unit that is mounted in the dashboard.



I pulled off to about 10-12kW (15HP) and cruised the LAK in level flight at 120km/h. At full throttle, it is doubtful if one can do without a headset. It is not the engine that is noisy, but the propeller.

FES Control Unit instruments (FCU)

The FCU is designed to make it as easy as possible to operate with a FES and it fits into a standard 57mm hole in the panel. It is equipped with a sunlight readable high-resolution colour display and it was no problem, even with my RayBan-copies and the sun in your face, to see it clearly.

The FCU shows RPM, Power, Voltage, Current, Battery, Capacity, Remaining Time and Temperature. It actually resembles a radio with a display, a control diode and a 'volume knob'.

The FCU is developed by LXNAV and it is very easy to read. Above all, the most interesting information is the Current Power Output and Remaining time. Power is indicated by numbers while Remaining time is indicated by the 10 battery symbols on the display. When there are no more 'batteries' things become quiet and the engine stops.

There's even a built-in 'self test system,' so that if any parameter is going outside its preset limit, it will start blinking and howling.

Propeller

The propeller is very light and made of carbon fibre. It has a diameter of one metre and weighs only 240 grams. When stationary, the blades are feathered back and they are slightly curved so that they have a near perfect match with the fuselage.

To ensure that the propeller has sufficient clearance during start, the landing gear is quite tall. When the engine is stopped, the propeller is braked and positioned horizontally automatically. At the front of the nose where you will often find the pitot tube, there is an air intake to cool the motor. It should always be open when the engine is running. The pitot tube is placed at the



top of the fin and is not disturbed by the propeller airflow.

The propeller blades are mounted on small hinges and when you start the engine the propeller is pushed out by centrifugal force and when it stops it is pushed back by the wind. Easy!

There are 50 hours between maintenance checks on the propeller. It does not sound like much, but how much is the engine actually running during a season? If you run it for 10 minutes every Saturday and Sunday throughout the year it will be about 17 hours. Now, it has never happened during my 45-year gliding career that it is flyable every weekend, so it should not be a problem.

FES batteries

The battery consists of 28 Superior Lithium Polymer (LiPo) cells manufactured by South Korean battery giant Kokam. Each cell has a capacity of 43Ah and is placed in special composite boxes. The cells are connected in series and provide a voltage of between 90-118V. Together the two batteries provide

Above: The very light wings make rigging a piece of cake

Facing page, below (left-right): Trygve Rushfeldt and Stasis Skalkis discuss the optimised landing gear design

Vytas Maciulis from LAK displays a winglet. It is fastened to the wing with a springloaded ball, eliminating the need for tools

Flap and brake handle placed where you'll expect to find them, on the left side of the cockpit wall

Below (left-right): The red power switch and FCU above. Full power only takes 3 seconds from standstill

Air extractor behind cockpit

The glider is not equipped with steerable tail wheel, so could prove difficult to taxi



ADVANTAGES OF FES

- An electric motor is smaller and lighter than a equivalent piston engine
- Quieter
- Environmentally friendly
- Reliable. No pumps, filters or spark plugs. Fewer moving parts to fail
- Full throttle in seconds
- Do not need to cool down before folding
- Need not be heated
- Minimal maintenance
- Performance does not decrease with altitude
- Easy handling. Just turn the knob
- No giant air brake if the engine does not start.

■ <http://lak.it>

■ www.balticsailplanes.co.uk

In the UK, you can expect to pay €82,000 (+ VAT), including FES and trailer, without instruments. You get a two-year warranty (or 200 miles, whichever is first).

Fifteen miniLAK FES have been sold already (two for UK)

Below: The glider has a rather high landing gear to give the propeller clearance.



✂ a total of 4.2kWh. The batteries weigh 32kg (two x 16kg) and are placed in the fuselage behind the wings. There are no other batteries in the glider so these batteries also operate other avionics, such as radio and nav computer.

Charging the batteries

To charge the batteries, there is a 1,200W (or two 600W) programmable LiPo chargers available. The latest GEN2 batteries have an integrated BMS (Battery Management System) and a RADSOK fast charge systems. The BMS keeps track of the voltage of each cell by measuring the resistance so that when fully charged, each cell has the appropriate voltage, +/- 2 mV. With a 1200w charger it takes approximately 150 minutes to charge a battery if it is completely discharged.

The beauty of LiPo batteries is that they have no “memory effect” and they will not deteriorate if charged from half full. Full charge can be monitored on a PC through FES BMS Control Software.

As an option, there is a 3000W fast charger. Two completely drained battery can then be recharged in less than two hours, but then you have to have access to an electrical cable with a 16A fuse, which is not always possible at the club. Unlike the lead batteries, you can set aside the batteries for several months without losing much capacity. The self-discharge is less than one per cent a month.

The battery manufacturer, Kokam, claims the batteries can be recharged 1,500 times, and after that they still have 80 per cent of capacity left. The batteries are quite

expensive, about €5,000, but if you charge them 1500 times it will cost just over €3 each charge. If you can make three launches per charge it then starts to get very cheap. If you make two charges a weekend throughout the year, they will last for 14 years. After 14 years, I believe that we might see better and cheaper batteries and I might perhaps have also bought a new FES and left the concern to somebody else!

FES engine

The engine system is designed by Slovenian LZ Design (Luka Znidarsic) and sits in the nose. It weighs about 7kg and balances out the two 32kg batteries in the fuselage. The motor is a DC motor and a DC/DC converter is placed between the engine and the batteries.

The advantage of the electric motor is that it does not need to be heated before use, or cool down afterwards. However, the engine must be cooled when it is running and it is done with the ventilation. It must always be open during engine operation, but can be turned off when the engine stops.

Photography

I was glad that I had brought a clean shirt with me and had shaved that day because now it was time for photography. The *Nordic Gliding* editor has a tendency to want to take close-ups. We folded the editor's long legs and shoved him backwards with three kilograms of Canon equipment around his neck in a Wilga, which had now been rolled forward. For superior image quality, we had also removed the door and the resulting blast from the mammoth Wilga propeller nearly cost the editor his Randolph Aviator sunglasses. With the editor hanging backwards and halfway outside the aircraft, they took off.

I have flown some formation flying in the past, but it has always been with a throttle lever in hand; to fly formation with a ‘volume knob’ was a new experience. After various directions given by the editor frantically waving and pointing, sitting backwards in the Wilga and me wildly twisting the ‘volume knob’, we finally got some good pictures. I was actually more concerned with the editor falling out of the Wilga than of a mid-air, especially as he had the keys for the rental car.

13.5 metres LAK

Our mission was primarily to test fly the FES, but a few words about the glider should



Mission completed: (left to right) Tryge Rushfeldt "Rush" and wife Reidun Rushfeldt, Stasys Skalkis (LAK), Vyutas Maciulis (LAK) and test pilot Mikael Roslund

also be mentioned. The LAK 13.5 has the same fuselage as its big brother, the LAK-17. Empty weight is 220kg compared with 340kg. The miniLAK has a relatively spacious and comfortable cockpit with all controls easily within reach. I consider myself to be a fairly normal (physically speaking) pilot, if there is such a thing, and there was still much room to adjust the forward and backward travel on both backrest and pedals.

As with any other flapped glider you start with minus flap and then change to plus flap when you approach take-off speed. Pretty simple, full 'volume' on the FCU and then move your hand an inch to the left to the flap lever. There was not much time left in the test flight session to get a more complex feel for the glider, but I took the opportunity to make some observations on the glide down. It is clear that it is just 13.5m span; incredibly harmonic and easy to manoeuvre, and almost as fast in the roll as a Fox. It stalls straight ahead with the stick fully back. Some light vibrations are felt in the wings, but nothing else. It is incredibly easy to fly and I think it would be perfectly safe to let students fly their first solo in it.

Now, the only two negative things I have to say about the LAK 13.5. With only 220kg aircraft, landing flaps and full brakes, I thought it would have a glide ratio like the proverbial piano. Intentionally, I came in a little high on the final and thought I would have to close the brakes again, but no, it did not brake too much. Should one need to make a short landing, you would probably

have to work a bit on it, much like an 'old' Duo Discus and certainly not as a ASW 20 or LS3. If you also add 180 litres of water in the wings, then you really have to work on it.

The other negative impression is the wheel placement. Although it has moved up 6cm since the first prototype, the glider will easily tip forward on the nose even with moderate wheel braking.

Who buys a MiniLAK FES?

When the glider was designed it was not with Open Class pilots in mind, but more as a leisure tool for the majority of pilots who are just looking for a FGF (Feel Good Flight). But surely it is possible to fly fast with 13.5-metres wings as well? It was shown at the first World Championship 13.5m Class in 2015 in Pociunai, where several flights were in excess of 100km/h.

Had I not already placed an order for a 20-metre German SLG with a friend of mine, then I could very well imagine spending my spare time in a miniLAK FES.

Conclusion

I think the miniLAK 13.5 FES is a concept which gives good value for money. The glider is very pleasant to fly, and it is easy to handle, both in the air and on the ground, and you will be spared messing around with oil and petrol. The key word is simplicity.

Mini LAK FES

Empty weight: 213kg
MTOW: 350kg
Water ballast in wings, 80kg
Min Wing Loading: 33kg/m²
Max Wing Loading: 41.6kg/m²
Wing Span: 13.5m
Wing Area: 8.41 m²
Fuselage Length: 6.53m
Fuselage Height: 1.32m
VNE: 250km/h
G Limits Without Ballast
-2.65/+5.3
Best glide: 1:44 @ 97km/h

ENGINE

Type: FES-LAK-M100
Overall system weight: 52kg
Batteries weight: 32kg
Total Energy Capacity of the Batteries: 4.2 kWh
Single Battery Charging Time: 4hr
Continuous Power: 20 kW
Max Power: 22 kW
Propeller Diameter: 1m



Mikael Roslund began his gliding career in Malmö Segelflygklubb, Sweden, in 1971 and now flies at Sweden's Ljungbyhed Flygklubb. Mikael owns a share in an EB27 and recently returned from Poppenhausen with a new ASG 32, which he owns with fellow Swede Robert Danewid. Mikael is an instructor and examiner. He has about 2,200 gliding hours, of which 1,000 are aerobatic. Retiring from a career in the Swedish Air Force, where he flew the "home-made" Draken, Mikael joined Scandinavian Airlines and was an Airbus captain. He is now retired.



HpH CEO Jaroslav Potmesil drove over 1,000 miles to share the story of the creation of HpH and the Shark with conference delegates



Andrej Kola of Naviter (right) and Erazum Polutnik of LX Nav gave a presentation on "Connectivity – can your instruments talk to each other?"



Open Class world champion Russell Cheetham (right) receives an unexpected gift from Darko Gagula, of Delux by Gagula

BGA C

Glider pilots from around the UK (and overseas) enjoyed the annual BGA Conference and AGM at the Nottingham Belfry on 25 February

MORE than 400 glider pilots attended this year's BGA Conference, which was kindly sponsored by Sydney Charles Insurance and superbly organised by Liz Pike. The Nottingham Belfry Hotel was a very busy venue from first thing in the morning on Saturday to the early hours of Sunday!

The day kicked off at 9.15am with two parallel sessions for club officials: a Club Chairmen's forum led by BGA Chairman Peter Harvey and a CFI/Senior Instructors' forum led by Mike Fox, the BGA training standards manager.

The main conference began with chairman Peter Harvey stepping up to the stage and welcoming everyone with his now customary numbers quiz and providing a brief introduction to the day. Jaroslav Potmesil, the CEO of HpH, who had driven over a thousand miles to attend the conference, made a presentation describing the development of HpH to its current position as a leading sailplane manufacturer producing the highly popular Shark.

Following a coffee break, BGA Chief Executive Pete Stratten and BGA Executive Committee member Dave Latimer presented 'Planning for Success', describing a number of topics that the BGA is delivering on or is developing with clubs to support gliding as it evolves over the next 10 to 20 years. Also included was a strategy that is emerging from a consultation with clubs and others during 2016 and the importance of partnership, particularly with the EGU, Europe Air Sports, and within the UK, the RAeC and GA Alliance. Dave Latimer went on to describe opportunities for high quality marketed awareness of what gliding is really all about and, with a trial flight conversion rate of around 1.4 per cent, the rationale for encouraging more of those who really want to learn more about the sport to do so. Describing some of the other challenges facing gliding, Pete detailed how government airspace capacity priorities and the airspace providers' need to satisfy their shareholders will require the BGA and its partners to be even smarter in retaining freedoms going forward, and identified the need for professional airspace expert support for our volunteers. He closed by reminding everyone of revised timescales for implementation of EASA regulation and noting that the BGA continues to use the BGA gliding certificate and all associated BGA instructor ratings while providing support to those who choose to hold an EASA licence.

Following a brief introduction by Peter Harvey, who described the huge contribution made by volunteers, the BGA awards followed. BGA Diplomas were presented by Peter Harvey to Barry Hogarth (Mendip GC), The Gliding Heritage Centre team, Peter Molloy (Dorset

CONFERENCE

GC), Edward Lockhart (S&G/BGA safety), Max Kirschner (British Gliding Team), Bob King (Bicester Gliding Centre), Bob Lloyd (Kent GC), and Richard Carter (Cotswold GC). The Bill Scull Safety Award was presented to Dan Bates (Black Mountains GC). BGA medals for exceptional service to gliding were presented to Dick Dixon (Bath, Wilts & North Dorset GC), Don Irving (Scottish GC), and David Howse (Cambridge GC). Yvonne Elliott presented the Caroline Trust special award to Tom Wilson (Kestrel GC). The British Gliding Team were applauded for their achievements in the recent World Gliding Championships, with a Gold medal for Russell Cheetham, Bronze medals for Andy Davis and Mike Young, and an overall Gold medal for the team.

Following lunch and another opportunity to make the most of the exhibition areas, the formal business of the AGM took place under the company secretary, Anthony Smith. The Minutes of the AGM held on 27 February 2016 were approved; the Annual Report was adopted; the Revenue Account and Balance sheet for the year ending 30 September 2016 was adopted; the budget for the year ending 30 September 2018 and annual subscription rates were adopted, and Auditors Haines Watts were appointed.

As required by the Articles of Association, following their retirement by rotation after three years, George Metcalfe, Lisa Humphries, Nick Bowers and Bill Craig were nominated and accepted as Executive Committee members for a further term of three years.

The airspace update followed, led by John Williams, the BGA airspace committee chairman. John reminded us why the subject of airspace is so important by reflecting on the beauty of the sky and the need for reasonable freedoms to enjoy it, and that there is no doubt that getting airspace right needs input from many as no one party sees the whole picture – even though some think they do. Using the analogy of soaring flight, John noted that getting airspace right is all about management of risk too and that the CAA agrees. He went on to discuss a number of topics that lead to a clear conclusion that more CAA intervention is needed in airspace

development. RMZs were an ideal tool to bridge the gap between ATZ and class D, but are now being misused; Hawarden, a low density air freight operation with no passengers, is looking to be provided with an RMZ. The risk assessment that might justify this is questionable and the precedent is appalling. John observed that other airfields will likely jump on the bandwagon and we'll see a map covered in RMZs, which was certainly not the original intent when we supported the original RMZ concept. He went on to note that Inverness, a peaceful place to sit for a coffee only disturbed by an aircraft movement every half hour or so, are hell bent on a huge swathe of Class D that would let them keep everyone out. Not to mention pushing GA away into the serious terrain.

Airspace choke points are a clear and frequently unnecessary hazard. After years of fruitlessly asking for what might justify Farnborough's airspace aspirations, gliding finally got to see some actual data which suggests that the whole thing is driven by the occasional delay of up to as much as seven minutes that can happen as frequently as every week or two. When judged against the choke point for everyone else that would create, it is hoped that the CAA will make the right decision. Using Ladder data to illustrate the issue, John questioned how additional controlled airspace at Oxford/Brize could improve overall airspace safety.

In closing, John reinforced the issue of different mind sets that different airspace stakeholders have, where both are right in their own world, and therefore why "gliding desperately needs much more CAA intervention during airspace development". If the CAA engaged stakeholders at the earliest possible stage, innovative and proportionate solutions could be jointly created; without that we'd be condemned to an ongoing flood of one-sided and disproportionate change proposals being bulldozed through the system. The latter inevitably led to confrontation, gross

NATIONAL AWARDS:

BGA Chief Executive Pete Stratten reported a number of national awards: the RAeC Silver medal to Howard Torode and Tom Hardie; a Bronze medal to Larry Bleaken; a RAeC Certificate of Merit to the Heritage Centre, John Bridge and Peter Gray; the Old & Bold trophy to Roy Cross; and Peter Saundby was made a Companion of the RAeC.



John Brady (FASVIG), Stu Lindsey (CAA) and John Williams answered questions about airspace

THE BGA AND ITS PARTNERS WILL NEED TO BE EVEN MORE FOCUSED ON RETAINING AIRSPACE FREEDOMS

■ Photos by Paul Morrison

■ TURN TO PAGE 46 AND 48-49 FOR MORE CONFERENCE COVERAGE

'CONNECTIVITY – CAN YOUR INSTRUMENTS TALK TO EACH OTHER?' IT APPEARS THAT THEY CAN AND IN SOME CASES ARE DOING SO

Right: The Shark eS from HpH was just one of the exhibits attracting interest in a packed exhibition hall



CHAIRMEN'S FORUM

■ Pete Harvey facilitated a discussion with around 24 club chairmen that considered membership, PR, challenges faced on MoD owned airfields, airspace safety and developments at EASA. John Williams provided an airspace update noting significant ongoing challenges.

CFI AND SENIOR INSTRUCTORS' FORUM

■ This year the CFI session returned to focusing on some nuts and bolts training matters. Colin Sword introduced himself as the new Instructor Sub Committee Chairman, and we covered how some clubs dealt with the incentives for pilots to get current again after a long winter of no flying. We got some feedback on the practicalities of teaching the spinning syllabus, as well as how we might be able to simplify things in the future. John Williams gave his now usual CFI focused airspace brief during the last five minutes. It was great to see both familiar and new faces.

✎ waste of everyone's resources and demonstrably bad outcomes.

John Brady of the FASVIG (Future Airspace Strategy VFR Implementation Group) then went on to describe the excellent work being carried out on behalf of GA by the FASVIG and its near future plans. The CAA's Stu Lindsey spoke about a number of developments, including modernisation of the airspace change process, implementation of 8.33, and the ongoing trial of non-transponder areas above FL100. The session closed with both Johns and Stu answering a small number of questions from the audience.

After coffee, the afternoon progressed with three very interesting presentations introduced by hosts Peter Hibbard and Ben Hughes. Nik Salej of LX Navigation presented a fascinating insight into new variometer technology; Andrej Kola of Naviter and Erazum Polutnik of LX Nav developed the technology theme even further through their

joint presentation on "Connectivity – can your instruments talk to each other?" It appears that they can and in some cases are doing so! Peter Harvey then took to the stage to present a highly amusing reflection on his experiences in soaring under the title of "Even a blind chicken eventually gets some seed. Everything I wish someone had told me 40 years ago!" The smiles and laughs rounded off a fantastic day.

The conference was followed by a formal dinner and disco sponsored by Forbes Insurance and a record 280 people sat for dinner, including a small number who the hotel weren't expecting! The BGA trophies were presented by Royal Aero Club President Patrick Naegeli, including the Enterprise Trophy awarded to two German pilots for their outstanding out and return flight to the Isle of Lewis from Aboyne.

The fun continued into the early hours of Sunday morning.

■ The BGA would like to thank the exhibitors supporting the conference: Sydney Charles Insurance Services, GP Gliders, Anglia Sailplanes, Hill Aviation Insurance, Forbes Insurance, Navboys (featuring Trig Avionics), Cobra Trailers, Vertigo Covers, The French National Gliding Centre (CNVV), IMI Gliding Equipment, Aeroclub Barcelona, LX Avionics, Aviation Skills Partnership, TPF Parachutes, UK Junior Gliding, BGA Shop, Stemme UK, the Light Aircraft Company, AFE, Stein Financial, HpH Sailplanes, Hayward Aviation, The Caroline Trust, Women Glide UK, Aim

Higher, and Mary Meagher. Thank you all for your support and we hope to see you again next year.

■ A total of £1,275 was raised for the Caroline Trust. Thank you to all who donated! The prize winners were:

- Flight in the EB28... the winner has donated this to a worthy junior (yet to be announced)
- Airside Tour and Tower Visit at Heathrow – John Towell
- Tickets to the Goodwood Festival – Dave Phipps
- Tickets to the Flywheel Festival at Bicester Heritage – G Dale.

**Don't renew your
glider insurance
before getting a
quote from us**

**Excellent
cover at
great
prices**



Proud sponsors of the
British Junior Gliding Team

**Comprehensive
Gliding Hull and
Liability Insurance**

**+44 (0)1420 88664
info@sydneycharles.co.uk
www.sydneycharles.co.uk**

SC
SYDNEY CHARLES
AVIATION INSURANCE BROKERS

Sydney Charles Aviation Insurance Brokers is a trading name of Sydney Charles UK LLP Sydney Charles UK LLP is authorised and regulated by the Financial Conduct Authority, FCA Firm Reference No. 471046. Sydney Charles UK LLP is a Limited Liability Partnership registered in England and Wales Registration No.: OC320079 Registered Office: 7 Old Aylesfield Buildings, Froyle Road, Alton, Hampshire, GU34 4BY.

PHILIP WILLS MEMORIAL FUND

SUPPORTING GLIDING IN THE UK



The Philip Wills Memorial Fund has cash available now to lend to gliding clubs for capital projects. Key features of the loans are:

- **Negotiable as to length and amount of loan**
- **Requirement for a "business case" to be presented to trustees**
- **Security usually taken on asset bought + personal guarantees**
- **LOW interest rates – lower than you would pay to a bank**
- **Early repayment not a problem**
- **Minimal legal costs**
- **Easy access to lenders for discussion**

More information is available on the BGA website. If you want to just discuss informally, please email Steve Lynn at Stephen@srlynn.co.uk, or please just download the application forms at <http://www.gliding.co.uk/forms/clubmanagement/PhilipWillsMemorialFund-ApplicationForm.pdf>

We look forward to hearing from you.

In conjunction with the





▲ Sebastian Kawa, 11 times world champion, travelled from Poland as an exhibitor on the GP Gliders stand and also to enjoy the evening dinner and awards

◀ German pilots Thomas Seiler and Christof Maul were awarded the Enterprise Trophy for their epic flight from Aboyné

▼ Delegates took away some colourful bags provided by conference sponsors Sydney Charles



▶ G Dale (right) is the UK dealer for GP Gliders

(Facing page from centre top):

- ◀ Alison Mulder (Nympsfield) with California in England trophy, awarded for the longest handicapped flight by a female pilot
- ◀ Sydney Charles once more sponsored the conference
- ◀ Winner of the Junior National Ladder Finn Sleigh receives the Spitfire trophy from Patrick Naegeli
- ◀ Shenington GC's Mary Meagher promoting her latest book *Gliding Granny on Final Approach*



(Left to right): Helene Sonn of the French National Gliding Centre (CNVV); networking and meeting with friends old and new is an important part of the day during breaks and at the evening's awards dinner generously sponsored by Forbes Insurance

2017 BGA SPORTING CONFERENCE AND AWARDS PHOTOGRAPHY BY PAUL MORRISON



▶ Selfie sticks provided by evening sponsors Forbes Insurance were ideal to capture the fun aspects of the evening

◀ Bronze medallists Howard and Steve Jones (right) received the Goldsborough trophy from Patrick Naegeli for highest placed pilot(s) in previous World Championships



WHAT'S IN A NAME?

'STRATEGIC plan', 'business plan', 'sport development plan'. Differing names, differing formats, same purpose – to set out a vision about how the The Club (that's You, the club members) would like the club to be in the next two to five years, and to identify paths to make that vision a reality.

The format will suit the club's current aims, and may change shape over time. It won't be long – the details will be in the files and folders of the various working groups who are bringing sections of 'The Plan' to life.

The current version will have developed by iteration and in consultation with you. It will also be shaped by the club's steady governing document, history and culture. Progress is monitored.

Decisions are reversible if actions result in unintended consequences, or the cultural timing is wrong. Your plan is a living document, a servant to the needs of the club.

'UNDERSTAND CLUB HISTORY, BUT DON'T LET THE FUTURE BE DEFINED BY IT'

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

Proactive, not reactive, planning

LOOKING at the feedback from last year's Club Management Conference, the most topical area covered was 'strategic planning'. For the past decade, clubs have been reacting to external threats to survival; threats which not all clubs have weathered.

What we saw at the 2016 conference was the fruition of the past few years of development work within and between clubs – people working collaboratively

and looking at ways of pooling limited resources.

The tone of discussion has shifted. Clubs are also shifting from reactive to proactive planning. Club management will always be a blend of the two, but it is heartening to see so many clubs ready to embrace the task of getting involved with a positive, planned future, rather than just arriving in the present by surprise and in a degree of discomfort.

MORE OF WHAT PEOPLE WANT

THE BGA Survey Monkeys have been at it again, this time talking to people who recently went solo. These are the key people when it comes to club health. 'Everybody' knows that the year after solo is the year pilots are most likely to leave gliding. BGA figures show 295 solos in 2015 to 170 Bronzes (42 per cent less) in 2016. How your club would look if that loss was halved?

For some people, going solo is a bucket list life challenge and, once achieved, they will be moving on. That's fine, but for the majority of new solo pilots, they want to do more and they are expecting to have years of varied and interesting gliding (and flying) ahead of them. The primary purpose of your club is to provide those opportunities. This is set out in the club's governing document, the steady document that provides instructions to club members, especially in times of uncertainty.

So what is 'Your Club' and if the responsibility lies with 'Your Club' what does that mean in reality? 'Your Club' is You, the club members. You elected a committee of volunteers to run the club on your behalf at the last AGM and, as a club member, your part is to support them to do that. The committee can only provide you with the gliding facilities and opportunities that you want if you help them to do it. That is the deal.

The reason why recently-soloed pilots are so valuable to the future planning

process is that they have invested their time and got involved in your gliding club's activities for long enough to go solo. Their understanding of the club is very good; they have aspirations and enthusiasm. They also have useful ideas about the possible; ideas that are not tainted by failed efforts in the different lands of times past. What would happen if they are right about what's possible now?

The 182 people who took time to respond to our survey have done so generously, and we have 56 pages of very useful results and text to analyse. If you were one of the 182, thank you.

In addition to facts (age, employment status, club and so on), we asked subjective questions like 'what attracted you to flying?'; about the ways clubs can improve pre-solo training; and what the post-solo aspirations are.

The good news is that 83 per cent of respondents are either happy or very satisfied with the training support they receive. However, there are 123 free text answers to the question 'what could your club do better to help you achieve your aspirations?'; 132 to 'is there anything about gliding that particularly frustrates you?' and 109 to 'what one thing could your club do to improve your overall gliding experience?'

Summarising the results here would be an injustice, but one comment in response to the aspirations question begins "After passing solo it wasn't impressed on me straight away that it is now down to me to drive what I wanted to do with regards to training. Eventually the penny dropped..."

What did you just think? Was it 'we should get better at telling them', or 'we should get better at leading post-solo training'? Imagine the improved post-solo retention rates if all clubs did the latter.

As the 'Go Gliding' marketing project picks up momentum in the coming months and years, we all need to get even better at welcoming and fostering new glider pilots so the gliding experiences and opportunities that come from being a member of Your Club, are positive, rewarding and fun.

The BGA Team and General Information



Executive Committee

Chairman

Peter Harvey
chairman@gliding.co.uk

Executive Members

Neil Goudie, David Latimer, Bill Craig
George Metcalfe, Nick Bowers,
Andy Perkins, Lisa Humphries,
Charlie Jordan, Anthony Smith

Treasurer

Anthony Smith

Company Secretary

Anthony Smith

HQ

Tel: 0116 289 2956
Fax: 0116 289 5025
office@gliding.co.uk
www.gliding.co.uk

Chief Executive

Pete Stratten pete@gliding.co.uk

Office Manager

Debbie Carr debbie@gliding.co.uk

Accounts

Peter Bishop
accounts@gliding.co.uk

Administration

Lizzie Pike lizzie@gliding.co.uk
Sheila Weston sheila@gliding.co.uk

Communications Officer

Keith Auchterlonie
keith@gliding.co.uk

FAI Badges Officer

Basil Fairston basil@gliding.co.uk

Chief Technical Officer

Gordon MacDonald
cto@gliding.co.uk

Airworthiness Quality Manager

Keith Morgan

Magazine Editor

Susan Newby
editor@sailplaneandgliding.co.uk

Child Protection Lead

Karon Matton karon@gliding.co.uk

Performance & Development

Competitions & Awards

Liz Sparrow

Team GB Manager

Graham Garnett

Development

Dave Latimer

Development Officer

Alison Randle
alison@gliding.co.uk

Marketing

BGA Office

Aim Higher

Kevin Atkinson

Schools and Colleges Lead

Yvonne Elliott
via the BGA office

Operations

Safety

Pete Stratten

Airspace

John Williams

Instructing

Don Irving

Training Standards Manager

Mike Fox
mike@gliding.co.uk

SLMG

Paul Whitehead

Technical

Howard Torode

Flying Operations

Peter Moorehead

CAA SLMG Instructors and Examiners

A number of CAA authorised SLMG examiners are appointed via the BGA to support SLMG activity under the management of the BGA SRE SLMG. Contact details are at <https://members.gliding.co.uk/examiners>

Gliding Examiners

BGA gliding examiners are appointed regionally and directed by Senior Regional Examiners. Coaching and tests can be arranged via SRE's who are listed at <https://members.gliding.co.uk/pilot-resources-flying-training/examiners/>

Safety Guidance

There is extensive safety guidance including a toolkit for club safety officers at <https://members.gliding.co.uk/safety>

Airworthiness Inspectors

There are a number of BGA inspectors across the UK. A proportion of them are approved to issue an ARC and are listed by region at <https://members.gliding.co.uk/arc-signatories>. Regional Technical Officers can be contacted via the BGA office.

Airworthiness Guidance

Extensive guidance for owners of non-EASA and EASA aircraft is at <https://members.gliding.co.uk/airworthiness>

Senior Accident Investigators

Chris Heames, Peter Claiden

Other Information

Courses and Seminars

BGA courses and seminars information is at <https://members.gliding.co.uk/courses/>

Fees

BGA fees are detailed at <https://members.gliding.co.uk/fees-and-charges/>

BGA Office Contact Details

8 Merus Court, Meridian Business Park, Leicester, LE19 1RJ
tel: 0116 289 2956 fax: 0116 289 5025 email:office@gliding.co.uk





Clockwise from left:
At the end of a busy cold December day at Banbury Gliding Club (Piotr Wiszniewski)

Waiting for the last flight of the day - a beautiful sunset over Kenley airfield (Chris Leggett)

Darlington's EuroFOX G-SIEF visited Pocklington recently and here it tows Wolds member John Hunt's Pilatus B4 G-PILY

Burn Gliding Club instructor Terry Tordoff's granddaughter Olivia carrying out positive control checks on the club's PW5. Soon to be a new recruit in the junior squad? (Terry Tordoff)





Clockwise from above:
Gordon Basey (right) is interviewed during filming of the BBC's *Wolds Way* (see page 36)

'Late landing' by Harriet Gamble was the winner of Bath, Wilts & N Dorset GC's Winter Sunset competition

This year's Sea Cadet Aviation programme got off to a good start when 16 cadets from all over the UK travelled to Weymouth for ground school and a chance to gain their Bronze Wings



Dorset's Carol Marshall and Adam Kingdom flying eastwards along the Jurassic Coast, approaching Lulworth Cove and Durdle Door

Martin Ewer is presented with a photo of his LS3 as he retires from the position of Peterborough & Spalding CFI. It was Martin's second term in this role during a distinguished career in the RAF

■ 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*, please email them to:
editor@sailplaneandgliding.co.uk
or upload to: www.sailplaneandgliding.co.uk/dropbox



CLUB NEWS

BANBURY (HINTON IN THE HEDGES)
WWW.BANBURYGLIDING.COM
5204355N 00118784W

WE are preparing for the soaring season with our fleet completing their annuals, arranging time in the motor glider for field selection and landing courses, and planning sessions in the clubhouse on a number of subjects. Hopefully, as soon as the dull weather disappears and spring comes along we will be in good shape to take advantage. Congratulations to Simon Ducker, who has attended and completed his mechanics course with Rotax, which is a big benefit to the club with its two EuroFOX aircraft. Our second EuroFOX is nearing completion in the workshop and will be ready for trials very soon. It looks like an exciting year ahead.

David Sibthorpe

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

FIRST of all we congratulate Matthew Tilling for going solo and are excited to have new instructors to enjoy some flying at Bannerdown. There's a big 'well done' to Mike Edwards for his new FI status and also for Ian McFarlane on finishing his completion course. And finally there's change afoot at Keevil as Ian Harris steps down as CFI after six glorious and successful years, handing the reins to former CFI Ken Reid. We wish Ken the very best in his new/old role and hope Ian loves parenting a newborn as much as he enjoyed parenting BGC.

Ian Harris/Debb Hackett

BATH, WILTS & NORTH DORSET (THE PARK)
WWW.BWND.CO.UK
510742N 0021445W

OUR tug is being overhauled, but we have kept flying with our new winch. Bath University ran some 'taster' days for interested students, and we were able to incorporate these into Wednesday flying. We've been lucky with conditions and just before Christmas we were treated to wave, which we all enjoyed. Christmas was duly marked with dinner provided by John and Julie Hull. Many thanks to them! We had some uninvited visitors overnight causing damage. Fortunately, none of our property suffered, but security is a something that no club can afford to neglect.

Chris Basham

BICESTER (BICESTER)
WWW.BICESTERGLIDING.COM
515458N 0010756W

HUGE congratulations to Derren Francis, who in his first gliding competition at world level achieved sixth place in the 15m Class – we'll be looking for a medal next time! Our instructor base continues to build with three Bls working towards Ass Cat ratings. Rob Hines has regained his BI rating and Pete Atkinson his Full Cat rating, Julian Bane has recently qualified as a BI coach and is also doing a brilliant job with our cadets. We now have 25 under 18, with over half of them solo and working towards higher things. Terry Mitchell is leading our maintenance effort, which includes a major K-13 refurbishment in the new workshop.

Martin Clark

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

JANUARY saw some ridge and wave flying at the club. With the new workshop and spray facilities now fully completed, as well as a complete refurb of our Pawnee tug and Mike Codd engaged as the summer course instructor, we are ready to rock and roll into 2017 at Talgarth! In addition, a complete rebuild of another K-13 is under way. To secure our water supply we are looking into the feasibility of a borehole to supplement our new gray water storage setup – there will never be shortage of water in Wales, but you've got to manage it!

Robbie Robertson

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

THE winter has at least been relatively dry, although the good ridge days have been limited in number so far. The club AGM was held with a significant, but well-mannered, discussion about the club's management structure. The ARC season got under way thanks to the hard-grafting Thursday team. A new computer appeared in the briefing room, thanks to Seb. A television production (*The Crown*) took over the car park and clubhouse for a number of days whilst filming in the Woodchester Valley. The British Team won in Australia; congratulations to Andy on his Bronze medal. Not surprisingly his Masterclass for 2017 sold out fast.

Greg O'Hagan

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

WELL, again the winter is nearly passed. We have had a very active winter so far, with launches considerably up on last year. Midweek activity has been strong and weekends have been bolstered by the very keen LUGC members. Our EuroFOX pricing has seen a shift in the balance of aerotow and winch launches, which surprisingly has helped the club finances a lot. New members continue to join us and will soon be attending our Bronze lecture programme. We are going to push more cross-country flying this season, with at least two task weeks and monthly training weekends. Our TMG flying is now back on track following the acquisition of a new aircraft.

Danny Lamb

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

WE have recently gained a new instructor in Richard Cust, who achieved his Basic Instructor rating in December after a number of years as a club member. We started a number of post-solo lectures in January for those members who went solo in 2016. This is to help them towards their Bronze badge. Plans for a new workshop to replace the old one are in development and will hopefully be completed in the next few months. Finally, well done to 17-year-old Ethan Ayres, who was sent solo in February by instructor and club chairman Matt Ellis.

Russell Walsh

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

A FEW hardy members made the long trek south to Nottingham to see Nick Norman and Moritz Korn receive the De Havilland trophy for their new site altitude record in May 2016. In fact Nick also won the National Height Ladder, all the flights on which were made either from or to our site. The airfield is under new administration and may be occupied by sheep during the week, which may impact our ability to welcome occasional powered visitors. The Acro has been through its 3000hr inspection, and relatively benign winter weather has allowed much more frequent winter flying than we saw last year.

Phil Hawkins

(Left to right): Terry Mitchell (right) leads **Bicester's** maintenance effort, which includes a major K-13 refurbishment; **Burn's** Ethan Ayres ready to go just before his first solo flight (Russell Walsh); **Devon & Somerset GC's** new all-purpose vehicle



CAMBRIDGE (GRANDSDEN LODGE)
WWW.CAMGLIDING.UK
521041N 0000653W

THE New Year has seen the BGA Spitfire Trophy awarded to Finn Sleight and the BGA Rex Pilcher Trophy awarded to Mark Lawrence-Jones – congratulations to both – and the arrival of our second winch, a rebuilt Tost from SkyLaunch. Plans for the summer are well advanced with a cross-country ground school in early March, the Open Day planned for 9 April, and our Cloud Rally set for 5-13 August. A group of members will be heading to Jaca in April and two syndicates are looking forward to the imminent arrival of their Shark FESs. As usual, we will be running five-day courses this summer, as well as new three-day weekend courses.

Julia Rigby

CHILTERN & UCL (RAF HALTON)
WWW.RAFGSA.ORG/CGC/
514733N 0004416W

WE have had a steady winter and managed to fly most weekends. Highlight of the year so far was a first solo for Sam Smith, 14 years and four months and a grand total of five hours in his logbook – well done Sam! Our thanks are due to our retiring CFI Pete Brown. Pete has been CFI of both Chilterns and the Adventure Training Operation. In his place we have Paul Moslin, and we wish him all the best. Lastly, it has been announced that Halton Airfield is closing in 2022, so we have five more years of operations, or five more years to find a way of securing our operations.

Mick Boydon

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

AT our AGM, the chairman reported a successful 2016 and, despite purchase of a new K-21, finances are robust. Chris Gough and Paul Gentil, our treasurer and secretary respectively, have retired and we thank them for their hard work. We welcome Adrian Giles and Lesley Waters as replacements. Chris Gough was a cup winner for his Diamond height at Portmoak; Best Junior was awarded to Helen Wilson, and Matt Page the Weston Trophy for his competition support software that will be also used at Lasham for the Europeans in August. We are sad to announce the passing of Whizz Wheeler, a WW2 bomber pilot and club member for many years.

Frank Birlison

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

THE year at Cranwell is progressing well, with a number of members through various stages of their instructors' course and we look forward to having them on board in the near future. Our venerable K-21 is away being refurbished and we look forward to its return. Our thanks go to Brian Hutchinson, who has sourced and acquired a new banded diesel tank and, yes, with a battery-powered pump which is continuously topped up by a small solar panel. As part of our continual aircraft refurbishment and improve programme, all aircraft are now FLARM equipped together with new radios. Finally, our university members are progressing well, ably led by their president Tom Southrey.

Zeb Zamo

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

THE weather conditions over the past few months have prevented the club from winch launching on a number of occasions due to the winch getting bogged down on the wet field, but the EuroFOX has saved the day. The club has been hosting BGA Full Cat courses, successfully run by John Maddison. These have allowed our members to meet and talk with fellow pilot from local clubs and help with inter-club cooperation. We would like to thank Yorkshire Gliding Club for making our three Flight Instructor Coaches (FIC) very welcome at the BGA FIC Seminar run at Sutton Bank. The seminar was very informative and an enjoyable day. In January, chairman Bob Grant managed to get into wade over the site and get to 4,300ft – not bad for a flat site.

Barry Patterson

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

MADDY Draper went solo on her 14th birthday, the first girl in Scotland to do so. Alistair Cunningham and Keiren McGregor both did their 5-hours on 3 January, whilst Roy Wilson was achieving the first 500km of the year. Our EuroFOX is performing well, which has allowed us to reduce our tow prices. Our simulator is making good progress and will be completed shortly. We have 10 pilots on our Bronze course and five

members have expressed interest in training for an inspector's rating. We revert to seven day a week operation mid-April and welcome instructor Jakub Hlavacek and Tuggie Kacper Bloch.

Glen Douglas

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

102mph was recorded on the local anemometer in January, resulting in some minor damage and no flying that day. There have been some lovely flying days, with wave appearing. No spectacular heights, but very pleasant flying much appreciated by those who participated. The main access road remains closed in early February, but we have hopes of progress. Our 'new' SkyLaunch came with Dyneema, which we have been evaluating against the Skyrope on the other. It seems to be standing up well, and reports are of higher launches. When the latest Camphill TV appearance screened, the programme had been halved in length, but our slot survived, apparently displacing the Reds, Sullenburger, and other famous participants.

Dave Salmon

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

THE club has been stunned by the tragic gliding accident involving Matt Wright. Matt has been the soaring inspiration of many of our members (see obit on p68). We welcome Glenn Turpin from Bannerdown – the latest of the Devon incomers. We have taken delivery of a smart-looking Discovery airfield vehicle. Planning is well under way for Competition Enterprise, returning to North Hill this year 1-8 July 2017.

Jill Harmer

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

DECEMBER and January were dry, but bitterly cold, and we managed to keep flying. Early February was wet and our flying curtailed with a boggy strip. Dave Poole has completed his IFP (Introductory Flight Pilot) rating, and Allan Powell completed his Bronze. Very well done to both, and they both wish to pass their thanks on to their various instructors. We are all busy trying to come up with ideas to increase the efficiency of our club. Then



(Left to right): Ray Maycock and Carol Marshall enjoy a winter flight from **Dorset**; Glyn Long after his first solo, pictured with **Essex** CFI Dave Hertzberg (Dave Jones); Robert Walker's mural on the clubhouse wall at **Essex & Suffolk** is next to the club's WW2 tribute wall to the USAF



✎ we should be able to get a three-year lease, instead of our yearly one. If anyone has helpful ideas, please email treasurer Nick Barnes at: accounts@dorsetglidingclub.co.uk. As ever we are looking forward to a bumper soaring year.

Colin Weyman

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

WE are looking forward to the clocks changing and being able to fly longer. More people have joined the club so we give them a warm welcome. The weather isn't helping flying at the moment, which is allowing our members to do maintenance jobs and get CofAs on our gliders done too. One of our members is doing an instructor course. Good luck to Iain.

Wendy McIver

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

THIS year was the first time since 2012 that we could fly in January! Our field conditions remained favourable through the winter period, although we did have to curtail activities when the occasional fog bank descended. Although we started 2016 season late, we consider the past year was a highly successful one, notably our trial lesson sales, at 288, were the best we have done in living memory. We are all looking forward to a busy 2017 season.

Mike Jeater

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

AS you are reading this, the members of Edensoaring Gliding Club will be coming together for the annual pre-season visit to Lleweni Parc. Most gliders are ready for the season at Skelling Farm, which starts on 6 May. Some visiting clubs are already booked in and others should contact us on 07866 730273 or via the website as soon as possible to avoid disappointment. Our booking co-ordinator advises me that a number of weeks are blocked out already. Individual pilots or small groups with their own gliders are always welcome and can be fitted in to an otherwise busy calendar at short notice, just call.

John Castle

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

WE have settled into flying at Rattlesden again after an unusually late exit from Ridgewell, courtesy of some fairly dry weather. Many thanks again to our friends at Rattlesden. Our second PW6 is, at last, available and we are therefore well on our way to an all-glass fleet. We are all looking forward to the season ahead with various events planned, the first of which being our annual trip to the Long Mynd in early March; our fingers are crossed for some ridge soaring. We have another open day planned in the summer and Alex Harris is running some aerobatic tuition sessions over various weekends.

Cathy Dellar

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

IT'S the time of year for fettling in a warm workshop. Mike Haynes, our technical officer, has fitted Trig 8.33 radios and rewired the K-21, which has also been cleaned by junior members and hard waxed by Andreas Rieder, who is now seen to be attacking the rest of the glass fleet with his power mop. Our resident Michelangelo, Robert Walker, has painted a mural on the clubhouse wall next to our WW2 tribute wall to the USAF. The mural titled 'Shared Skies' shows the three aircraft based at Wormingford: the P47 Thunderbolt, P51 Mustang and the P38 Lightning, with modern sailplanes.

Paul Robinson

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

OUR Christmas dinner at the local Shobdon pub was well supported and we enjoyed a good evening. Since then we have had some wave flying during December and early January, including some excellent flying on Boxing Day for a very small number of people, who were able to escape from Christmas activities. Our winter lecture series is getting under way with a series of talks and discussions on a wide range of subjects designed to appeal to as many members as possible, whatever their experience level. Key elements of the winter lectures being personal goal setting and forward planning.

Diana King

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

OUR new 280m x 6m Perfo runway (26) has been laid and is working well. It is to be used for all powered take-offs and landings, including all aerotow launches. Gliders will continue to land on the grass. John Campbell has done a fantastic job of updating our website, it has a fresh new look and loads much more quickly. There are also many additions to content, including many more photos (lots of them showing off the new runway) and committee meeting minutes are also available once you have logged in.

John Thomson

KENT (CHALLOCK)
WWW.KENT-GLIDING-CLUB.CO.UK
51123N 0004950E

WITH spring upon us, we have started our bookable flying system for members, along with a new duty programme designed to enhance the progress of members to solo and beyond and to provide a more efficient use of time for both members and instructors. Our weekday courses start from 1 April with our professional instructors. With our refurbished Puchacz and three K-21s, bookable system and professionally delivered courses, we provide excellent training and also deliver a busy trial lesson programme. We have several new instructors coming on line this year and are looking to increase our pilot member flying and course business, as well as expand our trial lesson operation.

Mike Bowyer

LASHAM (LASHAM)
WWW.LASHAMGLIDING.CO.UK
511112N 0010155W

OUR winter maintenance and fettling season continues very well, with many members making good use of our excellent maintenance facilities. Our spring and early summer expeditions to Jaca and Serres are proving very popular and were fully booked within a few days of the lists opening. We are welcoming good numbers of members and guests to our winter lectures, with a wide range of subjects from murders to air traffic control. Congratulations to our own Steve Jones for a very respectable 7th place at the Worlds in his Ventus 3. Looking forward to a less soggy 2017, hopefully with a successful Euroglide 2017 Comp later in the summer.

Mike Philpott

(Left to right): Joe Dixon receives his wings from Peterborough & Spalding CFI Kevin Fear; newly refurbished K-6CR owned by a Seahawk syndicate looks stunning with a fresh coat of paint and not at all like she is 57 years old; Kamila Czartolomna was sent solo by Peter Gill at Staffs



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

CONGRATULATIONS to Oliver Nurse and Russell Sumner (solo), and Gary Cook (RT license). Our 'Winter Wednesday' seminars were successful, covering club history, thermal formation, field landings, parachutes and the latest in flight instruments. We are looking forward to a Polish Evening with guest speaker Sebastian Kawa. In spring we completed our Bronze lectures, led by Martin Hayden. Our Pilot Development Course took place in March, and we are gearing up for the Dan Smith aerobatics competition, and the Soaring Course (13-19 May). Our Racing Week is 17-25 June. As always, guest pilots are very welcome at the Dunstable Regionals (5-13 August) and will never have to worry about a retrieve!

Andrew Sampson

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

WE have purchased a third K-13 with the help of a loan from the Philip Wills Memorial Trust. The wings of one of our K-13s have gone off to Ian Mitchell for recovering and paint. Edward Gardener has retired as membership secretary after 15 years' service; Kenny Whitelaw-Jones has taken on the post. Many thanks to Edward for his years of service, and thanks to Kenny for stepping up. Our treasurer, Jeff Green, has dragged us into the 21st century by introducing a computerised logging system, which should make club recording so much easier. Our DCFI, Simon Withey, is arranging winter lectures for Bronze and general membership. Plans are afoot for several summer courses.

Barry Hogarth

MIDLAND (LONG MYND)
WWW.MIDLANDGLIDING.CLUB
523108N 0025233W

FLYING opportunities have been limited recently, but so far we have escaped the worst of the winter. Ironically, however, the first of our winter lectures had to be cancelled due to icy road conditions. The Christmas party was a sell out with a wonderful meal, thanks to Fay, Rob, Jane, David and all their helpers. Trophies were awarded and a raffle raised £468 for the social fund. New Year's Eve was celebrated by about 21 members and what sounded like a huge Chinese meal. The Mynd

has had a lively few days with a visit by the BGA Juniors; more than 70 joined us and the Saturday was a really good day, with 112 launches.

Steven Gunn-Russell

NORFOLK (TIBENHAM)
WWW.NORFOLKGLIDINGCLUB.COM
522724N 0010915E

WINTER, they tell us is over, spring is here and let's hope this new season is kind to us. During this winter we have undertaken a major overhaul of our winch; it now sounds and looks good, the team having put in many working hours. The Grob two-seater is off to pastures new and we hope they enjoy this fine aircraft. The new hangar, long delayed due to bad weather etc, is nearing completion and hopefully will be in use by this summer. We are in the middle of the 8.33 radio upgrade, a task we don't need to do too often, thankfully.

Barbara and Adrian Prime

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

ON the threshold of the soaring season we are in good financial condition, but our membership remains static. We will have more visitors for trial flights than 2016 and it's hoped that some will take up gliding as a hobby. We had another enjoyable Christmas Dinner with some new faces and one or two missing. Congratulations to Gareth Jones on going solo. Two of our club gliders are about to have their annuals so they're ready before things get busy. At last we have a ladies toilet, all done by members. We are still having issues with Hawarden Airport, with letters of agreement and RMZ matters; we hope all will be settled amicably in due course.

Brian Williams

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

IT'S been a busy start to the New Year with a few good flying days already and the club safety officer seminar, which representatives from the club attended. We are in the process of changing the club's governance to suit the new CASC rules and we are in contact with the RAF and London Oxford Airport concerning possible airspace changes in the Oxford area – more of this anon. We were saddened to learn of the death of Chris Woodcock, a former member of the club and

our thoughts are with his family and friends. Let's hope 2017 is a good season.

Norman G Nome

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

AT the beginning of 2017, our CFI Martin Ewer made the decision to retire. He has guided the club for a number of years and this was his second term as CFI during a distinguished RAF career. Martin has been instrumental in maintaining exemplary operational safety while at the club, a status that we have enjoyed. Our training programme gathers strength with an eighth young pilot achieving solo in as many months. Joe Dixon has made remarkable progress and our new CFI, Kevin Fear, put him through his paces before sending him solo. Joe achieved this milestone after only 22 flights and is looking forward to developing his skills further with aerobatic training.

Tim Beasley

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

AFTER many years Tom Docherty has returned to gliding, bringing his son Adrian and grandson, young Tom. Adrian has been busy gaining a cross-country endorsement, Silver duration, Silver height and Gold height. Soon he hopes to complete his Silver Badge and fly his father's new Shark. Congratulations to Shashank Pratapa on completing his first solo flight in a glider. He is an experienced power pilot, who is training to fly our EuroFOX. We have had a few good wave days and the usual pundits (Sant Cervantes, John Williams and Phil Dolan) have completed tasks ranging from 300km to over 500km. Roy Wilson (Deeside GC) completed his task on 3 January. Work is under way to improve the fire safety of our accommodation, which will be completed ready for our spring visitors.

Chris Robinson

SEAHAWK (RNAS CULDROSE)
WWW.SEAHAWKGLIDING.CO.UK
500509N 0051520W

WE are deep into winter maintenance period with the club's Pegase undergoing an annual and the rest of the fleet waiting for its turn. We are delighted to announce our Super Dimona is now back and serviceable, so the club will be able to offer aerotows again.



(Left to right): Aiming high at **Trent Valley GC** during ground school with Kevin Atkinson; first day of flying in 2017 at **Upward Bound Trust** (Chris Scutt); it looks as if it is 'Strictly Come Gliding' with **Welland's** Andy Bennett and Baz Wood



Well done to Steve Moore, who is up and running as an instructor after completing his FI course and satisfying the CFI. Three of the club's juniors attended the Winter Series at the Long Mynd and thoroughly enjoyed their time there, meeting other like-minded junior pilots and getting the chance to fly at a different site. Our thanks to UK Junior Gliding.

Jake Matthews

SHALBOURNE (RIVAR HILL)
WWW.SHALBOURNEGLIDING.CO.UK
512014N 0013239W

WE have been having fun in the winter sun and making the most of every opportunity, including enjoying some festive flying. Liz even clocked up her 4,000th launch. The Shalbourne annual dinner at The Plough was well attended, with much fun (and wine/beer) had by all. In other news the two-seater fleet has been upgraded with the purchase of "the private" Puchacz and we wave a fond farewell to JMX. "N" flew for the first time and Graham got his first taste of the Libelle. Work continues on renovating the clubhouse. Many thanks to everyone involved and the many people (too numerous to list here) whose hard work keeps our club running.

Claire Willson

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

WE'VE been flying on the better days and doing maintenance on the others. A big thank you to Connor for rehabilitating some of our vehicles. We have our AGM in March and annual dinner later in the year. Shenington Regionals 2017 is fully subscribed, but we have a waiting list. Watch OnGlide and Facebook for news. The weekend crews have had many days flyable, and we're flying midweek on good days. Contact the office (Mon or Fri/email in winter) or pop in on the better days if you want to join us – the webcam will give clues as to activity. Seven-day operations are likely to begin by early April.

Tess Whiting

SOUTHDOWN (PARHAM)
WWW.SOUTHDOWNGLIDING.CO.UK
505532N 0002828W

KATIE Simmonds has taken over as membership officer for juniors. With her background as an airline pilot she is ideally

suitable to offering advice. Our office manager, Lynda Simms, is moving to a job nearer home; we welcome applications from qualified enthusiastic candidates. Given the generally dreadful winter weather, Roger Coote, former development officer at the BGA, took the opportunity to publish his tales of the Australian outback. The Jackeroo is just the thing to remind us about sunnier climes. On those rare flyable northerly days, it's good to see so many visiting pilots attending the morning briefing. Being reminded of the rules for ridge soaring keeps us all safe.

Peter J Holloway

SOUTH WALES (USK)
WWW.USKGC.CO.UK
514306N 0025101W

CONGRATULATIONS to John White, who, before Christmas, went solo just days after his 14th birthday and to Rob Coulson, who is our first instructor to have completed the whole of the EASA FI(S) course and fulfilled his post-course review. Despite the mist, murk and drizzle, our keen members have continued to come and carry out odd jobs and, on flyable days, keep current and get their annual checks done. We have also provided quite a few trial lessons. Even while our tug is away, our winch has been able to get pilots airborne whenever ground conditions permit. We now look forward to a good programme of evening talks and lectures.

Stuart Edinborough

STAFFORDSHIRE (SEIGHFORD)
WWW.STAFFORDSHIREGLIDING.CO.UK
524940N 0021212W

THE New Year weather isn't as bad as it could be, with the airfield soggy only in the usual places, and not bad enough to prevent regular flying. We waved the old Rallye tug goodbye and the Pawnee is being given plenty of work with aerotow training. Congratulations to Kamila Czartolomna, having been sent solo in late 2016, and welcome to the new office safe, which replaces the one borrowed by unnamed visitors in the night over Christmas, thankfully without loss to the club. It looks as though the BGA club maintainers' course is going to be a popular adjunct to a busy period of winter fettling – perhaps we'll need a bigger workshop?

Malcolm Taylor

STRATFORD ON AVON (SNITTERFIELD)
WWW.STRATFORDGLIDING.CO.UK
521406N 0014310W

MANY thanks to Barry K and Jeff G for their continued effort in maintaining club and private fleets over the winter months. Our SkyLaunch winch has gone away to have a refurb before the season gets going. The club is looking forward to hosting the Aim Higher week in the summer and further enhancing our pilots' soaring and cross-country skills.

Daniel Brown

SURREY HILLS (KENLEY)
WWW.SOUTHLONDONGLIDING.CO.UK
511820N 0000537W

THE weather has not been great and, although we have continued to fly throughout the winter, so far there has been virtually no soaring. However, with four new solo pilots, it has been a good time to practise those circuits and improve the confidence levels before the soaring begins again. Following the success of the event last year, we are hosting the London Skyline Vintage Rally from 8-11 May. Several syndicates are planning their spring and summer trips to other clubs and they are looking forward to visiting other sites to improve their experiences of different terrains and conditions.

Chris Leggett

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

CONGRATULATIONS to: Nicole Woodford and Mark Fraiwald on going solo; Simon Leach on his Bronze and cross-country endorsements; Steve Nock on his Aerobatics Badge. Local clubs gathered at TVGC for the first of Kevin Atkinson's Aim Higher Weekend Ground Schools. The course was a huge success and very informative; the members are now ready to go for the new season and practise the theory they have learnt. The club has purchased a Janus A, which will allow us to focus more on cross-country and competition two-seat training. The members have made the most of the winter season, working through checks, aerobatics and cloud flying ratings.

Kristina Samuels

(Left to right): **Wolds'** Joel Hallewell, Sandy Loynd and Sam Hall with the new trailer-mounted toilet unit (officially classified as a single-seater); Christmas Eve 2016 celebrated 55 years to the day since **Wrekin's** David Judd was sent solo in a T-21; **Wyvern's** mass Bronze exam



UPWARD BOUND TRUST (HADDENHAM)
WWW.UBT.ORG.UK
514635N 0005630W

WITH poor weather on New Year's Day, our first day of flying in 2017 took place on a bright and sunny 2 January. Our Annual Dinner was held on 6 January and was well attended, many thanks to Nigel for organising this and to Angus, Mike and Gary for their contributions. Some of our members went to Aboyne in search of wave in February and we have a group expedition to Talgarth in April, where we will introduce some of our new solo pilots to ridge soaring. Our Vintage Rally weekend is to take place from 29 April to 1 May 2017.

Chris Scutt

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

IT'S been quiet over the winter, with no glider flying due to problems with the tug. The airfield is in good firm condition and we expect to be back to normal and flying again from mid-February. We had our AGM on 4 February. For the first time in years we actually had two volunteers to join the committee, Niall and Chris, so we took advantage and enrolled them immediately. The reduced membership fees, which were introduced for 2016, remain unchanged for this year. We had our club dinner on 18 February to give us some winter cheer, and we are all looking forward to the start of the soaring season.

Paul Kellett

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

FLYING continued throughout this winter season and the overwhelming success of the mole draining meant we could experiment with using different areas, achieving winch heights of up to 2,000ft. This triumph has led to a 10 per cent increase in flying activity year on year. WGC members continued to work tirelessly through the club works programme. Special thanks going to chairman Andy Bennett, Dave Arblaster, Baz Wood, Steve Allen, Dick Short and Alan Bushnell, who as always kept the hardworking crew going with tea and his legendary butties! Successes continue with the arrival of the Corby Model Flying Club and the celebratory news that

Andy Burton has secured a lease extension until 2030. Fantastic work all round!

Becky Hart

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

AS expected, there was a major role for Gordon Basey in the recent BBC North *Inside Out* programme about the Wolds Way, filmed partly during last year's Two-Seater competition at Pocklington. There were also appearances by club chairman Graham Wadforth and veteran tug pilot Eddie Room (see p36). GBV, one of our K-21s, has been packed off to Poland for refinishing, while the Supacat winch has had a major overhaul at home. Dave Tagg has provided us with a trailer-mounted toilet unit, which will be particularly appreciated when the launch point is far from the clubhouse. We've already had the first thermal soaring of the year and look forward to the annual dinner in March.

George Morris

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

CHRISTMAS Eve 2016 celebrated 55 years since a young Air Cadet and club member, David Judd, was sent solo in a T-21 at Cosford. So it was only fitting that we joined him on the airfield in celebration of his gliding career, thousands of flights, and hundreds of trainees who have benefited from his years of instruction and thoughtful insight. The 2017 season started on 2 January with fine weather and a great turnout; after the festivities, BALLAST was high on the checklist! The club continue to host Staffordshire Wing Air Cadets undergoing their Blue Gliding Wing programme. It's great to see young people put a foot on the gliding ladder.

Geoff Catling

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

WINTER flying continues at Upavon with some classic cold and dry days, alongside the annual maintenance cycle in the workshop. Our 'mass' Bronze exam in December was a huge success and followed up with a club brief on safeguarding, along with all instructors now being DBS cleared.

February saw us testing dual operation over two weekends with the Air Cadets using a common circuit to prove safe and capable joint operation. Under the new chairman (Alec Watt), Wyvern held its AGM in January, with the annual award of trophies. Winch maintenance next, but we're looking forward to lengthening days.

Paul Jessop

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

THANKFULLY we have been spared the floods of last year and flying has continued with members enjoying wave on New Year's Eve. Our EuroFOX has passed its initial inspection and the build quality was highly complimented – a great testament to Rick and team. The paperwork has been submitted and we are waiting for a permit to test fly. We are now looking to upgrade the glider fleet and searching for a suitable glass two-seater, though the falling value of the pound post-Brexit is not helping. We are delighted that the Yorkshire Club League competition will be held at Rufforth on the weekend of 29 April. We are already looking forward to it.

Andy Carden

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

WINTER flying has been limited by occasional high winds, but mainly by low cloud and misty days. Nevertheless we enjoyed 15 flying days in January with careful attention to the potential for orographic cloud formation and misting canopies. This has been supplemented by ground school work and training on our state of the art simulator. Steve Ogden completed his cross-country endorsement. Paul Whitehead is CFI, as Andy Parish is on a winter assignment in NZ. Good financial results for 2016 enable us to embark on re-instrumenting our glider fleet for the soaring season and, following our EuroFOX tug success, take an option on the next generation under development.

Ken Arkley

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



■ A Serviceman is never too old to experience the joy of gliding
Main pic: A busy launchpoint, together with the Air Cadets



> CLUB FOCUS

WYVERN

AT A GLANCE

Membership:

Service (Military): £132
Civilian: £180 - £230
Juniors: £132

Launch type:

Winch: Winch: £5.50/£7.50
(Club/Private)

Club fleet:

2 x K-21, DG-1000(T), LS8,
LS4b, Grob 109 MG

Instructors/Members:

12/130

Types of lift:

Predominantly thermal,
occasional ridge

Operates:

Sat/Sun all year, Wed/
Fri afternoons in summer,
weekdays for courses and
cross-country by arrangement

Contact:

07553 903739

Email wyverngliding@gmail.com
www.wyvernglidingclub.co.uk

Long and Lat:

511712N 0014700W
Light aircraft PPR Aerodrome
Operator: 01980 615381

WYVERN GC is a military sports club, forms half of the Army Gliding Association, and is situated at Upavon Airfield on the northeast corner of Salisbury Plain. The all grass and fully landable airfield was the original Central Flying School in 1912 and is the oldest military airfield in the UK in continuous use.

Tucked just inside the northern edge of D128, and with military parachuting to the south and artillery ranges to the west, the local chalk downland offers great thermal conditions and cross-country opportunity. There's unrestricted airspace to the east and north across the Pewsey Vale into central England, with the vale edge offering the occasional ridge flight. Mainly a winch launch site, the club does not currently have a tug, but can make aerotow available on specific occasions.

Whilst the membership has to be predominantly Service personnel and the core ethos of the club is to introduce them to the sport, civilians are very welcome to apply. Club flying is all year at weekends, with Inter-Club League

and task weeks; along with Wednesday afternoons and group trial lessons on a Friday evening in the summer months. Unusually, and with its 10 BGA instructors, Wyvern also provides up to six, five-day *ab initio* courses a year as Adventurous Training and Sport to Service personnel (and civilians where there is spare capacity). There is only very occasional operational military flying that closes the airfield, or the D128 airspace. Wyvern normally shares operation of the airfield with an Air Cadet gliding squadron.

A superb fleet of club gliders includes two K-21 as the instructing workhorses, the DG-1000(T) providing everything from basic, to spin and cross-country training, and the LS4b and LS8 giving graduated single-seat progression and competition entry. Aply supported by the Grob 109 for gliding instruction, field landing and cross-country experience. PPL training is not currently available.

The ground facilities are modest and efficient, with club aircraft under waterproof covers or trailered. Plans are progressing to build a hangar on the southern edge of the airfield.

Paul Jessop

In a class of it's own



The new mini LAK FES Electric Self Launching Sailplane

For more information contact Ron on 07540 479204 www.balticsailplanes.co.uk

Baltic Sailplanes Ltd — Sole UK agents for Sportine Aviacija & Co

At Nympsfield, we fly all year round - Come and join us!
Good Thermal Sources, Convergence, Ridge Running & Wave from the Welsh mountains.

Please see our web pages for details of "Master Class" XC coaching weeks & "Task Week" in 2017.

We welcome club expeditions – our clubhouse (with bar, kitchen, lounge & bedrooms) is open throughout the year

Please contact 01453 860342: office@bggc.co.uk: website: bggc.co.uk

1640 €

All-inclusive week February-March 2017*

Be an early bird in Saint-Auban,
book now for February
and up to 15th March!



www.cnvv.net

* includes :

- CNVV membership
- 6 days experienced mountain gliding instruction
- 6 days glider rental
- Up to 8 tows
- 7 nights accommodation in the North building
- 50 € off per rainy day

CENTRE NATIONAL DE VOL À VOILE Contact Helen or Patricia : + 33 492 642 971 or booking@cnvv.net

Additional FFV membership and insurance is mandatory to fly our gliders. Prices vary upon selected options.

A SILENT ROLE

Bruce Stephenson reflects on the historical impact of gliding

ONE thing about having a passion for old stuff is that not only is it a passion, it is, in itself, a lesson in history. The more one delves into that passion, the more one begins to realise the significant part gliding has played in aviation today. So perhaps in many ways it is appropriate that, when cavorting around the skies in near silence, much of gliding's contributions to powered aviation have been just as silent?

Of course, the birth of aviation found its wings in the form of crude contraptions that merely performed controlled descents back to Mother Earth with varying degrees of success (whatever that was based upon during the day?). It wasn't really until coordinated experimentation that we really began to make any serious headway. Lilienthal was, of course, one of the first real masters of

the air and proved that sailing off down an appropriate slope with a greater angle than his craft's limited glide ratio could be done with a repeated degree of success and controllability... that is, until he killed himself proving it!

Then came one of the true unsung heroes of early flight, Octave Chanute. An engineer by trade, Chanute was concentrating his studies on a scientific approach to master flight stability. Networking closely with Chanute at the time were a couple of bicycle fanatics, who proved to be 'Wright' in more ways than one and hit upon the idea of flexing and pivoting control surfaces in roll, yaw and pitch which, by the way, was all carried out on gliders. Eminently sensible in their approach, we still haven't come up with better and, bingo, we still pretty much still fly like that today.

Then came the earth-shattering

breakthrough that the world had been waiting for; sustained flight with a powerful enough and, more importantly, a light enough engine. Yep, you guessed it, it was down to those two bicycle engineers again, who yet again proved to be 'Wright'. Now this is the point that many powered aficionados think heavier-than-air aviation began: a nice day at Kitty Hawk in December of 1903. Not so, but many seem to have developed historical amnesia when talking about 'the first to fly'. One up for gliding!

As we moved on to the First World War, gliding was by now largely old hat and for people too poor to fly proper aeroplanes, or for eccentrics! Going into WW1, powered aviation was at logger-heads with the aristocratic fathers of flight, balloonists (did you know that in the early years of the FAI, a country's membership fees were based on how much hydrogen it consumed?). Coming out of WW1, however, aircraft had truly settled that argument with a seismic kick up the 6 o'clock to the balloonists.

But out of war comes mixed fortunes. With a rather limiting treaty (depending on which side you came out on), powered aircraft or,

more precisely, ones fitted with pop-guns, were considered rather bad... for good reason. So with our erstwhile adversaries, the Germans, now relegated to the ground they spotted two loopholes: rockets and, yep you guessed it, gliders. Not wanting to be left standing, they quickly realised the potential and began exploring where the Wrights left off. Now it's at this point things began to get really interesting and gliding was not only on the cusp of being developed into something with far more potential than anyone had dreamed of, it was about to once again become powered aviation's silent benefactor.

With the first fledging coordinated meetings taking place at the Wasserkuppe during the opening years of the 1920s, we soon learned that drag needed to be put on a metaphorical 'Atkins' diet. In the powered world, designers simply tackled the problem by adding a few more cubic inches, a few more bracing wires and largely accepted the craft's limitations. In the gliding world we had a problem. Unlike our now smug powered brethren, we couldn't simply solve problems through brute force alone. Soon we had discovered that long, thin wings were good for reducing drag, but like most things it all came with a price. Long, thin strong spars became terribly difficult to build and, what's more, those long wings twisted mercifully when the 'Wright' inspired waggly bits on the ends tried to do their stuff. So it was goodbye to the simple two-spar, wire-braced wing and hello to the birth of the single-spar, ply-covered, torsional rigid 'D' box. Another one down to gliding...

Then things got even more interesting. You see gliding in Germany largely hit the buffers by about 1925, when the Allies decided to let Germany's aviators aviate behind those smelly engines once again (before all you history buffs start wagging fingers in the air, in aircraft without the pop-guns). But luckily, as it turned out to everyone's benefit, there were still enough broke young men and eccentrics about, who still indulged in gliding as if it was the new dawn in aviation. With grand predictions of one day gliding serenely from city to city, much of it at the time must have sounded



In a rare photo we see Shenstone (left) at work with Lippisch (right) and team in his design office 1931 (Photo courtesy of Shenstone family)

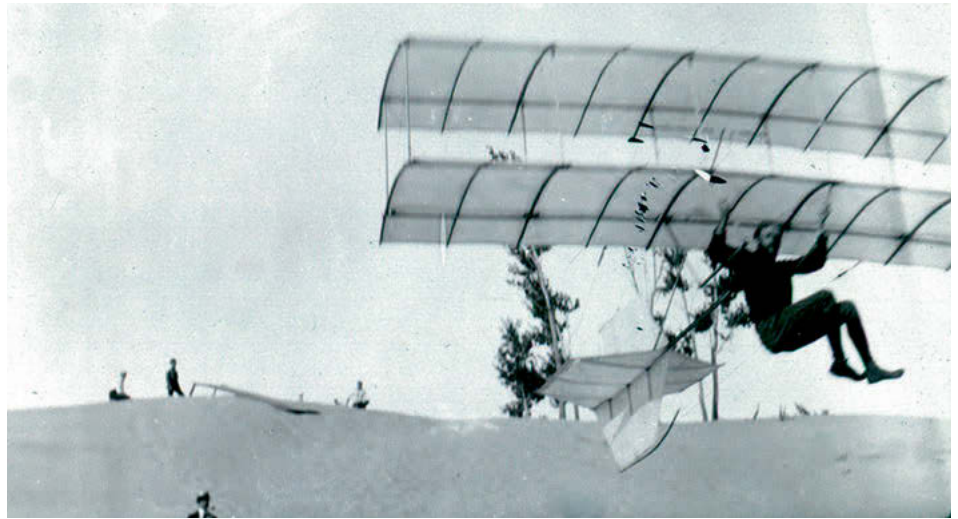
**ONE OF THE
UNSUNG HEROES
OF THE SPITFIRE
HAS TO BE THE
AERODYNAMICIST
BEVERLEY
SHENSTONE**

like 'a load of hot air', which as it was about to turn out was decidedly appropriate! These same young men soon found themselves at the leading edge of a new-found era of aerodynamics, one which had some rather important and beneficial benefits for our powered buddies.

By now a whole bunch of experiments were being carried out in the search for the perfect 'Miss World' of the aviation domain. 'Slim and slender' was the catchphrase on most designers' lips, with an almost obsessive affair with the perfect figure. With the new evolving ellipsoid wing outer plan-forms, one of these areas was the all important wing-fuselage connection. Soon fiendishly complicated fillets around where the wing-fuselage connection met started appearing, many of which later proved counter-productive!

You see, simply slapping a wing onto a fuselage doesn't really work if your god is efficiency. Acute angles between where the upper surface of the wing and the fuselage meet slow down airflow, causing static pressure to rise, thus working against lift (that's why high wing designs are inherently better, it's all going on under the wing, aiding lift). So when accelerated air suddenly encounters an area of rapidly rising pressure, it stops like a runner who has over extended himself and is now left gasping for breath. And with that pause for breath comes premature separation and dreaded drag. So, our rather clever glider boffs took a long, hard look at the problem, gazed at our masters (soaring birds) and began designing increasingly elaborate fillets to reduce these effects. Take a look at designs like the Fafnir II. Now take a look at that He111 trailing edge, but if you want to get really clever, take a look at those exquisite wing-fillets on the Spitfire; sheer poetry.

Which brings me nicely to the subject of our 'Spit', arguably one of the most beautiful and iconic British fighters of all time. Enhanced by her beguiling lines, the Spitfire played its part in those iconic films of the 50s and 60s when we still celebrated our achievements. If you go with the films, we watched Leslie Howard play out the story of the Spitfire's designer, Reginald Mitchell, who fought against the odds to produce his child of perfection. Well actually that's only half the story. If you want to delve deeper, then one of the unsung heroes of the Spitfire has to be the aerodynamicist, Beverley Shenstone. Shenstone played a pivotal role in that gorgeous wing, which, by the way, was all done by calculus and minimal wind



tunnel testing (and heavily influenced no doubt by the early works of the Russian designer, Zhoukovski).

So what's my point? Well that name, Shenstone, is again an unsung hero of British gliding. Shenstone had cut his teeth at Junkers (who had, at the time, been delving into elliptical wing theory) in the late 1920s. In his spare time he had been hanging around with the likes of a very young Alexander Lippisch up on the Wasserkuppe, one of the world's most advanced proponents on tail-less design. He even learnt to fly gliders, which he found dovetailed rather nicely in with his life-long passion for sailing. So when he was hired by Supermarine, all that knowledge and experience came with him.

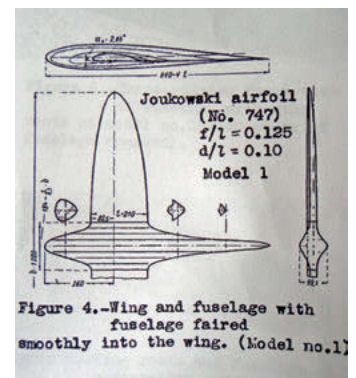
During WW2, that Spitfire wing was up with the best of them, testimony to the fact that it is about the only fighter that I can think of that was developed before the war and was still being developed into subsequent marks at the war's end. I can think of no other fighter that can share this accolade and is indirectly another string in gliding's bow...

But, of course, I have only begun to scratch the surface. There are many other areas of gliding development, especially glass with decades of blended wings, which is now all the rage in influencing modern airliner design, but alas space within these pages dictates otherwise.

So, to bring these ramblings to a close, it is perhaps fitting that gliding continues to influence aircraft design and our understanding of our world around us. With the exciting Perlan Project that aims to take the sport to the very edge of space, one can only wonder what they will discover and its impact for the future of air travel.

Chanute-Herring glider, 1897
(Photo courtesy of Chanute Papers, Manuscript Division, Library of Congress)

MUCH OF IT AT THE TIME MUST HAVE SOUNDED LIKE 'A LOAD OF HOT AIR', WHICH AS IT WAS ABOUT TO TURN OUT WAS DECIDEDLY APPROPRIATE!



Zhoukovskii (Joukowski) ellipse drawing circa 1900. The real inspiration of the Spitfire's wing perhaps? (photo courtesy of Lance Cole)

■ The author wishes to extend his thanks to Lance Cole and Howard Torode in the compiling of this article.

■ www.vintagegliderclub.org

FAIRER DISTANCE HANDICAPPING

Paul Candler describes an idea for handicapping task distances for a fairer competition



■ Scan this QR code for a more detailed description of the task, or visit www.sailplaneandgliding.co.uk/current-issue

DISTANCE Handicapped Tasks (DHTs) have proved popular with many pilots, but have some shortcomings when used in rated competitions using the 1,000 point scoring system. This is an outline of an idea for an alternative approach to distance handicapping, using SeeYou to set and score the tasks without needing any additional specialist software, and avoiding some of the shortcomings of DHTs.

The Assigned Distance Task combines some of the features of Distance Handicapped Tasks (DHTs) and Fixed Course with Enhanced Sector (showery TP) Tasks, with Assigned Area Tasks (AAT) to create a task which uses the principle of handicapping the distance, but which also:

- Avoids the perceived unfairness of smaller TP observation zones for higher handicaps in DHTs.

- Gives all pilots flexibility to enable them to avoid showers/poor soaring conditions over TP zones.
- Allows the tasks to be set and scored using SeeYou, without needing any additional software (other than a simple spreadsheet for task setters).
- Includes accurate wind adjustments to each leg flown, using actual leg distances flown, and using wind measured post task, from a selection of pilots' traces.
- Gives fair and accurate distance measurements, including wind adjustment, for all outlandings, and for calculating number past Y (not currently possible in DHTs).

The task is set as an AAT, with large circular areas, but with no time limit. Instead of a time limit, each pilot is given a target distance, a minimum number of actual kilometres that they will be required to fly, based on their glider's speed index (handicap).

For example, if the target distance for an LS8 (handicap 100) is 242.2km, the target distance for an ASH 26 (handicap 110) will be 266.7km and the target for a Standard Cirrus (handicap 90) will be 218.2km. The handicapped target distance for all three is 242.2km.

The task is a straight race, actual distances flown are measured by SeeYou as for an AAT (but any excess distance is ignored). Handicapping and wind adjustments for each leg are applied to arrive at 'windicapped' speeds. The winner is the pilot who finishes with the greatest 'windicapped' speed around the course.

To qualify for speed points a pilot must complete the task having covered at least 95 per cent of their target distance. To discourage pilots from tactically flying excess distance, any distance above 105 per cent of the target distance is ignored, but the time taken to cover that distance is still used in calculating the marking speed.

Pilots who complete the task, but fail to achieve 95 per cent of their target distance, will be given a marking distance and awarded distance points only, as will pilots who fail



SAILPLANE & GLIDING

Six issues for the price of three!

Subscribe to *S&G* today by Direct Debit and you will receive six copies of *S&G* for the price of three – that's just £12.88 for the first year of your DD subscription. Subscribing to *S&G* costs just £25.75 for one year (six issues) for UK-based pilots. **THAT'S LESS THAN THE COST OF A SINGLE AEROTOW!**

www.sailplaneandgliding.co.uk Photo: Alastair Mackenzie

to complete the task. Unlike AATs, it will not be possible for an outlanding to score more points than a finisher.

The number of day points available, and the points awarded to each pilot, will be determined as for a conventional Fixed Course Task.

The radius of each of the circular areas (observation zone) is determined by the range of handicaps in the contest. The actual distance between the turnpoints (ie the circle centres) will be the target distance for the highest handicapped glider, the outer radius of each of the observation zones is set such that it will yield a minimum AAT task distance equal to 90 per cent of the target distance of the lowest handicap of any competing glider, giving the lowest handicap glider some flexibility in how deep to fly into each observation zone.

Like the variable barrels in a DHT, within each observation zone, a 'barrel size' can be given for each handicap, such that if a pilot flies to within that distance of the turnpoint at the centre of the observation zone, they will achieve the required target distance. However, pilots are not constrained to using the barrel radii, as long as they register a fix in each observation zone, and their total distance flown (under AAT distance measurement rules) reaches their target distance, it does not matter if they turn 'short' in one zone and 'long' in another.

If control points are required in order to avoid airspace or to control the direction of approach to the airfield, then these will be circles of 1km radius.

Aside from control points, not being constrained to a specific turn radius removes the need to 'control' the point of turn, and so should remove almost all chances of a 'missed TP' penalty or being 'landed out' for missing a turn by more than 500 metres.

WE CAN LEARN ABOUT FLARM FROM THAT...

A HUGE number of glider pilots appreciate the usefulness of FLARM fitted in their gliders. The device highlights the proximity of other similarly equipped aircraft and in doing so helps pilots to look in the right place. But how sure are we that we have accurately perceived the threat that the FLARM is warning us about? A helpful incident report submitted to the BGA has highlighted how FLARM information can lead a pilot to misidentify the potential threat under certain criteria.

The incident occurred when three gliders, all fitted with FLARM, were ridge soaring. Glider A, tracking south along the ridge, received a FLARM alert in the cockpit and observed glider C passing to his right tracking in the opposite direction at a safe distance. The pilot of glider A perceived that glider C was a potential threat and, given the ample separation between the two aircraft, was not unduly worried at this stage.

The FLARM then sounded an extreme alert. At this point the pilot of glider A saw glider B very late and approaching on a collision course. With glider C now on the right of glider A, the pilot of glider A took swift avoiding action by turning left. Glider B did not deviate from his course and continued tracking along the ridge.

Logger traces confirmed the proximity of both gliders to each other and that a head-on collision was

avoided two seconds from impact. Glider B did not turn as per established protocols, suggesting that the pilot had not perceived the problem.

When ridge or wave soaring in strong winds, the significant crab angles and the fact that FLARM displays alerts relative to track and not to heading can cause confusion about the exact direction of a threat. During a trial some years ago at the Scottish Gliding Centre, a difference of up to approximately 60 degrees has been observed between the threat direction relative to the glider heading compared with that indicated relative to the 12 o'clock position on the FLARM display.

When an instrument issues an audible and visual warning, it is all too easy to focus our attention in the cockpit and/or to rush to an incorrect conclusion. Pilots are reminded that, whilst electronic collision warning equipment can enhance pilots' awareness by providing most useful warnings, such equipment cannot and must not replace a good systematic visual lookout scan, and that it is necessary to avoid any in-cockpit equipment from distracting from the visual lookout scan.

■ The Scottish Gliding Centre FLARM trial can be viewed at <https://members.gliding.co.uk/library/safety/sgu-flarm-report/>



GLIDERSERVICE NOVAK

Repair and maintenance workshop for sailplanes of composite structures specialised in **REFINISH**



- Complete refinish in Polyurethane or Polyester paint
- All kinds of repairs and modifications
- ARC renewals, 3000 hrs inspections, special inspections
- Guarantee certificate for the quality of service
- All services according to EASA regulations
- Simple order procedure, organisation of transport



At your service
since 1988
- more than
1700 refinished
sailplanes from all
over the globe

www.gliderservice-novak.si

BGA accident/incident summaries

AIRCRAFT

Ref	Type	Damage	Date, time	Place	Age	PILOT Injury	P1 hours
109	Grob Acro	substantial	03/07/16, 13:50	Herefordshire GC	56	none/none	1923
Field landing accident. Late in the approach the pilot tried to turn to change the direction of landing. The wingtip caught in the grass, groundlooping the glider and breaking the fuselage.							
111	LS6	substantial	17/07/16, 16:30	Cotswold GC	75	none	not reported
Wheel-up landing on a runway damaged the fuselage underside.							
112	Grob 102	destroyed	19/07/16, 15:45	Lasham GS	59	minor	28
Heavy landing after aborted winch launch. A wingtip touched the ground during the ground run; the stop signal was given, but there was enough momentum in the cable and drum to accelerate the glider into the air. The cable back released at about 4ft agl, but the glider continued in a shallow climb for a couple of seconds before the pilot lowered the nose. The pilot was able to round out, but there was insufficient energy to arrest the descent rate and the glider landed heavily on the main wheel, damaging the wheel mounting structure and fuselage. The pilot suffered back injuries.							
115	Vega	substantial	18/07/16, 12:30	Yorkshire GC	69	none	235
Field landing groundloop. The pilot thought that he had selected a grass field, but landed instead in a barley crop. The low speed groundloop removed the tailwheel, bent a wing main pin and damaged the elevator mount.							
116	K-21	substantial	30/07/16, 13:10	Ulster GC	53	none/minor	324
Aborted aerotow launch. After two aerotow launches, the launchpoint was moved to allow for a more into wind take-off diagonally across the field. Soon after the glider took off, the tug ran over some longer grass and slowed. Both the tug pilot and glider P1 released, allowing the tug to take off, but the glider went through a wire fence before coming to a stop on the beach. The front seat P2 was cut and bruised, the glider had multiple impact damage and scratches.							
117	K-13	minor	21/07/16, 17:05	Midlands GC	50	none/none	628
After landing, the P1 was unable to close the airbrakes and discovered that the lower brake had some impact damage. It is presumed that the glider must have hit a sheep during the approach.							
118	Vega	substantial	06/07/16, 15:25	Norfolk GC	71	none	563
Groundloop during landing broke a tailplane mounting fixture.							
119	K-21	substantial	21/07/16, 13:00	Yorkshire GC	58	none/none	1300
Heavy landing. The instructor attempted to take control late in the approach, saying "I have control". The P2 did not hear the P1 and continued to try to fly the glider, resisting the P1's inputs. The glider landed on the nosewheel and bounced a few times, pushing the nosewheel in and deforming the surrounding structure.							
123	ASG 29	destroyed	21/07/16, 11:45	Lasham GS	60	fatal	--
AAIB investigation							
126	LS4	substantial	30/07/16, 16:00	London GC	41	none	376
Field landing accident. The pilot selected a suitable field and, not noticing any significant wind or slope, chose to approach from the end without trees. As it turned out this meant landing down a slight slope with a slight tailwind. Unable to stop, the pilot attempted to groundloop the glider. The glider went into a barbed wire fence, damaging the nose, wings, undercarriage doors and breaking the canopy.							
127	Discus	minor	31/07/16, 15:00	The Gliding Centre	28	none	180
Competition field landing. The visiting pilot landed in a crop field, damaging a winglet while groundlooping.							
128	ASW 20	minor	31/07/16, 14:30	The Gliding Centre	65	none	1572
Wheel-up landing on runway during competition landout. The pilot had lowered the wheel before joining the circuit, but then raised the wheel while trying to climb away again. After losing the lift, the pilot flew a quick circuit and forgot to lower the wheel again.							
129	DG-400	substantial	31/07/16, 16:15	Norfolk GC	not reported	none	2200
Tailwheel damage. After landing on the runway, the tailwheel ran through a pothole, breaking the tailwheel fork and tyre.							
130	Nimbus	substantial	31/07/16, 13:00	Cairngorm GC	40	none	372
Wing drop during an aerotow ground run resulted in a groundloop. The fuselage was cracked near the fin.							
133	LS6	substantial	03/08/16, 16:30	La Motte du Caire, France	63	none	2161
Field landing accident. The visiting pilot found himself low over difficult terrain with just one landable field. After carefully assessing the field, the pilot had to make a late change of landing direction and approach over a power line. Touching down about halfway into the field the pilot tried to steer towards the corner of the field using the rudder. The glider passed over a dip in the field, became airborne again and yawed significantly before landing sideways, damaging the undercarriage and fuselage.							
134	Grob Acro	minor	03/08/16, 17:25	Trent Valley GC	61	minor/minor	667
Trial flight field landing. Flying a winch launch trial flight in a 20kt wind, the instructor noticed a band of rain approaching from upwind. There was strong sink on the base leg and after turning final the P1 decided to land in a field rather than attempt to reach the airfield. The field had crop in it and was rutted, the glider landed heavily before groundlooping, damaging the nosewheel mount.							

BGA accident/incident summaries *continued*

AIRCRAFT

Ref	Type	Damage	Date, time	Place	PILOT Age	Injury	P1 hours
135	Janus	substantial	05/08/16, 16:30	The Gliding Centre	-	minor/minor	180

Competition field landing accident. The approach was flown into wind, but down an (unnoticed) slope. More than halfway down the field and still airborne, the pilot shut the airbrakes, raised the flaps and tried to turn around to land in the other direction. Impact evidence suggests that a wingtip caught on the ground and that the glider then landed nose first, rupturing the front fuselage and damaging the rear fuselage, wings and tailplane. The pilots escaped with cuts and bruises.

137	ASH 31	substantial	07/08/16, 08:30	Deeside GC	67	none	3606
-----	--------	-------------	-----------------	------------	----	------	------

When the pilot returned from an early morning wave flight, a standing wave was overhead the airfield. Soon after touching down, a gust recorded by the club anemometer as more than 30kts hit the glider which then took off, dropped a wing and rotated 180° about the dropped wing. The fuselage broke in half and the tailplane was damaged.

Incidents

110	not reported	none	-, 12:30	-	-	-	-
-----	--------------	------	----------	---	---	---	---

Tug upset. At about 150ft ato, as the combination flew off the airfield towards the valley, a radio message was passed from the ground to the glider pilot informing him that the airbrakes were open. The pilot quickly closed the brakes, but in the process the glider ballooned behind the tug, lifting its tail. Both aircraft were able to recover safely after both pilots released the rope.

113	PA 18	substantial	11/06/16, 17:00	-	-	-	-
-----	-------	-------------	-----------------	---	---	---	---

The tug was parked outside the hangar when a club vehicle was reversed into it, damaging the port wing struts.

114	DG-505	none	17/06/16, 17:10	-	-	-	-
-----	--------	------	-----------------	---	---	---	---

Gear-up landing on grass. The pilot believes he may have omitted to retract the undercarriage after releasing from tow, raising the wheel during his pre-landing checks. The avionics battery had drained during the afternoon, depriving the pilots of the benefit of the fitted undercarriage warning.

120	K-13	none	22/07/16, 17:30	-	-	-	-
-----	------	------	-----------------	---	---	---	---

Aerotow launch failure during first solo flight. The tug engine started to run rough and lose power just before take-off so the pilot dropped the rope and was just able to stop the tug before the airfield boundary. The glider was already airborne and the pilot made a safe landing in a nearby field. The tug pilot had been using carb heat at all times except when towing, even so carburettor icing was suspected. However, test flights the next day were able reliably reproduce the rough running when using MOGAS; switching to AVGAS eliminated the problem. The club suspect that the MOGAS in the fuel tank of the tug left parked in the sun on a hot day may have exceeded the maximum allowed temperature for MOGAS, leading to vapour lock in the fuel system.

121	Discus	minor	23/07/16, 10:30	-	-	-	-
-----	--------	-------	-----------------	---	---	---	---

While towing the glider behind a car, one wingtip hit a windsock pole, breaking the tail dolly catches and yawing the glider until the other wing hit the back of the car. Both wings and the car were damaged.

122	PA 25 CAP 10	substantial substantial	21/07/16, 12:45	- -	- -	- -	- -
-----	-----------------	----------------------------	-----------------	--------	--------	--------	--------

After warming up the Pawnee engine outside the hangar, the pilot looked out of both windows before taxiing, colliding with the CAP 10 parked at the fuel pumps 40m from the Pawnee hangar. The CAP's starboard wing was extensively damaged, the Pawnee's prop was broken.

124	Duo Discus	minor	23/07/16, 14:20	-	-	-	-
-----	------------	-------	-----------------	---	---	---	---

After landing, the tow gear was attached and one of the pilots stood beside the rudder to signal to the club Gator as it backed up to the towbar. As the Gator reversed it moved suddenly, knocking over the pilot, hitting the rudder and stopping on the pilot's leg. The pilot was bruised and the glider had a split in the rudder.

125	Grob 102	none	29/07/16, 16:00	-	-	-	-
-----	----------	------	-----------------	---	---	---	---

Canopy opened early on during winch launch. The launch was abandoned and the glider landed safely.

131	DG-600	none	02/07/16, 11:00	-	-	-	-
-----	--------	------	-----------------	---	---	---	---

Wingtip caught in grass during winch launch. The glider yawed and rolled as it took off, reaching about 90° of bank with the wingtip about 15m above the ground before the pilot was able to level the wings and land safely. The grass was about 6" long, the wingtip holder reported feeling a down load on the tip, the pilot reported letting go of the release as the launch started and not noticing that the wing had gone down until the glider started to yaw.

132	Grob Acro	none	03/08/16, 17:00	-	-	-	-
-----	-----------	------	-----------------	---	---	---	---

Wingtip caught in crop at the end of the landing groundrun, yawing the glider through 90°.

136	Grob Astir	none	06/08/16,17:35	-	-	-	-
-----	------------	------	----------------	---	---	---	---

Wheel-up landing after the pilot omitted his pre-landing checks.

In an S&G survey, you told us that you would like to see more in-depth coverage of accidents and incidents. Edward Lockhart is now providing a little extra detail, where available, in the listings on these pages. We would also like to publish (anonymously) your stories of particular flights that have taught you a valuable flying lesson. Please send details to editor@sailplaneandgliding.co.uk or by post to the address on p3.

MATT WRIGHT 1969-2016

S&G cartoonist and contributor, also known to many as Balleka

ALL CLUBS have those people who come along and, within short order, seem like they have been there forever and are at the heart of the action. No one at the Devon & Somerset Gliding Club in the mid-noughties would realise that the arrival of a 'South African' jumbo jet jockey was to herald a mini renaissance in cross-country flying and reboot flying for fun, with expeditions to exciting places and the recognition of the amazing potential of the natural assets on the club's doorstep. Few also realised that this big man would also be so capable at sharing the excitement of this epic flying with both flyers and non-flyers alike. Under his YouTube moniker of Balleka, Matt would go on to publish countless videos capturing gliding at its most epic and breathtaking, revealing the full secret beauty that flyers are privileged to see.

Matthew Wright was actually born in Salisbury in what was then Rhodesia, later to be Zimbabwe or "Zim" as Matt would say when admonishing those who accused him of being South African. His father had a factory making simple pharmaceuticals for the African market and Matt, with his brother Andrew and his sister Catherine, grew up in an exciting world rich in natural beauty and wildlife. For all his later love



Maybe putting Wing Commander Chalmondeley-Smythe DFC & Bar (retired) in charge of 'Protecting the Airfield Environment' wasn't such a good idea!

of adrenaline sports and excitement, his mother reports that young Matt was a quiet, shy and well-behaved boy, who was never any trouble. Competitive at an early age, he attended Highlands Junior School, where he played first team cricket, rugby and hockey and was also part of their athletic and swimming teams. He was made Head Boy in his final year at Highlands Junior School.

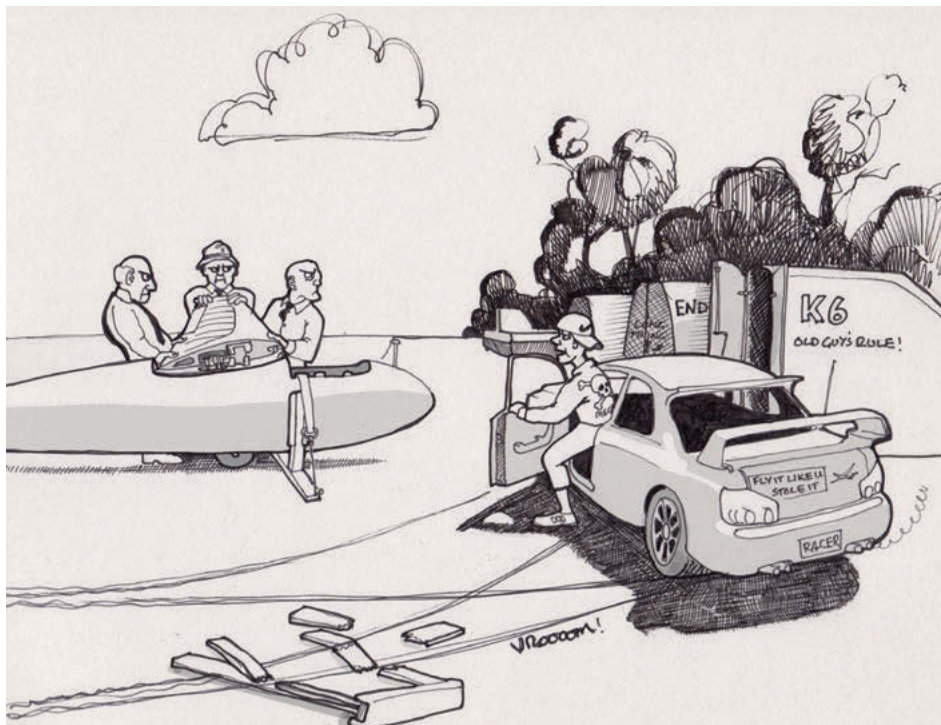
At St George's College Senior School,

Matt studied the sciences for his A levels. He also studied art to A level and his talents would later lead him to be a regular contributor to S&G, with cartoons capturing the humour of often serious or dry topics.

From school Matt went to university in Natal and studied Environmental and Cellular Biology. It was here that one of Matt's defining characteristics was born as he realised alcohol was a mug's game and became a life-long nominated driver. He also started down another path as a committed vegetarian and, for all his later public exposure, he privately committed to a quiet relationship with his spiritual side.

Meanwhile, it didn't take long for work experience in a UK laboratory to convince this young man that it was not the career for him. Luckily Wright senior was able to support the lessons needed to unleash Matt on the skies of Africa. With a job at Bush Pilots, Matt would find himself in an adventurous flying world ferrying tourists round the beloved African bush. Dropping in and out of remote strips and even parachuting through cloud by GPS to collect aircraft, Matt lived a Boy's Own dream. This dream nearly had a premature end when as P2 in an aerobatic biplane it was wrapped round power wires, saved from disaster by soft soil and Lady Luck.

From small planes Matt was to graduate to jets and a new era that was to see him ending up on the flight deck of cargo 747. He had married Kate and, with the situation in Zim increasingly less certain,



Dudes! I've just bought Fred's share. Can I take it for a burn?

moved to live in England and started a family. The 747 and days at MK Airlines allowed a return to African skies and it was whilst doing this that Matt's trademark film-making started. With perhaps more relaxed standards in Africa, the defining 'Belly of the Beast' film was made recording the underside of a 747 as it surfed the African clouds. With ingenuity Matt found a way of getting the nose gear down on its own and a backward-facing camera did the rest. Fortunately for the viewing public, the demise of MK Airlines allowed the reposting of this film on YouTube after initial knuckle rapping and video removal! The combination of the best seat in the house, a great eye for a stunning picture and hotel time for video editing meant that the Balleka ("run away" in native Zim) running man logo was soon a popular hit for YouTube surfers wanting insight into the world of the freight dog.

Matt's arrival on the gliding scene mid-2000s saw him quickly progress from tyro to pundit, as his unquestionable skill and appetite for adventure found him eager to be leaving the circuit and heading out cross-country. His enthusiasm fired up those around him and so the renaissance in North Hill cross-country soaring began. It also brought a new era to Balleka film production, with the ubiquitous GoPro(s) always along for the ride. Cutting tail shots with cockpit footage and wingtip views, Matt became the master of condensing the essence of a flight into a few minutes of visual delight, all topped off with an epic (usually...) sound track. At the last count, his YouTube channel has 14,989 followers and he has enabled many a glider pilot to proudly show the unbelievers what they are missing.

A regular on expeditions to Denbigh, Nympsfield and Parham, Matt was always the first to get his name down for the long trek to La Motte du Caire. At every club he visited he made friends, with his infectious chuckle and a genuine willingness to help. Always the first to offer to retrieve, it was amusing that on the day he did call into the club for a retrieve for himself he was able to selflessly say "Can you come and get me from Porlock, but don't bother with the trailer". The ASW 20 was eventually pulled from the Bristol Channel... (see *Swimming with a shark*, pp44-45, June/July 13.) With its shark mouth, the replacement ASW 24 'M5' was to star in countless films and be the glider

to chase for the burgeoning North Hill soaring section. As Ladder steward, Matt was quick to follow up on postings and encourage all levels to participate - from the 300km's to the 30km's, all were praised. Oh yes, and he also flew the tug.

A recent move to video filming with a drone, to obtain extra otherwise unobtainable aerial footage, led to the creation of the superb "C'mon you know you want to!" video that is perhaps the best video advert a gliding club could ever hope for. The drone and the photographs he shot from it proved that he was the master of still as well as moving images and talk of a move from commercial flying into commercial photography and a book can only make us wonder at what we have all missed out on.

For those lucky enough to have been on expedition with M5, memories of his trade mark call of "Dude" as he bounced in behind, cameras rolling and a mega cheesy grin visible from space will not easily be forgotten. Whilst his family take comfort that he was lost doing something he had a passion for, his untimely departure leaves two great children, Maddie and Ben, an amazing library of videos, but a big void in gliding clubhouses up and down the land. All we flyers can do now is to continue the quest for "epicness" and keep up the spirit of not holding back, but hitching up and heading off to explore new soaring opportunities whenever these appear.

John Pursey, Devon & Somerset GC



■ See page 70 for details of the Matt Wright Memorial Fund

A POEM FOR MATT

*You, my friend, sought beauty in the skies
and bore our minds above those clouds
that shroud our humdrum world below.
You glimpsed us sights of where true
glory lies.*

*You, my friend, soaked up the sun
and used its heat to climb aloft.
Embracing energy, as if your own.
You opened minds and showed what could
be done.*

*You, my friend, brought laughter to the air.
And, filled with joy, you soared and flew
o'er lands with countless orbits of the sun.
You, with alas too few, fell down. Whilst
they live on.*

by Phil Morrison, DSGC

“Matt, you will always be an inspiration to so many glider pilots, young and old. Your videos were one of the sparking moments many people decided to take up gliding; seeing your experiences entertained us all and showed your real passion for the sport. Rest well up there, soaring an eternity above the clouds and looking down on all of us from M5, cloud surfing in wave with a laugh and a wing over. Great pilots never die, they simply disappear behind the horizon. You will always be remembered, Dude.”

THE MATT WRIGHT MEMORIAL FUND

MATT WRIGHT was inspirational in so many ways: his videos were inspirational in motivating new people to take up gliding and existing glider pilots to expand their horizons. On a local level, his infectious enthusiasm inspired and encouraged pilots at all levels of experience to do more cross-country flying, visit new gliding sites and, above all, have more fun!

So it is our intention that a Matt Wright memorial fund should be used in a way that continues to promote his ethos.

About 15 years ago, a couple of Devon & Somerset Gliding Club members bought a K-6cr (G-DHEB) for the club's junior members to fly for free. Its running costs are funded by the generosity of a small group of like-minded people and, since the project began, most of our junior pilots have done their Silver Cs in it. They take it on expeditions to other clubs and it has flown in Competition Enterprise and the Junior Nationals. Indeed, young Liam Vile even did his 300km Diamond goal in it and put us all to shame!

Perhaps if sufficient money were to be raised by the Matt Wright fund, one option might be to upgrade this little glider to something more competitive, like a Std Cirrus or, hey, let's get stuck in and make it a Discus....2!

However, until we have a better idea of the size of the fund, it's difficult to decide exactly what to use it for. However, we are all agreed that the focus should be on continuing to promote the thing that Matt was passionate about – the pursuit of epicness!

The Matt Wright memorial fund is currently standing at about £4,500 and we are hoping that further donations will be forthcoming over the coming months.

If you really enjoyed his videos and would like to contribute to the Matt Wright memorial fund you can find the details below. Oh, and next time you're setting out on a new adventure, look up at the clouds and listen carefully – you might just catch those immortal words... "Dude, it's going to be epic!"
John Burrows, DSGC

■ To contribute to the Matt Wright memorial fund, you could write a cheque payable to the "Devon and Somerset Gliding Club (MWF)" and post it to: The Treasurer, Devon & Somerset Gliding Club, North Hill Airfield, Sheldon, Honiton, Devon EX14 4QW. Or email cashier@dsgc.co.uk for online banking details.



WW2 Spitfire photo reconnaissance pilot Jimmy Taylor took up gliding in the 1980s

JIMMY TAYLOR (1922-2016)

GLIDING lost one of its most colourful characters on Christmas Eve, 2016.

Jimmy Taylor had been flying one thing or another since 1941 when he entered the war effort. But that's getting ahead of the story. The young James Strickland Taylor went to Cheam school; rubbing shoulders with an equally young Philip Mountbatten, who would end up being a lifelong friend. Then it was Eton until 1941 when he joined up.

Jimmy was an aviation cadet in America and he eventually landed at 16 Squadron on Photographic Reconnaissance duties, where he served until November 1944 when his engine failed over enemy territory in and he baled out, becoming a POW at Stalag Luft 1 before being liberated by the Russians in March 1945.

Post-war, he gained a degree in History and a diploma in Education at Cambridge, did a year at Chelsea School of Art and enjoyed a career that employed all three, travelling all over teaching English as a foreign language.

Despite his wartime experiences, Jimmy remained an utter gentleman. I was fortunate enough to know him for almost 20 years, meeting him at Dishforth GC in the late 90s.

He was polite and friendly, courteous to a fault and with a razor sharp mind. Jimmy didn't care if you were an experienced aviator or an utter novice – he had a friendly word for everyone.

Even though Dishforth had to close its doors several years ago, former members are still close and as news of Jimmy's passing came, tributes began to arrive on the club's Facebook page.

The comments refer to him as a legend, truly remarkable, a privilege to meet and a

real gentleman. He's also remembered as a real character, an amazing man, a pleasure to know, and as someone who was humble and willing to help others. Several of the remarks also describe the privilege of having Jimmy tell you stories of his World War 2 exploits.

I have watched my husband, Willy, enjoy a long friendship with Jimmy, mostly played out via lengthy letters – Jimmy was a prolific writer. Poignantly, his last Christmas card arrived at our home on the day news of his death was also delivered.

Indeed, if you never experienced the joy of having Jimmy tell you a story, he wrote a massive book, *One Flight Too Many*, with the foreword written by his aforementioned school friend, the Duke of Edinburgh.

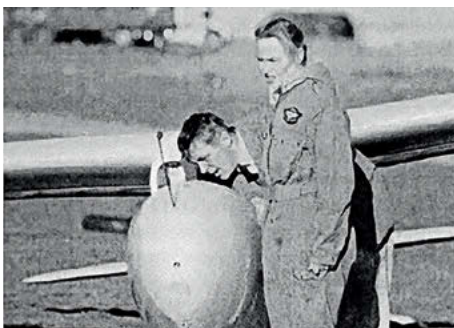
The book is dedicated to his friends from 16 Squadron, who were lost on operations and the four Dutchmen from 't Hesseler, who were executed by the Germans in reprisal for helping him.

Jimmy returned there in 1995 to meet the villagers and families of these men he never met and maintained close contact with them all. Parts of his Spitfire were unearthed there by a local farmer.

In 2013, everyone who knew Jimmy was delighted to see him return to the sky at the controls of a two-seater Spitfire. He was thrilled just to sit in one, never mind being taken for a flight and given control. His co-pilot Willy Hackett said he flew most competently, despite the 70-year gap between flights.

Despite now being gone from our lives, Jimmy left a lasting impression on all those who knew him. Gone, but not forgotten – happy landings forever now, Jimmy.

Debb Hackett, Bannerdown GC



Tom and June Zealley at Dunstable in the 1950s

JUNE ZEALLEY (1926-2017)

JUNE died on 7 January following a short and unexpected illness. The widow of Tom (d 2002), June was herself a part of the gliding scene at the London Gliding Club, regional and national competitions in the 70s-90s, and at the BGA and Royal Aero Club events.

June learnt to fly at the LGC in the late 50s under the instruction of John Westhorpe and John Jeffries. Her early log book entries include references to the club T-21b, Grunau Baby and Tutor, with and without canopy. Latterly, she flew the K-6 that she and Tom imported from Finland, one of the first Schleicher aircraft in the UK, and latterly their K-6E.

Having amassed over a hundred hours in a myriad of relatively short flights, June eventually gave up gliding herself to focus on family matters and became a dedicated ground crew. She contributed to many competitions, including turning point observer duties at a time when this required heading out to the turning point itself and lying prone gazing into the heavens, hoping to catch a glimpse of competitors making the turn, with duties somewhat improved when transport was provided in Jan Mikulski's Meta Sokol.

However, her main duties for many years were as 'Zed Car' to Tom's 'Zed-Ship', before the use of competition number call signs became mandatory.

As has been recorded in S&G before, crewing was much more exciting and varied then. Not least the ability to re-light from an outlanding, meaning that as soon as (Rika) had confirmed a 'good start', crews were expected to immediately head off down track in case a quick retrieve from a premature outlanding could get their pilot back into the day's race.

Also, the absence of air-ground radio meant that in days when tasks consisting of downwind goals, out-and-returns and cats-cradles made the prospect of return to base far from certain, crews would show their dedication by sitting outside phone boxes at strategic cross roads. They would phone into control to see where their pilot had returned to earth in order to try and get the pilot home as early as possible for a decent night's sleep - all this in June's case often with a young son in tow.

Latterly, the reward for this dedication was many more relaxing expeditions to Shobdon, Zell am See, Gap and Barcellonette, which all kept June in touch with a range of her gliding friends. With a soft spot for Enterprize, she was always pleased to see gliding friends when they were at North Hill near her and Tom's retirement home in Devon, even if inevitably the distance meant she lost touch with her LGC friends.

So, with June's passing, another member of the post-war gliding 'movement' has gone to the great thermal in the sky - but leaving many happy memories of the spirit that laid the foundations for the success of the sport today.

Charlotte Zealley, granddaughter

BGA BADGES

No.	Pilot	Club (place of flight)	Date
Diamond Badge			
817	James Clarke	Shalbourne	27/10/2016
Diamond Height			
3-1806	James Clarke	Shalbourne (Aboyne)	27/10/2016
Gold Badge			
	Alexander Maitland	Angus	01/12/2016
Gold Height			
	Adrian Docherty	SGU	03/01/2017
	Alexander Maitland	Angus (Portmoak)	01/12/2016
	Lewis Merry-Taylor	Portsmouth Naval (Aboyne)	28/10/2016
Silver Badge			
	Tim Ward	Nene Valley	11/09/2016
Silver Distance			
	Tim Ward	Nene Valley	11/09/2016
Silver Duration			
	Adrian Docherty	SGU	11/12/2016
	Tim Ward	Nene Valley	17/07/2016
Silver Height			
	Adrian Docherty	SGU	03/01/2017
	Wolf Rossmann	Angus (Portmoak)	01/12/2016
	Lewis Merry-Taylor	Portsmouth Naval (Aboyne)	28/10/2016
Cross Country Endorsement			
	Colin Ashman	Rattlesden	17/12/2016
	Kieren Macgregor	Deeside	22/01/2017
	Enrico Pagliuca	York	23/11/2016

INSTRUCTOR RATINGS

No.	Pilot	Club	Date
Basic			
36141	Christopher Parsons	Kent	13/01/2017
35022	Freddie Turner	Bicester	13/01/2017
24692	Michael Desmond	Wyvern	03/02/2017
29301	Iain Mclver	Dumfries & District	10/02/2017
Assistant			
24823	Stephen Moore	Seahawk	03/01/2017
25708	Patrick Yeoman	Buckminster	10/02/2017
Full			
12210	Neil Rathbone	Buckminster	02/10/2017
12975	Michael Sheehan	Buckminster	01/13/2017

■ S&G is delighted to recognise the achievements of those joining the ranks of instructor in the first of what is intended to become a regular feature of each issue.

SAILPLANE & GLIDING

Six issues for the price of three!

Subscribe to S&G today by Direct Debit and you will receive six copies of S&G for the price of three - that's just £12.88 for the first year of your DD subscription. Subscribing to S&G costs just £25.75 for one year (six issues) for UK-based pilots. THAT'S LESS THAN THE COST OF A SINGLE AEROTOW!
www.sailplaneandgliding.co.uk

Photo: Alastair Mackenzie

General Aviation Legal Consultant

TIM SCORER, MRAeS, Aviation Solicitor and current PPL provides legal advice and assistance to a wide variety of GA clients. He has been credited with "an unsurpassed knowledge of UK General Aviation" and "a very realistic and affable approach as well as good client instincts". The application of his technical knowledge underlies a service based on sound legal experience.

Tim.scorer@kennedyslaw.com
Mobile phone: +44 07860 557766
Direct: +44 0 207 667 9372
Based at 25 Fenchurch Ave. London EC3M 5AD



SKYLAUNCH

- ▶ Re-engineering any winch to Skylaunch specifications at lower cost
- ▶ Components, kits, services and upgrades for non-Skylaunch Winches
- ▶ All cables, Launch equipment, parachutes, etc
- ▶ Contact us for free, no obligation quotes or advice



"It's like going up on rails"

"2 new winches delivered to The Brazilian Air Force"

Tel: 44(0) 1939 235845 mike.groves@skylaunch.com www.skylaunchuk.com

Gliding Holidays Down-under?



Rated by G Dale as 'the perfect place for badge flying', Lake Keepit Soaring Club has everything you need for a great holiday with all the flying you can take.

5-10,000 cloudbase (AGL), 4-10 knot thermals and varied terrain mean 300 km flights are possible in *our* winter! With safe outlanding options and open airspace, most pilots only need a check flight to go solo in one of the club's excellent single-seaters. Surely there's no better place to spend a Pommie winter?

LKSC is a club, so charges for aircraft and our range of great accommodation are affordably low. English is spoken and the natives are friendly! Visit our website or email the club for the full story.

www.keepitsoaring.com
Tel: +612 6769 7514
enquiries@keepitsoaring.com

FOR SALE

ASW 15B AND METAL TRAILER -

Tow-out gear and tail lifter, radio and flight recorder. Much loved, delightful, forging machine with powerful airbrakes, based at Booker. Date of manufacture 1975, total hours 2982, launches 1778. Offers invited.

Tel: 01737 244385 / 07989 623504
webb487@btinternet.com

Bronze & Beyond

Brush up your knowledge!

The book that tells you what every British cross-country pilot should know.

Available from BGA, larger gliding clubs & direct from:

www.mccullagh.biz



Specialist Sailplane & Sport Aircraft Repair & Maintenance Centre



Beringer wheels & brakes sales & service' centre

Bristol & Gloucestershire Gliding Club

Nymphsfield, Nr. Stonehouse, Gloucestershire GL10 3TX

Tel: Workshop (01453 860861 - Home (01453) 823319 -
Mobile 07850 769060 - Email: sailplane@btconnect.com
Web: www.targetaviation.com

Classifieds

Please send the text of your classified advert to Debbie Carr at the BGA office (not to the editor) - debbie@gliding.co.uk Call 0116 289 2956 if you have any queries about classified adverts.

Please remember that, if you are emailing text, your advert may not appear unless we have received payment by post or credit card by the deadline. The deadline for classifieds to be included in **June/ July 17** is **6 May 2017**.

Text: 80p/word, minimum 20 words (£16). Black and white photographs: £6 extra. Box number: £3 extra. All prices include VAT.



Propeller Seller.com

FREE GA Classifieds
Find & Sell
Aircraft | Equipment | Services
450+ Glider Models

[Facebook](https://www.facebook.com/PropellerSellerUK) [Instagram](https://www.instagram.com/PropellerSeller) [Twitter](https://www.twitter.com/PropellerSeller)



life cover

for glider pilots

Glider pilots can often face expensive premium loadings when applying for life cover.

In the vast majority of cases we can secure standard rates and this includes aerobatic and competition flying.

- Life assurance for your family, mortgage or business
- 24/7 cover including flying
- Cover can be arranged over the phone

stein pilot insurance



FREEPHONE
0800 5999 101
www.flyingcover.co.uk

Great Winter Gliding Holidays in South Africa



The Country

Magnificent Scenery and Unique Wildlife

No jet lag - Same Time Zone
as Central Europe

Convenient overnight flights
to Cape Town and Johannesburg

The Site

Friendly Club Atmosphere
Good airfield facilities

World Class Guest Houses
within 4km's of the airfield

The Gliding

Ideal cross country environment
Strong thermals, high cloud bases
and safe outlanding conditions

Excellent fleet of well equipped gliders

Daily Met Briefings
Task Planning and Guidance

Comprehensive post flight analysis

ASW27b, JS1 and Duo Discus now in Fleet



www.soaring-safaris.com

rbradley@telkomsa.net

Dick Bradley : +27 83 280 1028

Soaring (Oxford) Ltd

UK Supplier for all Grob aircraft including full support for all Grob gliders.

Suppliers of all general gliding and winching parts and accessories including everything from tyres and instruments to weak links and a huge stock of metric nuts, bolts, washers and fasteners.



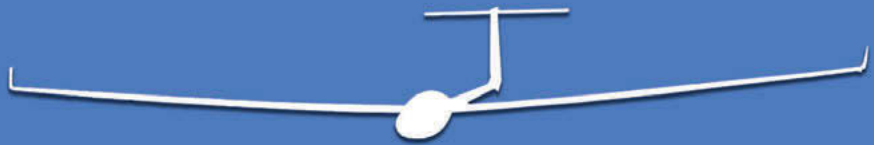
01636 525318

support@soaringoxford.co.uk
www.soaringoxford.co.uk



Diana 2
NEW PERFORMANCE...AND MORE

sales agent
UK / IRELAND



diana2sailplane.co.uk

07854141478

Specialists in supply of **TUG and GLIDER PROPELLERS**



Skycraft, the Service Centre for **Hoffmann Propeller**, has a wealth of experience in installation, support & maintenance of general aviation propellers.

SKYCRRAFT Propulsion Systems for Land, Sea & Air

| Skycraft Services Ltd | Tel: 01763 852150 | Email: customerservices@skycraft.uk.net | www.skycraftservices.co.uk |

Winch and aerotow launches seven days a week?

Bookable training seven days a week?

2:1 trainee to instructor ratio?

All glass fleet?

Where else? 01767 677077 www.camgliding.uk

Cambridge Gliding Centre



NORTH YORKSHIRE SAILPLANES
dereknysailplanes@onebillinternet.co.uk



TEL: 01845 524107 MOBILE: 07711 889 245
NORTH YORKSHIRE SAILPLANES, THORPEFIELD, SOWERBY
THIRSK, NORTH YORKS YO7 3HH




AIRBORNE COMPOSITES

GROB

HpH sailplanes UK

Tel: 01985 840981 (Workshop)
or 01985 841125 (Home)
Mobile: 07778 963277

Tim@Airbornecomposites.co.uk
The Hangar, Wing Farm, Warminster, Wilts BA12 7DD



LJ Panels

+44 (0) 7966 426105
alan@ljpanels.co.uk
www.ljpanels.co.uk

EES Aviation Services

Husbands Bosworth Airfield
www.eesaviation.com
Tel: 01858 880807 07729 322804
Lutterworth, Leicestershire LE17 6JJ

Complete maintenance and repair service for all aircraft
BGA & LAA inspector, authorised CT microlight repair agent
Authorised Ikarus C42 Repair Agent

Photograph courtesy of glidingsport.com

INDEX TO DISPLAY ADVERTISERS

AFE/RD Aviation	inside back cover
Airborne Composites	74
Anthony Fidler	31
Baltic Sailplanes	61
Bicester Aviation Services	31
Black Mountains	31
Bristol & Gloucestershire GC	61
BGA	6 + 37 + 51
Cambridge GC	73
Centre National de Vol à Voile	61
Diana2sailplane	73
East of England	74
Forbes Brokers	11
GASCo Flight Safety	34
Gavin Wills	21
Glider Service	65
Hayward Aviation	18
Hill Aviation	34
HpH Sailplanes	34
John McCullagh	72
Kennedys Law	71
Lake Keepit	72
LJ Panels	74
LX Avionics (John Delafield)	31 + IFC
North Yorkshire Sailplanes	74
Oxfordshire Sportflying	31
Propeller Seller	72
Philip Wills Trust	47
Roger Targett Aviation	72
Skycraft Services	73
Skylaunch	72
Soaring Oxford	73
Soaring Safaris	73
Southern Sailplanes	back cover
Stein Financial	72
Sydney Charles Aviation	47
Zulu Glasstek	30

Sailplane & Gliding's cover and entire contents are the copyright of The British Gliding Association. Nothing herein may be republished in any medium or format, in whole or in part, without explicit prior written permission from the publisher. Views expressed herein are not necessarily those of the BGA, nor of the editor. The publisher reserves the right to accept, reject, discontinue or edit any advertising offered for publication. Publication and/or inclusion of advertising is not an endorsement, qualification, approval or guarantee of the advertiser or of the service or product advertised. Readers are advised to make their own enquiries in respect of advertisers they may use.



TOST Weak Links

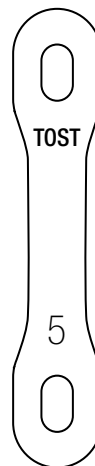
The TOST weak link system is an engineered and approved design which prevents aircraft overloading during winch, car-tow and aero-tow launching.

Tost Weak Link – black	Quickfind: TST110101	£4.25 D
Tost Weak Link – brown	Quickfind: TST110102	£4.25 D
Tost Weak Link – red	Quickfind: TST110103	£4.25 D
Tost Weak Link – blue	Quickfind: TST110104	£4.25 D
Tost Weak Link – white	Quickfind: TST110105	£4.25 D
Tost Weak Link – yellow	Quickfind: TST110106	£4.25 D
Tost Weak Link – green	Quickfind: TST110107	£4.25 D
Tost Weak Link – mauve/purple	Quickfind: TST110108	£4.25 D
Tost Weak Link – grey	Quickfind: TST110109	£4.25 D
Tost Weak Link – turquoise	Quickfind: TST110114	£4.25 D
Tost Weak Link – orange	Quickfind: TST110111	£4.25 D



Weak Links - reserve

Tost Reserve Weak Link – black	Quickfind: TST110121	£4.25 D
Tost Reserve Weak Link – brown	Quickfind: TST110122	£4.25 D
Tost Reserve Weak Link – red	Quickfind: TST110123	£4.25 D
Tost Reserve Weak Link – blue	Quickfind: TST110124	£4.25 D
Tost Reserve Weak Link – white	Quickfind: TST110125	£4.25 D
Tost Reserve Weak Link – yellow	Quickfind: TST110126	£4.25 D
Tost Reserve Weak Link – green	Quickfind: TST110127	£4.25 D
Tost Reserve Weak Link – mauve / purple	Quickfind: TST110128	£4.25 D
Tost Reserve Weak Link – grey	Quickfind: TST110129	£4.25 D
Tost Reserve Weak Link – turquoise	Quickfind: TST110134	£4.25 D
Tost Reserve Weak Link – orange	Quickfind: TST110131	£4.25 D



Weak Link Sleeves

Tost Weak Link Sheath – single	Quickfind: TST111000	£6.95 D
Tost Weak Link Sheath – double	Quickfind: TST111200	£6.95 D

Weak Link Shackles

3mm weak link shackle	Quickfind: TST112300	£5.95 D
6mm weak link shackle	Quickfind: TST112600	£5.95 D
8mm weak link shackle	Quickfind: TST112800	£5.95 D

Tost Scissor Shackle

Tost Scissor Shackle	Quickfind: TST097000	£39.95 D
----------------------	----------------------	-----------------

Connecting Ring Pairs

TOST connecting Ring Pairs	Quickfind: TST102000	£29.95 D
----------------------------	----------------------	-----------------

'Carabiner' Connector

Tost 'Carabiner' Connector	Quickfind: TST095000	£7.95 D
----------------------------	----------------------	----------------

1:500,000 Southern England and Wales VFR chart, 2017 edition

The 2017 edition (ed 43) of the 1:500,000 Southern England and Wales VFR chart was released on the 2nd March. With hundreds of airspace, aeronautical information and typographical changes every edition, there have never been more reasons for making sure you are not flying with an out-of-date chart.

Quickfind: SOUTHED43 **£15.99** D

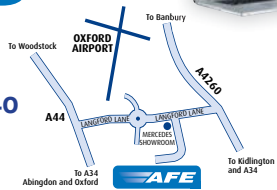
2017 1:500,000 VFR chart series

Chart name	Current edition	Date	(Next edition due)
Southern England & Wales	43	02 Mar 2017	
Northern England & Wales	39	26 May 2016	(30/03/2017)
Scotland	31	23 Jun 2016	(09/11/2017)

All prices include UK VAT

AFE OXFORD

The UK's largest pilot shop. Opposite Oxford Airport, 10 minutes from Junction 9 of the M40



SAT NAV: OX5 1FQ

www.afeonline.com

1000'S OF PRODUCTS AVAILABLE ONLINE

Opening Hours (local):
Monday – Friday 09:00–17:30
Saturday 09:00–16:00

Tel: (0) 1865 841441
Fax: (0) 1865 842495
e-mail: tech@afeonline.com

AFE Oxford Pilot Shop
Unit 2 Chancerygate Business Centre,
Langford Lane, Kidlington, Oxford OX5 1FQ

- Supply
- Maintain
- Repair
- Certify

Membery Airfield,
Lambourn Woodlands,
Hungerford,
Berkshire RG17 7TJ

tel_ 01488 71774 fax_ 01488 72482
evenings_ 01488 668484
mobile_ 07774 429404
email_ office@southern sailplanes.com

Changing times

The way we harvest and apply energy has developed quickly, and gliding is no exception. The Discus 2c FES and the new Ventus Sport FES match their world leading aeronautical designs with the safety and convenience of a Front Electric Sustainer. The order books for these two remarkable Sailplanes are filling up fast, so don't get left behind.



For more information on the Discus 2c FES, the New Ventus Sport FES or any other Schempp-Hirth masterpiece, please contact Philip Jones: phil@southern sailplanes.com