

SAILPLANE & GLIDING

VOL. 71 NO.4

INTERVIEW WITH
MARK MAUGHMER
- 'MR WINGLET'

BEWARE DANGERS OF
CONTROL CONFUSION

TAKING PART IN THE
LARGEST AIRBORNE
OPERATION IN WW2



A PASSION

As flying resumes, Santiago Cervantes reflects on his love affair with gliding

£4.50



62

The BGA Shop



www.bgashop.co.uk

**Whatever your standard &
whatever your aspiration
there is a book for you at
the BGA Shop**



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**

.....





CONTENTS

- 04** BGA NEWS
- 06** YOUR LETTERS
- 08** OPINION
- 14** GOING ON SAFARI
- 17** SUPPORT FOR AN EARLY SOLO
- 18** PILOT PROFILE: HOLLY HARRIS
- 26** GLIDING GALLERY
- 28** FACING UP TO FLIGHT FEARS
- 30** ADVISORY 14: THE RIGHT KIND OF CONFIDENCE
- 36** LANDOUTS: FROM HEAVEN OR HELL
- 45** ATKINSON'S LAW
- 48** BOOK REVIEWS

CLUB

- 33** TRIBUTES
- 42** VINTAGE GLIDING
- 46** A FURLOUGHED FLYER
- 50** DEVELOPMENT NEWS
- 51** BGA UPDATE
- 52** CLUB GALLERY
- 54** CLUB NEWS
- 60** CLUB FOCUS: DERBY & LANCASHIRE
- 64** ACCIDENT/INCIDENT SUMMARIES
- 68** AAIB BULLETIN
- 70** OBITUARIES
- 70** BGA BADGES
- 72** CLASSIFIEDS
- 74** INDEX TO ADVERTISERS

FEATURES

10 INTERVIEWING 'MR WINGLET'

Herrie ten Cate talks to Mark Maughmer, who was recently awarded an aerodynamics award for his work

22 MY ROLE IN THE 'CORPS D'ELITE'

The Rhine Crossing was the single largest airborne operation in WW2. **Brian Latham** was one of 1,500 RAF pilots transferred to the Glider Pilot Regiment following the heavy losses at Arnhem

38 A PASSION FOR GLIDING

Santiago Cervantes reflects on a love affair with gliding and why he chooses the Highlands

62 COCKPIT MUDDLE

With accident reports continuing to describe the same errors, the BGA safety team highlights the dangers of control confusion



MEMBER OF THE ROYAL AERO CLUB AND THE
FEDERATION AERONAUTIQUE INTERNATIONALE



 **THE MAGAZINE OF
THE BRITISH GLIDING
ASSOCIATION**

AUG/SEPT 2020 VOLUME 71 No 4

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

EMAIL: EDITOR@
SAILPLANEANDGLIDING.CO.UK

EDITORIAL TEL: 01763 246657



COVER STORY
Paul Whitehead,
in ASW 24,
G-CJXT, on
the ridge at
Portmoak. The
photograph was
taken on 25 May
2019 from the
Bishop Hill
(Ron Smith)

DEADLINES

Oct/Nov 20

Articles, Letters, Club News:
Display advertisements:
Classifieds:

5 Aug
21 Aug
8 Sept

Dec 20/Jan 21

Articles, Letters, Club News:
Display advertisements:
Classifieds:

5 Oct
21 Oct
6 Nov

© British Gliding Association 2020
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

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

› Congratulations to Sebastien Chaumontet, who has won the EASA GA Safety Award for his Open Glider Network (OGN) project. OGN provides a unified tracking platform and helps reduce mid-air collision risks by connecting information from a range of electronic conspicuity devices. It also enables easier provision of weather information directly into the cockpit to help pilots cope with changing conditions. The award was launched at last year's AERO and recognises the most safety-beneficial smartphone/tablet application for use by GA pilots.

› While the current Covid-19 situation is limiting opportunities for instructor training, thoughts are turning to restarting this important activity as soon as reasonably possible. Any pilots who have completed the teaching and learning course module are encouraged to work with their CFI in developing a plan to resume instructor training at their club as soon as there is capacity to do so. Information about instructor courses will be updated and published as soon as possible.

› There have been a number of infringements reported since flying resumed across much of the UK. The Airspace Safety Initiative has published helpful guidance on avoiding infringements. See <https://airspace-safety.com>

› Several pilot-owners have formed a soaring group operating from Bicester airfield. The group has joined the BGA as an associate member.

› The theme of the 2021 FAI Young Artists Contest is "a friendlier world with air sports". There are three age categories. For more details see www.fai.org

› The second eGlide competition is due to take place at Grossröckerswalde, Germany, from 28 August to 5 September. The e2Glide competition is for 13.5m electric powered gliders.

› Congratulations to Sherington's Lucy Wootton, who has been awarded a Flying High Scholarship by the BWPA (British Women Pilots' Association). Lucy is upgrading from a Light Aircraft Pilot's Licence (LAPL) to a Private Pilot's Licence (PPL) and will use her scholarship to help her finish this. She would like to become a tug pilot and, eventually, fly commercially.

› The NSPCC Child Protection in Sport unit has recently sent out written guidance and reduced rates for online training. See <https://learning.nspcc.org.uk/training/introduction-safeguarding-child-protection>

Craig's Covid screen

THIS project arose when I was concerned that, although we were getting our experienced pilots flying again, it wasn't long before the K-21s were idle, despite a large demand from early-solo and pre-solo pilots, **writes Southdown's Craig Lowrie.**

I started looking at the design and installation of a screen to separate the cockpits and managed to make a cardboard template that fitted quite well. This was used to make an acrylic prototype, but the acrylic was quite brittle and I cracked it when adjusting it to fit. The challenge was to not interfere with the canopy interlock mechanism.

I took the prototype to a friend – the MD of Cirrus-Laser, Dave Connaway – and two production versions were taken back to Parham and tested. Everything looked strong enough to meet the normal envelope of the glider.

I settled on approval guidance from the BGA. Having completed the required documentation, we did some flight checking trials with the CFI and

his son, and everything performed well. Communication from rear to front seat was fine, but the communication from front seat to rear was reduced. Having discussed the initiative with the CAA, it was proposed that we submit a minor modification application to EASA, which in due course received EASA approval.

DFT revised operational guidance appeared in early June. With both airworthiness and operational aspects addressed, I looked for assurance from our insurer that we were fully covered, which was duly confirmed.

We brought online a simple bluetooth communication system, which allowed full-duplex conversation between the two occupants – all for about £100 a glider. I have to thank Marcus Rice for identifying and qualifying this simple, effective solution for our K-21s.

The BGA mentioned what I was doing in a circular to the clubs, and I was inundated by requests for information. Information packs were sent to about 30 UK clubs and Cirrus-Laser has shipped well over 30 K-21 screens. Many are being used daily in clubs around the UK. This has enabled a significant number of early post-solo pilots to get flying single-seat gliders again. At Southdown we even have a 'first-solo' following training using the screen.

Having polled instructors, the majority want to continue with the screen. Some say that if it is removed they may stop instructing. I think this solution has 'legs' yet.



Flying with screen fitted in Southdown K-21

It's all change at Bicester

AFTER 16 very successful years, during which time it had grown into one of the largest gliding clubs in the country, Bicester Gliding Centre ceased operations on 30 June 2020. In the absence of an agreed lease going forward, advice obtained by the club directors that they would have to leave the site was accepted.

Following a huge effort by a small team of volunteers, the club cleared the site on time and departed on the final day via a procession of trailers that circled the site before the owners headed off to their new clubs. The club fleet is either in storage or on loan to other clubs.

The club has stated an intent to re-emerge at another site. The Oxford University Gliding Club, as well as many of Bicester's 'cadet' glider pilots, have relocated to Oxford Gliding Club.

Bicester airfield, which is known to many glider pilots, is one of the last remaining omni-directional and drained grass airfields. With gliding having an unbroken presence for at least 60 of the airfield's 100-year plus history, it would seem inconceivable for the airfield to be moved into the next phase of its long and proud history without gliding being an active part of the operation.



Katie Stokes is awarded the Peter Cruddas Foundation Scholarship

TRUST IN YOUTH

THE Royal Aero Club Trust has maintained its practice of awarding more bursaries to young persons involved in air sports than any other organisation, despite the disruption to many air sports caused by the Covid-19 pandemic.

The Trust received almost the same number of bursary applications in 2020 as in the previous year. Of the 33 bursaries awarded, to enable young enthusiasts to advance their existing air sport qualifications, 12 went to glider pilots.

Special bursaries were awarded to:

- The Peter Cruddas Foundation Scholarship: Katie Stokes, Lasham.
- The Bramson Bursary: Daniel Weston, Bath, Wiltshire & N Dorset.
- The John Downer Bursary: Shayan Hassanbigi, Surrey Hills.
- The Royal Aeronautical Society Award: Ewan Hogg, Lasham.

Other glider pilots receiving bursaries include:

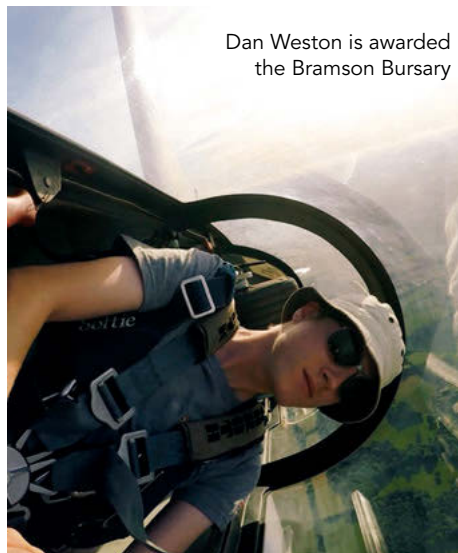
- Harry Reed-Walker, 15, Bicester.
- Bradley Lefley-Kemp, 15, Trent Valley.
- Lucy Cotton, 15, Cambridge.
- Jacob Tully, 21, RAFGSA.
- Benjamin Briscoe, 15, Wyvern.
- Jared Chohan, 15, Midlands.
- Sebastian Taylor, 16, Burn.
- Max Gould, 15, Bannerdown.

The potential difficulties of completing training in 2020 have been recognised by the trustees, who have decided that the

bursary award recipients can complete the training by 31 December 2021.

The significant increase in the number of awards made in recent years follows a decision by the Trust in 2015 to widen the age range for eligibility and to introduce follow-on awards to enable previous award winners to continue to make progress in their chosen air sport. The Trust is most grateful to its benefactors, who do so much to encourage young persons engaged in air sports.

■ Details of how you can become a Trust benefactor, or friend, are published on the Trust website www.royalaeroclubtrust.org



Dan Weston is awarded the Bramson Bursary

Vintage events taking place

STRIM that long grass around your vintage trailer and get busy – there are still some great vintage events to come! We are hopefully through the worst, but send our commiserations to the organisers of cancelled rallies: The Park, Long Mynd, Southdown and Camphill.

The forthcoming vintage events are:

- Lasham Vintage Task Week, 17-25 August. Organised by Glyn Bradney.
- Whispering Wardrobes, Booker, 28-29 August. Organised by Graham Saw.
- Slingsby Week, Sutton Bank, 29 August – 5 September. Organised by Jerry Henderson Newton.
- 2020 UK National Vintage Rally (postponed from May), Long Mynd, 12-18 September.
- Last, but not least, the VGC Annual Dinner, 3 October. This will be in Maastricht, Netherlands, organised by Jan Forster. The venue is Fort-Eben, site of the first assault glider landings in 1940. Note that the event is still 'paused' as I write this. Please check with individual clubs for final advice before committing to a long journey.

Andrew Jarvis, VGC President

A year without competitions

FOLLOWING careful consideration, it has been concluded by the various competition organisers that with the current Covid-19 situation it is not feasible to run a safe and effective competition. All BGA-rated competitions have been cancelled by the organisers.

Unrated comps still scheduled to be held, at the time of writing, include the Cambridge Cloud Rally (8-16 August) and the UK Mountain Soaring Championships at Aboyne (6-12 September).

■ Ranking and selection processes for future Nationals entry and British Team selection will not include the results of any competitions run in 2020. This is to avoid unfairness to competitors and to remove decision-making pressure and obligation from competition organisers, host clubs and those responsible for competition governance.

SAILPLANE & GLIDING



Andy Davis
Competition flying



Paul Whitehead
SLMG



Howard Torode
Airworthiness



Derren Francis
Tugging



Mike Fox
Instructing



Dr Frank Voeten
Medical



Andy Holmes
Winch operating



Steve Noujaim
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

Those were the days, indeed!

I WAS delighted to read the letter in the June/July issue from my old CFI (you probably won't remember, Jack, but I was one of your assistant instructors at Swinderby in 1970) about his student spinning the Baby on his first solo. My first solo as an Air Cadet in a T-31 had been (slightly) less exciting and I was now a very junior trainee at RAF College Cranwell. Following suitable training in the T-21, I had finally been assessed as fit to fly gliders on my own. After some circuits in the Tutor (those really were the days), I was permitted to seek thermals in the Grunau Baby, which Max Bacon had somehow obtained for us (gliding at Cranwell was still officially part of the Air Cadet organisation). I could leave my furry jacket and goggles on the ground, this aircraft had a canopy!

At last, on a relatively calm afternoon, I managed to find a thermal just after the winch launch, but with my lack of experience succeeded in falling out of it. That meant I had to join the circuit before I had achieved the necessary 15 minutes for my C Badge. However, a kick in the pants, the green ball rose in the Cosim, and I was higher than usual on the downwind leg. Surely high enough to try at least one 360 before I got down to 500 feet? Watch out for anyone else in the circuit, though, keep your eyes outside, and check behind

you! Looking over my shoulder, round I went, but a bit more rapidly than intended and the wing dropped further than I had planned.

Looking forwards, I could see that the trees below me were rotating; I wasn't going very fast so I was obviously in a spin. Full opposite rudder, control column centrally forward and immediately the Baby recovered. At the time it didn't seem at all noteworthy that the recovery took us directly towards the point at which I would normally turn final, so the rest of the flight was uneventful and I even managed to land close to the launch point.

Most of that generation of gliders were pretty predictable in their handling characteristics. Later in my gliding career, as a much more experienced pilot, I was part of an early expedition to the Italian Alps. On that occasion I managed to spin down the side of a mountain. I had attempted to tighten the turn with both elevator and rudder after the speed had dropped (as it always does when facing the hill during a thermal turn). I wasn't completely to blame, because the wings of that particular L-Spatz were set up with different angles of incidence, but anyway the recovery worked as it should and I was able to climb up and do the same again!

As you say, Jack, those were the days!
Dave Cockburn, Thirsk, Yorkshire

In the words of Chekhov...

IN APRIL, our CFI Dick Skerry was, in an email, bemoaning the lack of flying. I sent him a reply along the lines of "take heart Dick, we are all, no doubt, reminded of Chekhov's words in *Uncle Vanya*":

SONYA: What can we do? We must live out our lives. [A pause] Yes, we shall live, Uncle Dick. We shall live all through the endless procession of days ahead of us, and through the long evenings. We shall bear patiently the burdens that fate imposes on us. We shall work without rest for others, both now and when we are old. And when our final hour comes, we shall meet it humbly, and there beyond the lockdown, we shall say that we have known suffering and tears, that our life was bitter. And the BGA will pity us. Ah,

then, dear, dear Uncle, we shall enter on a bright and beautiful life. We shall rejoice and look back upon our grief here. A tender smile – and – we shall glide. I have faith, Uncle, fervent, passionate faith. We shall glide. We shall glide. We shall hear the angels. We shall see a thermal shining like a jewel. We shall see evil and all our pain disappear in the great pity that shall enfold the non-gliding world. Our life will be as peaceful and gentle and sweet as a caress. I have faith; I have faith. [Wiping away her tears] My poor, poor Uncle Dick, you are crying! [Weeping] You have never known what it is to be happy, but wait, Uncle Dick, wait! We shall glide. We shall glide. We shall glide.

Mike Emberson, Lincolnshire GC

CONDOR FOR TRAINING

I WAS just reading the latest S&G (a pleasure as always) when I came across David Innes' article *Carry on Instructor Training* about instructor training with Condor (pages 28-29, June/July 20).

I have started using Condor myself as an instruction tool, although I focus on cross-country training and competition training. I also recently entered the online Dutch gliding nationals, with over 120 competitors spread over two servers.

In the article, David mentions some limitations, such as a limited field of view (FoV) when wanting to look at the controls. However, it is possible to 'zoom out' in Condor, allowing for a far wider FoV which does allow both looking at the controls and much of the sky at the same time.

It is possible to set Condor up to start with this wider FoV and also centre the screen a bit lower down.

But, even better, since the latest update that the Condor development team released, there is now a spectator mode.

This allows David, or other coaches, to sit in the virtual cockpit, but having the full autonomy to turn and look in any direction. As a spectator you can also view the glider from the outside, and turn on a track ribbon for better visualisation. This really is an excellent teaching tool.

In the current version, you are not able to see correct instrument readings (as ASI will now show groundspeed for a spectator instead of IAS, and actual climb rate instead of correct vario readings).

Dinant Riks, Amsterdamsche Club voor Zweefvliegen, The Netherlands

David Innes replies: Dinant makes some good points. I was cursing the Condor update with 'spectator mode', which arrived just after the 'press date'. I am still assessing how to integrate that into our training. I am, of course, fully aware of the Display Shift and Zoom functions, but since I am remotely monitoring the trainee's performance, asking them to Zoom on their laptop in the middle of an

exercise would disturb their 'flow' and therefore negate the exercise.

On a more positive note I recommissioned the Aboyne Simulator - I had removed the expensive bits while the clubhouse was deserted during lockdown - and we found I could monitor and coach pupils from the doorway, but obviously not demonstrate. Indeed I had one pupil, a bit rusty, who asked for a simulator session when we resumed flying. Between his practice and my hints, he was comfortable, as was I, so he was authorised him to fly solo on a calm day. (We had 10-15kts cross that day, from the south, which always brings lots of turbulence and an abundance of sink.)

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 5 August

No hiding our early exploits

THE LAST time I saw Sam St Pierre (obits, p71, June/July) was perhaps 15 years ago. On a non-gliding day, we went bird watching at Blacktoft Sands, just off the River Humber.

To the west of the bird hide were some impressive pylons (maybe gone now) crossing the River Ouse, the wires being some 250 feet above the water.

I reminisced with Sam how, in my "irresponsible youth", I had flown under those wires. Needless to say, Sam had a similar story.

We became aware that the other birdwatchers in the hide were more interested in the animated conversation of a couple of retired pilots than in the assorted curlews, plovers, oystercatchers, and avocets on view.

Jack Harrison, Nairn, Scotland

Gliders sent to India

HAVING read the article *A taste of India* (pages 10-12, June/July) in the last issue, I spotted this in the S&G website archives. *Gliding*, volume 3, Autumn 1950. On page 153, it reads about Indian Gliding Association:

The British sent gliders to India, which were affectionately named after the leaders and Prime Minister of India, who were majorly instrumental in promoting gliding in newly-independent country.



Sushil Bajpai with Lasham's Jordan Bridge during his recent trip to India

Indian Gliding Association

In appreciation of the interest taken by the Communications Ministry of the Government of India, the association has named the first two-seater sailplane imported from the UK for training purposes 'Kidwai'.

The second, due to arrive in Bombay later, will be named 'Khurshid Lal'. The association has already named its Olympia sailplane 'Jawahar', after the Prime Minister.

The first two-seater was successfully test-flown at the Fersinji glider-drome (Hadapsar) on 10 July, by Mr F H Irani, chief pilot instructor of the association.

To popularise gliding among the youth of the country, the association proposes to organise joy-rides for students of schools and colleges in the State of Bombay at the end of the monsoon this year.

The Air Headquarters of the Government of India proposes to train 59 gliding instructors.

Sushil Bajpai, Pune, India

INNOVATIVE APPROACH TO STAYING SAFE

As gliding slowly resumes, BGA Chairman **Andy Perkins** is delighted that the social heart of clubs has grown stronger, and reflects on innovative approaches being taken to keep us all safe from effects of Covid-19



I

T HAS been fantastic

to hear from club chairmen that the social heart of our clubs has grown stronger throughout the past few months. People are, of course, the lifeblood of our sport and one of gliding's big attractions is the interaction and sharing of experiences with others. Catch-ups via social media and even virtual bar get-togethers have all been highly valuable, particularly for those that have been isolating.

The changes to social distancing and the relaxation of restrictions from 4 July to enable two-seater flying by people from different households will, hopefully, have allowed many more to resume their enjoyment of gliding and for some to start gliding for the first time. I appreciate there are still many challenges to

the way we fly. However, there have been some really innovative approaches to give confidence and help keep all safe from the effects of Covid-19. 'Craig's Covid screen', as it is colloquially known, has been highly valuable in giving confidence and reassurance. Thank you to Craig Lowrie in particular for the effort, time and determination shown to get this mod approved for use in K-21s.

Whilst on the topic of instruction, I appreciate some instructors don't feel able to instruct at the moment, with many risks to balance and to ensure that the PPE and procedures used are of the right level to give the protection required. It is important for us all to remember that this is an individual decision. To all instructors, please know that all of us support your decision and whatever contribution you feel able to make.

As and when guidelines allow and club officials agree, introductory gliding courses and flights will recommence in a more significant way. If you aren't an instructor, but feel that you would be able to assist your club, please remember that through the IFP (Introductory Flight Pilot) there is a way to take passengers as part of their first experience of gliding. If you have your Bronze 'C', Cross Country Endorsement and either 50 hrs or 100 launches, then please do consider it.

Flying with others has enabled some of my most memorable and enjoyable glider flights. It can lead to all kinds of adventures, as well as being a lot of fun and enabling you to assist the future bloodline of your sport. Ultimately, IFP and instructors shape who joins gliding.

Bicester Gliding Centre

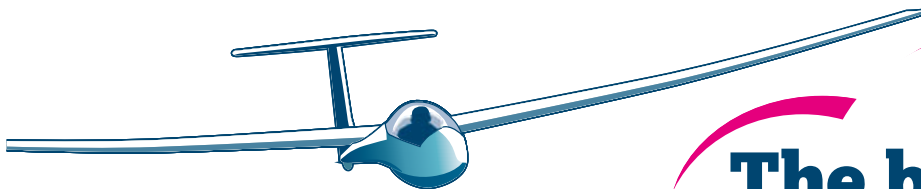
As many of you will have heard, the club went into hibernation from the end of June with the majority of members joining other clubs in the local area. This is the end of an era for sure with many volunteers having poured hours, weeks and, for some, months of their lives into Bicester GC over the years! Although a sad day for all of us to see any club close, the good news is that other clubs nearby will benefit from the energy and enthusiasm of many Bicester members. Bicester will remain an airfield, so landing is still possible.

Finally, most gliding competitions this year have been cancelled. That said, the Ladder is more active and vibrant than ever. In addition, there are some soaring/task weeks planned across the country that I am sure will provide some excellent soaring opportunities. Whatever your plans for gliding over the next couple of months, I hope the weather is generous and that you are able to enjoy it.



'Craig's Covid screen': cardboard prototype (left) and installed (right)

Andy Perkins
Chairman
British Gliding Association
July 2020



**The best glider
insurance will
cover you at
every level**

**Comprehensive
Gliding Hull and
Liability Insurance**

Superior security rating Excellent policy T&Cs Competitive rates

Submit a quote online at: **sydneycharlesaviation.co.uk**
or Call today for a great value quote +44 (0)1420 88664

Proud sponsors of the British Junior Gliding Team



Sydney Charles Aviation



SCAviation1

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
 **BRITISH
GLIDING
ASSOCIATION**

INTERVIEWING 'MR WINGLET'

The Thermal Podcast's Herrie ten Cate talks to Mark Maughmer, who was recently awarded the 2020 AIAA aerodynamics award for his work

IMAGINE you're flying your relatively modern glider. Now look at its wingtip. If you have a winglet, glider pilot Mark Maughmer probably had something to do with its design. Mark is a professor of aerospace engineering at Penn State's College of Engineering, USA. His winglet designs are on hundreds of production sailplanes around the world. Mark's lifetime of contributions to the field of aerospace is being recognised by the American Institute of Aeronautics and Astronautics (AIAA) with the 2020 AIAA Aerodynamics Award.

HtC: Mark, first of all, congratulations on this prestigious award.

MM: Well, thank you very much.

HtC: Now, before we get into your design work and the relationship with gliders, I'm afraid we're going to have to talk a little bit

about Covid-19. What kind of impact is it having for you and the faculty and students at Penn State?

MM: Well, it's pretty major. Penn State is completely closed and locked down. When it started out, I thought it would be a great time to catch up on wind-tunnel experiments but we're not allowed in the building space, so we're conducting lectures online. It still seems difficult to do, but it works. I've got the hang of it but so far, every time I've run a class, different parts of the internet connection didn't work. I've got 137 students in one class. It's a challenge. And they were very helpful in helping me get the technology to work and seem pretty patient. The faculty seems to be coping reasonably well, but it's difficult. It really is.

HtC: It's all about adapting now...?

MM: I think it would be easier to adapt had we had more time to do it. I'll try to dry run something that works perfectly the night before... and on the day of class one component of it doesn't work, so that's a bit frustrating. The university has been very helpful in that you can order whatever you need to make this work. I've ordered a document camera, so I can do my notes. I've tried from writing on a pad to a camera on a whiteboard. What seems to work best is a camera on a sheet of paper which I've used like a blackboard and I go through my notes that way. The students seem to like that the best, and are not shy about telling you what they like and don't like it.

HtC: Here in Canada, the government is asking all universities to drop what they're doing and turn their engineering firepower towards the design and manufacture of critical supplies and medical equipment. Has there been any talk of that happening at Penn State?

MM: There are a few people who have done that on their own. We have a place called the applied research lab here, which is basically an old Naval Research Laboratory that does



Mark Maughmer
in front of his 1946
Piper J-3

submarines and torpedoes. They're trying to do some medical equipment, but we're basically not allowed even to go on campus. So, it'd be difficult to engineer or create anything.

HtC: *Let's switch gears here; you know, the main reason I wanted to talk to you was about this award for your work. One of the footnotes says you were chosen because of your foundational developments in aerofoil and wing design. Talk to me about your work and how it relates to gliders.*

MM: Much of the research that happens with gliders is done by people who are passionate about gliders. They try to shoehorn other things they're doing into the work of gliders, which I've been able to do pretty successfully. But I've been at it for a long time – we were doing low Reynolds number aerodynamics in aerofoils and wings and stuff before other people.

Model airplane people and glider people were the people doing it until UAVs came along. There wasn't much funding, so you did it because you were interested and passionate about it. And now with UAVs there's a lot more activity because there's funding in that area.

HtC: *Are you working on glider UAVs?*

MM: No, and I'm not really doing much on UAVs, so kind of sneaking into gliders as best I can. The winglets stuff was really directed toward the glider movement early on. That's an interesting one because Karl-Heinz Horstmann in Germany had done winglets and the big guys had done winglets. Basically, the idea was that they help the climb, but hurt the cruise. So, they never found their way onto production aircraft.

I was contacted by Peter Masak, who said he was going to make winglets for gliders and did I want to help? I said, Peter, the best aerodynamicists in the world have done this; it doesn't work, it helps the climb, it hurts the cruise. Well, he said, I'm going to do it...will you help? He was so persistent I finally said, well what aerofoil are you going to use? We were ultimately successful with a trial and error flight test program, with him in Texas and me on the other end of the phone in Pennsylvania. After several weeks of flight-testing we got into the design space; it's a miracle we did that. And people started winning contests; Schempp-Hirth became interested, and then the other manufacturers.

HtC: *What was the sweet spot between cruise and climb? How did you work the*



design to find that place?

MM: It's interesting. Even in the late 20th century, you'd think that designing winglets for gliders should be pretty easy, but our tools couldn't do it. They just didn't have the ability to get into the corners. I think that was the same thing that the hurt the big guys, they didn't have those tools either.

Richard Whitcomb developed the winglet at the NASA Langley eight-foot, transonic wind tunnel, but didn't get the sweet spot. The beauty of the sailplane stuff is that Peter would say "what do I do next?" and I would tell him "try this" and he could make those changes and go fly that weekend. And on Sunday night he would call me... "this is what I found out." We picked the parameters in the right order so that we nailed down the ones that didn't matter first, and then the ones that really mattered last. And it comes down to things like the sweep and toe angle can do the same thing. It's easier to adjust the toe angle than the sweep, so we set the sweep and adjusted the toe angle.

We did a lot of this with tufts and other things, trying to get the winglet to stall about the same time that the main wing, or later, and have the tufts all demonstrate stall at the same time. This means that the winglet is roughly elliptically loaded, which is probably a good thing to do. So relatively quickly, because we could make changes and fly them, we arrived at the design and you can't do that with a 787. So, we got a winglet that was working.

HtC: *Speaking of some of the commercial airliners; is there still a bit of a crossover* ✈

Mark Maughmer participated with the Schempp-Hirth design team on the Quintus, particularly on the winglets and outer panels (photo courtesy of Schempp-Hirth)



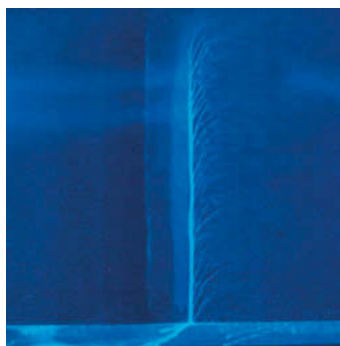
A new concept: the slotted natural-laminar-flow (SNLF) aerofoil being tested in the Penn State low-speed, low-turbulence (LSLT) wind tunnel. The concept could have sailplane implications

EVEN IN THE LATE 20TH CENTURY, YOU'D THINK THAT DESIGNING WINGLETS FOR GLIDERS SHOULD BE PRETTY EASY, BUT OUR TOOLS COULDN'T DO IT

WE CAN DO THINGS NOW LIKE PREDICT HOW MUCH BENEFIT THERE IS FROM A RETRACTABLE TAIL WHEEL AND IS IT WORTH THE WEIGHT PENALTIES



Dr Maughmer's sailplane course at Penn State working on a human-powered airplane project, flying here with electric power during an early test flight



The aerofoil used on many of the winglets, with fluorescent oil on the surface to identify laminar separation bubbles, boundary-layer transition, separation, and so forth

✎ *between, say, some of the work you've done on aerodynamic design that has still worked its way into the commercial world.*

MM: It's hard to say. The guys that are at the companies are friends of mine and, of course, we talk. To be honest, I think they watch the glider community. They're not advocates or anything, but they watch it and the fact that winglets were working on a glider I would say is like the canary in the coal mines.

The big guys had to notice. They were working with winglets. The 747-400 had the big winglets that they said didn't help much, but it didn't hurt. And it gave the airlines a big place to put their logo so let's go with it!

They were slowly getting there, but they couldn't do the quick flight test programs that that we were working on, so I think we influenced it.

And I know, particularly with Airbus, those aerodynamicists... a lot of them come from the glider world and Akafliegs and so forth. So, very much in the Airbus world, with winglets and gliders there's crossover. In fact, we use a lot of the same tools. Once we got into this design space and had a successful winglet, it still bothered me that we didn't have

accurate tools. That's when M&H Soaring contacted me and said they wanted to do winglets. I said, that's OK, but I want to develop the tools to do this. And so, you're going to test a lot of winglets that we're going to find out about, and we did get into the tools that work. Basically, we can design a winglet now that that works as it is supposed to, right out of the box.

Htc: *Wow.*

MM: That's pretty important, I think, and we're now using CFD (computational fluid dynamics) to check some of the things we eyeballed, like juncture flows and so forth, and we're finding out we did a pretty good job. But CFD allows you to get into these corners and exploit whatever advantages are left. We can do things now like predict how much benefit there is from a retractable tail wheel and is it worth the weight penalties and so forth. You can make those trades now which, you know, even four or five years ago you couldn't begin to touch.

Htc: *Speaking of glider design, are we reaching the limit of what's possible or do you think there's still a lot of room out there*

for improvement?

MM: There is room for improvement, but it's all connected. And one of the things that we've done, because of my interest in gliders and aerodynamics, is transition, which has always been an important area of interest. The transition between a laminar boundary layer and a turbulent boundary layer is of critical importance to the sailplane community, but the airlines don't care because their Reynolds numbers are so high that they've been basically flying turbulent flow aerofoils since transports began flying.

It bothered me that CFD completely ignored transition. And there's no way you can do this with a glider, or UAV, or even a business jet or GA airplane. If you don't include transition in the calculations you get the wrong answer. So, I had students working on that. We now have a transition model that works in CFD and that's why we're now able to use CFD to do the flow over a whole glider and get reasonable answers. That transition model has fallen into the big guy's area.

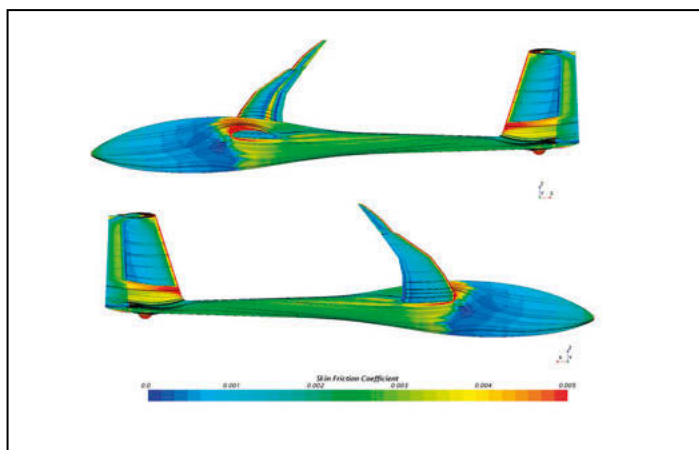
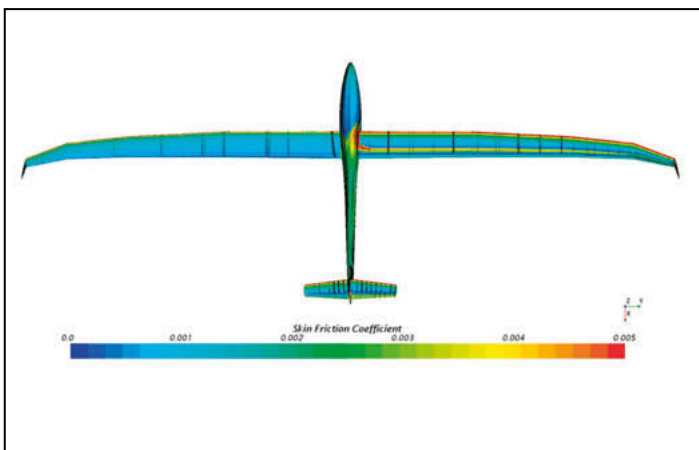
I would never be able to get a grant and say I want to do transition measurements and study sailplane aerodynamics. I would just say that capability allows us to look more critically at glider design, and I would have to say that, in looking at the CFD answers we're getting, we've done a remarkably good job with the tools we had. It's hard to find any big areas that say "oh, this is going to revolutionise gliding", but the little things will pick up a couple points of L/D every now and then, and that's improvement.

I think the biggest thing is our ability with loggers to find out about the air that the gliders are flying in. And if we better match the glider to its environment, I think there are some gains to be had there.

Htc: *That's interesting.*

MM: An example of this is with logger data... you may be familiar with, particularly, the European model of handicapping where there's the Karl-Heinz Horstmann model: A1, A2 and B1, B2 thermals that are strong and narrow, or weak and narrow, or – you know what I'm saying. And they go through this with a sailplane and determine its cross-country performance in the average weather conditions. We looked at the logger data and found that the 18m people or the Arcus people with their 20m two-seaters never used an A1 thermal, which is the weak narrow thermal, and you go... wow!

It really changed the way we think about



it, although we designed a glider that could still exploit an A1 thermal. My opinion is that you don't win contests in strong weather, you lose them in weak weather. So, you need to be able to exploit that, but we also added areas in there for cruising under clouds streets, or final glide and things like that.

HtC: *I interviewed Terry Delore recently, who broke another record in New Zealand flying 1,730km (Most challenging flight of my life, pages 22-25, S&G June/July 20). I can imagine a glider that's designed just for wave conditions...*

MM: You could do that, but nobody would sell very many. If my task is designing a glider for Uvalde Texas for a pilot who weighs 172 pounds, we could design a winner that would be hard to beat. But there would be only one of them. The manufacturers have to worry about weather in Northern Germany and the weather in Texas.

HtC: *Tell me about your connection with gliding... I saw a great photo of you flying an event somewhere over Germany. What else about your experience?*

MM: I just have to say that wasn't me. Yeah, whoever wrote that article picked that photo off the net. I think that's Tilo Holighaus in a Ventus 3, but it's not me. Darn!

HtC: *But you're an experienced glider pilot in your own right?*

MM: I've been flying gliders since 1972. And let's see, I've had a Mosquito, an ASW 20, and a Ventus 2BX. I don't fly as much as I'd like to. I flew competitions in the past and I'd still probably like to. I tell everybody that as soon as I can figure out how ClearNav works, I'll race again. It's funny when you do technology all day

at work. The last thing you want to do is bring a lot of technology into your hobbies!

HtC: *Well, you could get into the vintage gliding movement...*

MM: Yeah... I'll buy a K-6 and a wiz wheel. I've been a flight instructor since 1976 and the faculty advisor and promoter of several University soaring clubs: one at Princeton and one here. So, gliding has been an important part of my life for a long, long time.

HtC: *So, what is it about gliding that has kept you hooked your entire life?*

MM: Wow. You know the test you take when you're young that tells you what you're going to be when you grow? My test said I should be an artist/historian, which is diagonal across the origin from engineer. So, I think I approach engineering like an artist. And I think it's the beauty and the majesty of gliders that has kept me interested. And, you know, I've always thought "well, if your eye likes it the air likes it".

HtC: *That's a great expression!*

MM: And I think it's true... if it's pretty, the air likes it. And I've kind of assumed up until after I became a professor... I thought all engineers were that way and then you find out "no". Some of them are just looking at the problem and ugly is OK as long as it works. If I can make it work and make it pretty that's even better. So, I think these highly swept polyhedral platforms, that's me at work.

HtC: *I think we're all enjoying it as glider pilots around the world. It's been a real pleasure speaking with you and, once again, congratulations on what appears to be a very well-deserved award. Thanks and stay safe.*

MM: OK, and you stay healthy. Take care. And please, readers, join OSTIV*!

Above left: Predicted skin-friction coefficients for the top (right) and bottom (left) for the Ventus 3 at $Cl = 0.64$ (CFD calculations by Chris Axten, Ph.D. candidate)

Above right: Predicted skin-friction coefficients for the wing upper surface and fuselage side (top) and the wing lower surface and fuselage side (bottom) of the Ventus 3 at $Cl = 0.64$ (CFD calculations by Chris Axten, Ph.D. candidate)

*OSTIV – international scientific and technical soaring organisation. www.ostiv.org



■ The Thermal is a monthly podcast devoted to gliding. You'll hear about the latest cutting-edge sailplanes and technology. Plus gliding safety, instructing, gliding history, pilot interviews, towing, winching and a whole lot more. New podcasts will be released the first Saturday of every month. You can listen to past and upcoming podcasts at: <http://thethermalpodcast.libsyn.com>



Above: the country is clearly in the grip of the drought Below: there was a dust storm at Narromine on two consecutive days

Bill Mudge jumps at the chance of a soaring safari in the back seat of an ASH 30 Mi

THE idea of a soaring safari has always appealed to me. When the offer came to join a trip from South Australia through Victoria, New South Wales and finally to Lake Keepit, I was only too eager to be part of it.

Earlier in 2019, Theo Newfield of New Zealand and Graham Parker had purchased an ASH 25 Mi and invited Bernard Eckey to join them with his ASH 30 Mi for some flying out of Waikerie. Bernard kindly offered the back seat to me on the best day of the week. We flew a leisurely 500km in four hours

under cu based at 7,000ft.

Later that evening over a few beers, the idea of the safari was floated, and it seems that one extra person was required for the chase car. Theo's brother Steve, a New Zealander resident in Canada and owner of an ASW 27, was already on board. Did I know anyone else who would be interested in driving the chase car on alternate days? Silly question! So the last week of November 2019 was promptly earmarked for the adventure.

Eastern safari

Bernard and Graham were put in charge of organising and planning the trip. On the first day the plan was to fly eastwards as far as Robinvale, with Renmark and Mildura airfields as possible landing options along the way. Steve, the Canadian, flew with Bernard in the ASH 30 and I volunteered to drive the car and keep in touch by radio. Our chase car was Graham's Ford Everest, towing Bernard's ASH 30 trailer, which was loaded with all our gear.

Robinvale was easily achieved, but we found that the gate to the airfield was locked. When our car arrived we tied our gliders down, climbed over the fence and settled down for a nice dinner at the only available



motel in town. Luckily, we discovered an unlocked back road gate allowing us to use the car to position the gliders on the runway the next morning.

On Saturday, it was my turn to fly with Bernard to Narrandera. The trip was planned via Balranald, Hay and Leeton. At Balranald, we left the Murray River and followed the Murrumbidgee across the Hay plains. If you'd said I'd fly across these plains below 4,000ft I wouldn't have believed it, but the long legs of these ASHs made it possible.

We tied the gliders down at the end of the main strip at Narrandera, only to discover afterwards that we had landed at a secure airfield with locked gates and high fences all around. There wasn't a single soul to be seen, but Graham obtained the code for the pilot's gate by calling the airport manager while we were waiting for our chase car.

By the time Steve arrived he had also arranged suitable accommodation. The evening was spent at the Fig Tree Motel with a nice dinner and a good bottle of red at the local pub. This turned out to be the trend for the rest of the trip.

Favourable winds

Narromine was our goal for the next day. Although the weather reports indicated late storms and the possibility of smoke haze from the many bushfires along the east coast, fortunately the wind was such that we needed only to turn the gliders around and take off in the opposite direction to our landing.

It was my turn to drive again, but I was given a 50km head start. Once again the day began slowly with average climbs and heights, but once past Forbes it was apparent that the predicted stormy weather was cooking up further north. Initial dust devils in the blue and later climbs under cumulus got both gliders safely to Narromine. Within a minute or two of landing, a downburst near the field dumped heavy rain but fortunately no hail.

I arrived with the chase car and the trailer about 30 minutes later. Bernard was able to secure a spot in a hangar, but Graham and Theo decided to test their brand new all weather covers and leave the ASH 25 tied down outside. Graham promptly booked us rooms on the airfield and we enjoyed Arnie Hartley's famous steaks for dinner. The salads weren't bad either – thanks, Beryl and Fiona!

Dust storm

The following two days were a wipe out as a dust storm came in from the northwest

followed by another from the southwest on the next day. I was able to catch up with Beryl and Arnie Hartley, and John and Lee Rowe. John was one of my original instructors over 50 years ago. I hadn't caught up with either Beryl or John since 1975.

A trip to Dubbo and a good look around the Aviation Museum on the airfield helped fill in the time. Our original plan to fly to Lake Keepit was shelved as the conditions weren't amenable and the long-range forecast meant we had to get back south to beat a forecast front passing through the southern parts of Australia. Our plan was to return to Narrandera once again with several airfields as options along the way.

It was my turn in the ASH 30. Conditions were weak again with narrow thermals topping out around 4,000ft. Many times we left lift below 3,000ft – something I wouldn't attempt in a 15m glider! Some better climbs to 5,000ft later in the day got us comfortably into Narrandera once again. We tied down in the same spot as last time and went back to the Fig Tree Motel.

Sporadic conditions

The next day's forecast looked better with predicted heights up to 11,000ft, but the approaching front from the west was to be preceded by high cloud later in the afternoon. The task was to get to Mildura – our longest run so far – so that we would

**INITIAL DUST
DEVILS IN THE
BLUE AND LATER
CLIMBS UNDER
CUMULUS GOT
BOTH GLIDERS
SAFELY TO
NARROMINE.
WITHIN A
MINUTE OR TWO
OF LANDING,
A DOWNBURST
NEAR THE
FIELD DUMPED
HEAVY RAIN BUT
FORTUNATELY
NO HAIL**

Below: we came across this gold mine north of West Wyalong



THE RAVAGING EFFECTS OF THE DROUGHT WERE APPARENT ACROSS THIS STRETCH WITH NOTHING BUT BLOWN SAND AND BARE PADDOCKS BELOW. ONCE WE REACHED THE SCRUB NEAR THE BORDER A CLIMB TO 5,000FT GAVE US A BREATHER



On the ground at Narromine (photographs by Bill Mudge/Steve Newfield)

✂ only have a shorter flight back to Waikerie the following day.

It was my turn to drive again and I got half an hour head start. It was a tiring and boring five hours, especially across the Hay plains. I'd rather fly over them than drive, but when I looked up at Hay I could see both gliders above. The conditions had been sporadic with initial climbs to 8,000ft in the blue and long glides down low.

The high cloud was pushing in from the west, but both gliders climbed to 11,000ft before and just under the overcast, which gave them final glides into Mildura, landing at the Sunraysia Gliding Club. The drought had left its marks on the large airfield. "This looks like the Botanical Gardens of Baghdad," our Kiwi friend exclaimed on landing, but the warm welcome of the club members more than made up for the dusty airfield.

Last chance

The club happened to be holding a cross-country course, so they promptly greeted the airborne crew with a cold beer on landing. I arrived much later, but still caught up with a lot of the members I knew from the past and from the 2019 Joey glide at Waikerie. Overnight was at the Inland Motel with a nice dinner at a Thai restaurant.

Friday looked like our last chance to get back to Waikerie, but the forecast wasn't all that inspiring. Bernard and I went first and our initial climb to 3,200ft was to be our best height for the next 100km! Graham and Theo experienced the same and we tip-toed towards the SA border, many times getting below 1,500ft – Graham and Theo twice got away from 1,200ft.

The ravaging effects of the drought were apparent across this stretch with nothing but blown sand and bare paddocks below. Once we reached the scrub near the border a climb to 5,000ft gave us a breather and from then on, a few more similar climbs got us back to Waikerie. Phew!

Next time

Our soaring safari had been a terrific experience! Both gliders performed flawlessly and Bernard thinks he burned less than 10 litres of fuel for the entire trip. We had a great time with no engine air starts or unpleasant surprises, but with lots of laughter and plenty of opportunities to exchange views and opinions with an international perspective on different aspects of our beloved sport.

Safely back at Waikerie, we had a few beers together and agreed that we'll do it all again later this year. This time we will make it two weeks instead of one and hopefully make it in to Queensland. Would I be interested? You bet!

■ **With thanks to *Gliding Australia***



Bill Mudge is currently president of Waikerie Gliding Club in South Australia. He has been gliding for 54 years and has logged about 3,200 hours. Bill is a Level 3 instructor (instructor coach). He has flown about 75 types of sailplanes.

SUPPORT FOR AN EARLY SOLO

AT ANY gliding club, early on, a new aspiring glider pilot will discover that ground handling is taken super seriously. At Easterton, gliders are 'gentled' from the Highland Gliding Club hangar like Ming vases in the hands of those smart young people at a Sotheby's sale.

Loose talk about the weather, absence of wave (which seems to be a holy word for many pilots, and spoken with reverence) ceases, and it is now a case of "my wing", "are we clear there?", "forward an inch or two", "STOP!!".

It is not surprising: a scratch on a car can be buffed out; minor damage may warrant a report to the BGA, an embarrassing paragraph in the back of S&G (no names, no clubs) and entail some cripplingly expensive glassfibre therapy down south. Pre-solo, post-solo or 1,000 hours, everyone is aware how a momentary lapse of concentration can ruin a perfect flying day.

There's no arguing with the club inspector, as I discovered when I found a frayed canopy latch safety strap in the Junior I was very much looking forward to flying for my second day solo. I was tempted to say nothing. "Unserviceable," he said without equivocation. I was frankly a bit miffed, but prudently held my tongue. Then I began to think: going for the air brake it just might have been possible to unlatch the canopy, which could have landed on a cow, a descendant of Shergar, a Lamborghini, or worse, take off the tail – either way, costly, probably fatal.

A whole host of things are waiting to catch you on a gliding field, not least the aileron of the tug plane that scratched me, and it wasn't even moving. "You appear to be bleeding," someone said. "We need to log that," – and for a graze I would have plastered with masking tape in my professional boat building days, and carried on riveting. Don't argue. This is gliding. This is serious.

I will only mention in passing the

time I started to stroll off from the launch point towards the clubhouse, and heard the engine of the EuroFOX, low over the boundary, take on a more urgent note and the equally urgent cry of the duty pilot, confronted with the split-second decision whether to rugby tackle me or witness a decapitation.

Then there's the canopy again, closed at all times, and held if there's a strong wind. "Do you know how much these things cost?" for a bubble of Perspex? No. Surely not that much? Or the correct way to push a glider around ("leading edge, Adrian"), but administered as always with gentle admonition, for new members are hard to find, and easily discouraged.

Trusted

Soon you get to be trusted with simple tasks, like towing a glider (at a slow walking pace) behind the club's pensioned-off Land Rover, and before long you find yourself with a radio in hand supervising the launch point. And maybe even holding a wingtip.

At the HGC it comes slowly, with wise eyes following every move: how you attach a tow rope and certainly for every landing ("That was more in the way of an arrival, but safe enough"); watching every minor mistake ("a little slow, but you corrected in time"), but offered in a benign way, for they want you to succeed, stay flying, pay your dues, enjoy the craic, become an addict, but above all fly.

"Are you going up again?" says Bruce, or Mike, or Andy or Ellen, John or Tony. "I think you should, the sky's looking good. Head for the Rothes Ridge, but don't get below 1,100ft, or maybe try to the south, the clouds with the flat, slightly concave bases. You should find lift." And even if you didn't, it was great to be in the sky, on your own.

New members can be hard to find and easily discouraged. Adrian Morgan reflects on the positive approach taken at Easterton



Gliders and early-solo members are all treated gently (Adrian Docherty)



Adrian Morgan soloed last year at Highland Gliding Club. A keen sailor, he first experienced gliding 30 years ago as part of a journalistic assignment that resulted in a slim paperback book, *Gliding in 8 Days*.

› HOLLY HARRIS

Falling in love with gliding at 14, Holly flies most weekends, weather permitting. Financial support from the Caroline Trust and the Air League has helped her to progress her flying and she looks forward to becoming an instructor so she can see others become 'bitten' by the gliding bug

Age? 18.

Where were you born?

Church Stretton, Shropshire.

Where do you live now?

I am incredibly fortunate to live at the south end of the Long Mynd, five miles from the Midland Gliding Club.

How and when did you start gliding?

I started gliding when I was 14 years old. One

of my good friends had been having lessons and said how incredible gliding was. With a plan in mind to secretly start flying without my friend knowing, I asked to be shown around Midland Gliding Club. I instantly fell in love with the family feel and welcoming atmosphere of the club and joined as a full member that same day. I hoped that I could become a solo pilot quickly so that I could go up to the club on the same day as my friend, jump into a single-seater, fly away and leave them speechless. Unfortunately, my friend stopped gliding due to other commitments. However, by this time that idea was in the past and I was smitten with the world above.

How often do you fly?

I fly most weekends (weather permitting). However, recently A-levels have had to take priority. Now that that chapter of my life is closed, I plan to fly as often I as can. Covid-19 has reminded me how short life is and to live every day as it comes (in the best way possible). The best days are those with gliding in them.

Have you been the recipient of a gliding bursary and, if so, how did that help you progress?

I have been lucky enough to receive financial support from the Caroline Trust (recently merged with the Ted Lys Trust to become the BGA's preferred charity, Launch Point) and the Air League. Both have allowed me to enjoy hours in the sky with no financial worries, for which I am very thankful.

Not only has the Air League sponsored a whole summer of gliding, but being a member has provided me with lots of opportunities to meet inspirational people. Currently at the top of my list is Allister Bridger, who gave a talk about how his 'Bucket of Determination' drove him through his incredible aviation career as a fast jet pilot in the RAF before becoming the Director of Operations for British Airways.

Also at the first Air League event I attended I met the incredible Francis Freeman (a retired commercial pilot and businessman). Francis is a true inspiration. He has been a huge support to me; sometimes twice a week I receive packages containing aviation magazines. He has given

This photograph was taken when Holly Harris returned to flying after lockdown restrictions had been eased. She said: "It was awesome taking to the skies after a tough number of months working towards my A-Levels in lockdown."



me very valuable career advice and has given up so much of his time to help me. I am grateful for all his help and I owe it to the Air League for enabling me to meet him. The Air League helps create valuable contacts and broadens horizons.

How many other family members glide?

My younger brother, Ben, glides with me at the Midland Gliding Club. He is 15 and hopes to go solo one day. Ben and I, along with two other junior members (Orianna Rowe and Henry Morris), have created a band called 'The Mynd Juniors'. We played at the club to celebrate the end of 2019 Task Week. I know that we will be friends for life. The Midland Gliding Club is the perfect place for creating life-long friends and developing lasting memories.

I have tried my very best to get my parents to join as members, but owing to work commitments they sadly don't have the time.

My father was given a trial lesson; I quietly asked the instructor to demonstrate his aerobatic abilities whilst flying with him. My mother and I watched from the ground as the glider did two loops and several tight turns. Since then he has been in absolute awe of the instructor, saying that when he retires he would like to take advantage of the Midland Gliding Club.

Which pilots most influence you?

All the pilots and their partners at the Midland Gliding Club have influenced me and have all been so supportive. There are way too many names to mention...

One particular person, however, is the CFI Steve Male. Steve has arranged two insurance shares in K-6s and encouraged me through my Bronze and Cross Country Endorsement. If I am unsure of anything flying-related, I know that Steve is the person to go to, as his career has seen him perform aerobatics to the crowds in fast jets and race round fast tracks. There is not a single gap in Steve's knowledge and he has been a huge influence and support to me.

Andy Holmes has influenced my desired career path. Andy has the most amazing job! A captain with British Airways. Whenever I see Andy's parents at the gliding club they tell me of his most recent stories... from how he got his four stripes to flying royals. I really aspire to having a career like Andy's.

Simon Adlard and Dave Crowson have most definitely influenced my progress as they were the people who supported me



through my Cross Country Endorsement and Bronze theory paper. Simon has influenced my attitude towards flying; he is one of the most highly-qualified instructors and the most relaxed person I have ever met. When I made some questionable decisions, Simon advised me in such an assuring way. I hope that I will always be able to maintain a calm disposition like his. Dave watched me sit for hours messing up my Bronze theory paper. Afterwards, he gave me such an extensive and valuable debrief regarding my answers. His partner, Helen, also provided many chocolate bars to munch my way through the final paper. The theory paper was the part of the Bronze that I found the hardest and my success is all because of Dave and Helen (and not forgetting the *Bronze and Beyond* book).

And finally a lady; Amy Johnson CBE. Amy Johnson was a famous aviator, who flew at the Midland Gliding Club. She has inspired me with her female determination and I hope that one day I will be able to do the same.

What made you decide to open your GCSE results at 3,000ft – and film it?

I wanted to make the best of a bad situation. If the results had been poor at least I could have thrown them out of the DV panel and continued having a good flight with Roger Andrews. The filming part... well that was an idea that my brother came up with. 🐦

Holly being briefed by Midland Gliding Club's legendary cross-country pilot and instructor, Mark Sanders, at launch point

I PLAN TO FLY AS OFTEN I AS CAN. COVID-19 HAS REMINDED ME HOW SHORT LIFE IS AND TO LIVE EVERY DAY AS IT COMES (IN THE BEST WAY POSSIBLE). THE BEST DAYS ARE THOSE WITH GLIDING IN THEM

THE CLUB (AND ITS MEMBERS) HAVE GIVEN ME TRULY INVALUABLE LIFE EXPERIENCES AND I WANT TO PROMOTE THE OPPORTUNITIES TO OTHERS; TO ENABLE THE CLUB TO THRIVE IN THE FUTURE

■ Is there someone you would like to nominate to appear in S&G's pilot profile? Send your nominations to editor@sailplaneandgliding.co.uk detailing why you have nominated them.

Holly's first field landing



✍ I was nervous about opening my results and had been watching videos on YouTube of people's reactions when they opened their results. My brother pointed out that some of the videos had achieved a large number of views and that it would be good advertising for the club to video my reaction... in the air.

You also feature on the Glide Britain 'Introduction to the Midland Gliding Club' video. What was that experience like?

Frankly; strange. I had never been in front of a huge camera before and it was quite scary. It's OK when you are speaking to a person and observing their reaction, but the camera doesn't give you any feedback. However, the overall experience and final product built my confidence in media. The club (and its members) have given me truly invaluable life experiences and I want to promote the opportunities to others; to enable the club to thrive in the future. That experience really encouraged me to try and give something back to Midland Gliding Club.

Where and what was your most memorable flying experience?

This question is really hard because there are so many.

- Going solo at the Midland Gliding Club was awesome. The feeling was indescribable. Afterwards, my father bought everyone at the club a beer to celebrate (a Midland Gliding Club tradition). The whole event made me feel so proud and I felt the luckiest girl in the world.

- Flying cross-country from Midland Gliding

Club to Llangollen, Talgarth and Bidford in the Arcus was phenomenal; with a spot of ridge running to finish and having Mark Sanders as the pilot in command is very hard to beat.

- My first wave flight with Steve Male; the closest thing to heaven on earth.

- Lastly, my first flight in the motor glider and the lead up to it was very memorable. I had been noticed for working hard on the airfield and one of the instructors had told me that I could have a flight in the motor glider. My instant excitement was explicit. At this time, there had been a problem with the winch; launching had been stopped and the cable was dead. Steve Male and Peter Turner (another amazing pilot with such a great personality) were standing in front of the retrieve winch looking down at the cable trying to determine what the problem could be. I could not wait to tell the two my news and ran past the retrieve winch towards where they were standing. Forgetting that a cable lay between them and me, it was only a matter of seconds before my foot caught the cable and I landed face flat in front of the two gentlemen. At least they didn't have to look up from the cable to see me. Although that event was very embarrassing, the flight in the motor glider was great!

What are your favourite gliding sites in Britain?

Well that one is easy: the Midland Gliding Club situated in the Long Mynd. The Mynd is such a beautiful place and it's even more beautiful from the air. The club is my second family and they have shaped me as an individual.

Shobdon is another gliding site that I love. They are all friendly and very organised. They also do the most AMAZING bacon butty.

Lastly, Llanbedr, which is such a picturesque site.

What is your favourite glider?

That's hard. One of the members at my club let me sit in their JS1 once; just the thought of the Jet engine makes me smile. I also like the dreamy wings of the Arcus. However, my ultimate favourite is the Libelle. I think that it is such an adorable shape which gives it character. I would love to be the proud owner of a Libelle one day.

Who do you admire most in the sport?

Mark Sanders. Mark is an unbelievable glider pilot, who is always top on the club competition ladder.

When I first stated gliding, I was told that every pilot flies differently and that I must find an instructor whose style suits me. When I first flew with Mark, he made the flight so relaxed and gave me excellent guidance. Ever since my first flight with him I booked to fly on pretty much every day that he was on duty. He has trained me from the beginning and even gave up a crucial day during the 2017 task week to send me solo. I feel so privileged to have been instructed by him. He has an enthusiasm that is contagious.

Mark and his wife, Felicity, have become really good family friends and I admire everything about them and owe so much to them both. Thank you.

When not gliding, what do you do for recreation?

I am a very keen runner. One of the advantages of living only five miles from the gliding club is that it's in easy running distance. If something is bothering me, I simply put on my trainers and go and get lost in the hills.

Photography: Living in Shropshire, there are so many amazing photographs to be taken and I like to capture amazing moments so that they can be enjoyed by others.

I absolutely love driving. I'm fortunate to have a father in the motor industry, which means that I'm able to travel all over the country picking up and dropping off cars for him. All you need is little to no traffic and Virgin Radio to have a relaxing time.

Badminton, tennis, skiing and piano are some other recreations that I really enjoy.

Which book are you reading at the moment?

After reading revision guides from cover to cover, I'm now reading *Listening to the Animals* by Noel Fitzpatrick.

What is your favourite film?

That is a very hard question as I watch a lot of films. My ultimate favourite is *The Proposal* (Sandra Bullock and Ryan Reynolds).

What is your favourite piece of music?

Whispering your name by Alison Moyet.

What would your motto be?

Aim for the moon and, if you miss, at least you will land among the stars (taken from a film).



What's your next challenge?

I have just finished A-Level Mathematics, Fine Art and Photography at Ludlow College. My dream is to become a commercial pilot, however due to current circumstances I'm not too sure how that will become a reality. The sky is a world in its own and I would like nothing more than to work in it. Referring back to Allister Bridger's 'Bucket of Determination', I'm not going to give up hope.

I'm currently working towards finishing my Silver badge. My aim is to become a Basic Instructor at the age of 18. Every time I see instructors conducting trial lessons, I envy the fact that they are introducing members of the public to the incredible gliding world. All it takes is one flight to be 'bitten by the bug', as Jon Hall, chairman of the Midland Gliding Club, says. I would like to be the one introducing people to the world above and watching them be 'bitten'.

I hope that I will also be able to take part in competitions. I have been lucky enough to have been on quite a few cross-country flights with members who have had a spare seat and there is a great sense of achievement when you find yourself above a glider that you are competing against in a thermal.

"The Mynd Juniors" after spending the day flying at Shobdon. Left to right: Henry Morris, Orianna Rowe, Ben and Holly Harris

THE MYND IS SUCH A BEAUTIFUL PLACE AND IT'S EVEN MORE BEAUTIFUL FROM THE AIR. THE CLUB IS MY SECOND FAMILY AND THEY HAVE SHAPED ME AS AN INDIVIDUAL

MY ROLE IN THE 'CORPS D'ELITE'

The Rhine Crossing was the single largest airborne operation in WW2. Brian Latham was one of 1,500 RAF pilots transferred to the Glider Pilot Regiment following the heavy losses at Arnhem

THE Glider Pilot Regiment had lost many pilots at Arnhem and was no longer an effective unit. Brigadier George Chatterton was the Commanding Officer of the Regiment. He had been in the RAF and still had many friends there.

He requested that spare RAF pilots in the pool at Harrogate, of which I was one, home from the Empire Air Training Scheme and awaiting further training, be asked to volunteer to be seconded to the Glider Pilot Regiment (GPR). Very few volunteered because we wanted to fly Spitfires and Mustangs. We were then read the riot act and told that if we did not volunteer then we would never fly again. So, we became voluntary conscripts and very "Bolshie".

Off then to Bridgnorth to the RAF Regiment Depot. We were put through weapons training and shown how to dig slit trenches. This lasted for two weeks and we then went to RAF Brize Norton. This was the Heavy Glider Conversion Unit where we were taught to fly Horsa and Waco gliders. The

Waco was an American glider, smaller than the Horsa and made of steel tubing covered in canvas. The Horsa was large – as big as a Wellington – and made from plywood (as was the Mosquito). We were towed by Whitleys, which were bombers.

We still wore the blue RAF uniform and used the Sergeants' Mess. We were drilled by the GPR, and our regimental sergeant major Mick Brodie was responsible for this. He was a former Irish Guardsman and a great man.

After two weeks we went to Hampstead Norris where we were towed in Horsas by the Albemarle tug, a twin-engine aircraft built by Armstrong Whitworth. Here we practised mass landings, but with not many aircraft. Home then for Christmas leave before joining my first squadron.

I joined 'F' Sqn, Glider Pilot Regiment, at the beginning of January 1945 at RAF Broadwell, Oxfordshire. Broadwell was a wartime station. Lots of Nissen huts and two Dakota squadrons, 512 and 575. Each squadron had 15 Dakotas and we had about 20 Horsa gliders. I was the first RAF pilot to join the squadron and was met at Brize Norton and Bampton station by a truck which took me to Broadwell.

I was shown to a hut and inside there were two staff sergeant glider pilots huddled over an iron stove. They were very welcoming and insisted on one of them taking me to the mess for a meal. They were Gerry Moorcroft and Geoff Collins. They had both been on the D-Day and Arnhem operations. Gerry had taken part in one of the first wave of glider landings on D-Day and would then go on to be awarded the Distinguished Flying Medal for his part in Operation Varsity. When I got back to the hut, my bed had been made.

The following day I was kitted out in khaki. Of course, we were to keep our RAF uniform and to wear it off the station and for social occasions. However, we were to have our army battle dress fastened up to the neck, khaki stripes to be blanched and, horror of horrors, army wings to be worn instead



Horsa gliders lined up prior to Operation Varsity (Matt Yates)

of our RAF ones! I asked to see the station commander, a group captain, and told him about these orders. He told me not to worry, and he would sort this out. He did, and we were allowed to continue to wear collar and tie, blue tapes, and the RAF wings.

It was a miserable winter, cold and wet. It was no hardship to wear our khaki with boots and gaiters. The Denison smocks also kept us warm and dry.

More RAF recruits now joined our ranks, and we were made to train hard for what we knew would be a crossing over the River Rhine. The army glider pilots were determined to ensure that we would not be passengers. They took it upon themselves to make us as capable as they were. They were all from other regiments and had volunteered to become glider pilots; the Glider Pilot Regiment was considered a 'Corps d'Elite' on a par with the Commandos and Special Forces. We were taught to ride motorcycles, drive jeeps and 15cwt trucks, Bren gun carriers, handle explosives, fire all types of small arms and be able to man a six-pounder anti-tank gun. In fact, we were to be able to operate with any of the troops we might carry into battle.

Rendezvous

We did 10-mile run marches with Bergen rucksacks. We were dropped at night off trucks in the wilds of Oxfordshire and had to make our way to a rendezvous point whilst there were paras out to stop us. We spent hours on the shooting range and, of course, learnt to fly the Horsa glider under all conditions, both night and day.

We were also treated as operational air crew. The food was very good in the mess. Egg and bacon when we had flown. Leave every six weeks. Chocolate, chewing gum, and dried fruit given out with our pay every two weeks. Pay as a sergeant pilot was 13/6 a day (67p in new money). There was always a churn of fresh milk in the dining room and the mealtimes were very flexible. The Dakotas were operating over the continent and bringing back wounded, so the base was a busy place, with aircraft arriving and departing by day and night.

At the beginning of March 1945, the Americans had captured a bridge over the Rhine at Remagen intact and we thought that was that. But it was not so!

I was on leave at this time and had hoped to have my 21st birthday at home. I was recalled before this could take place. Dad took me to the station, put his head through



Horsa gliders and their Halifax tugs before the journey to Germany, March 1945 (Matt Yates)

the carriage window of the train and said: "Don't forget, keep your head down". The carriage was full, and I got some funny looks as I was in my "best blue".

We had one big dress rehearsal for which we used the new Mk 2 Horsa glider. Then we were taken by Dakota to RAF Gosfield in Essex where we were to be briefed for the forthcoming operation. We were now issued with the airborne Red Beret!

The Americans had operated out of Gosfield, so the amenities were good there. We met our Dakota towing crew and all went well for the briefing. The briefing room was like a theatre. It was very exciting to see where we were going when the cover was taken off and the map revealed. We were to land east of Hamminkeln, close to the railway station, and to take and hold the bridge over the canal. This was to stop enemy tanks crossing to support their army, which would be between us and the Rhine.

We had the new Mark 2 Horsas, with a folding nose section so that it could be swung open, the troughs placed in position and the jeep and trailer could be driven out and into the battle.

The Second Army were to attempt to cross the Rhine during the night of 23/24 March and establish a bridgehead before our arrival at 10am that morning.

We were to be the first squadron to land and the furthest in. My glider was No 14.

March 23rd was a busy day as we had to load the glider and meet our passengers. We had already met our Dakota crew and sorted out how and where we would be released. We would be at 2,500ft and would release about two miles from our landing zone.

My load was a mortar section of the

THEY WERE ALL FROM OTHER REGIMENTS AND HAD VOLUNTEERED TO BECOME GLIDER PILOTS; THE GLIDER PILOT REGIMENT WAS CONSIDERED A 'CORPS D'ELITE' ON A PAR WITH THE COMMANDOS AND SPECIAL FORCES

**WE CAME
IN LOW AND
WE WERE
IMMEDIATELY
HIT IN THE
RIGHT WING
AND IN THE
COCKPIT,
WHICH
BLEW THE
HYDRAULIC AIR
BOTTLE THAT
OPERATED THE
FLAPS AND
BRAKES**



RAF reconnaissance photo of the Operation Varsity landing zone west of Hamminkeln, taken early March 1945. It was used for the operation briefing (Brian Latham)

■ This article first appeared in *Glider Pilot's Notes*, the newsletter of the Glider Pilot Regiment.

■ www.gliderpilotregiment.org.uk

✎ Oxfordshire and Buckinghamshire Light Infantry with their jeep and trailer, a motorcycle, one officer and seven men. We were to deliver them and then rendezvous at a farmhouse with other glider pilots from the squadron. The rest of the day was spent cleaning weapons, putting our possessions in bags to be sent home in case we did not return, and writing letters.

Take-off was at 6am on Saturday 24 March. We had an early breakfast and joined our passengers. The Dakota taxied on to the runway, the tow rope was connected, slack taken up, throttles opened, and then we were off! We were now on our way into the unknown. We had four hours before we would be landing across the Rhine in Germany.

We were in a very loose formation and left England over Selsey Bill. We had to go south of Dunkirk to avoid the German flak there. Then, when south of Brussels, we turned north-east to take us up to the Rhine. The turning point was over the site of the battle of Waterloo.

The Dakotas which were taking the paras passed underneath us and there were plenty of fighter escort milling around to discourage enemy aircraft. The American Dakotas towing their Waco gliders joined us and they were to land south of our landing zone.

We hoped that when we reached the Rhine, we would see Bailey Bridges crossing it with our armour streaming across. But no bridges were to be seen, just a thick smoke screen from smoke generators laid down to

obscure the ground forces crossing the river and smoke from the artillery barrage which the Second Army was laying down.

Despite the artillery barrage and fighter sweeps the enemy flak was still heavy, and many of the Dakotas carrying the parachutists had been hit. Now it was our turn. We came in low and we were immediately hit in the right wing and in the cockpit, which blew the hydraulic air bottle that operated the flaps and brakes. We had also lost a right wheel, so the brakes no longer mattered. We were going very fast when we landed. It tore off our nose wheel which smashed into the cockpit. With the damage caused to the Horsa we were unable to unload through the front and had to unscrew the tail to get the load out.

There were many wrecked gliders around

the landing zone and burning Dakotas which had crashed. Suddenly we were pinned down by a German machine gun and two of the men took the Piat gun to deal with it. The tail was held on by four bolts which I was able to unscrew using a ratchet wrench and it fell off, allowing us to release the jeep and trailer. The section moved off and we made our way to the farm. It was chaotic and the Germans were surrendering, with some of the glider pilots being used to escort the POWs to a compound. We reached the farm and its terrified occupants were taken out of harm's way to Hamminkeln.

German tanks

Many of us had been lost during the landings and we were sent off to the perimeter by the railway station to dig in and await further orders. This we did and realised that only an hour had passed since our landing. The afternoon passed with Monty's artillery firing from the far side of the Rhine onto positions only a couple of hundred yards ahead of us. German tanks attacked the bridge on our right, but were seen off by the Royal Ulster Rifles who were holding the position.

There was a lot of aerial activity. Typhoons were attacking German armour just ahead of us, and American Liberators dropped supplies to their airborne division to our south and, for good measure, then came up and sprayed our positions with their cannon and machine guns! During the night there were various alarms, and the bridge to our left had to be blown. We were strafed again, this time by German Ju88s, and the artillery barrage continued. That night there was a bombing raid on the Ruhr, which was only a few miles away.

We knew that the Second Army had now crossed the river, but so far there was no sign of them linking up with us. Sunday was fine and warm. The artillery barrage continued, and there was another foray against 'our' bridge. I went over to a well by the bridge to get water just as a Tiger Tank appeared, which was very frightening and was taken care of by the RUR (Royal Ulster Rifles). We spent another night in the slit trench and at dawn the 51st Highland Division arrived and took over our positions. We were shelled as we went along the road to Hamminkeln, but there were no casualties. The squadron lost over 50 per cent of its pilots during and after the landing. We went to another farm, which was being used by senior officers of the 6th Airborne Division, and we carried out guard duties and generally made ourselves useful. During the day, the armour of the Second Army came through and it was a most

impressive sight.

The next day we marched back through the landing zones, and then through the forest to the Rhine and across a Bailey Bridge to the western side. Most of the gliders had been wrecked during the landing and many tug aircraft had been shot down. There were also paratroopers, both British and American, who had been killed on landing in the trees.

We were taken by lorries through Xanten and Goch, which had been virtually razed to the ground, and to a tented camp near Kevelaer. This was another town, now in ruins, which had seen intense fighting. It was close to the Siegfried Line, which we inspected. The scale of this was impressive and must have caused some problems passing through.

A couple of days later we were taken to a school in Helmond for the night. Here I met a Dutch family and handed over my K-rations as they were very hungry. The next day we were taken to Eindhoven where we were met by Dakotas from RAF Broadwell. We were flown to RAF Fairford and then collected by truck and returned to Broadwell for a party, and what a party that was!

Half the squadron were then sent on leave and the rest of us were sent to RAF Booker for a treat and to fly Tiger Moths for two weeks.

Preparation

We had been brought back from the Rhine in preparation for the crossing of the River Elbe, but by the time we returned it had been decided that this was not necessary as General Eisenhower was not prepared to go east of the Elbe.

I went on leave to Llandudno still bearing my "wounds" after the landing! Thankfully, only a few cuts and bruises.

I left 'F' Sqn after returning from leave and, with a dozen or so other pilots, was posted to Down Ampney and 'E' Sqn. 'E' Sqn had not been as badly hit as 'F' Sqn during the Rhine Crossing.

Soon we were sent to RAF Shobdon, near Hereford, to fly Hotspur gliders for a month. These were much smaller than the Horsa and great fun to fly. We were towed by Miles Magisters. These were single-engine trainers and we did a lot of very low flying, as well as high-level releases.

VE day arrived and although the war in Europe was over, it was continuing in the Far East and we would be needed for operations in that theatre.

We were sent as a squadron, now reinforced, to Timber Hill Camp on a hill above Lyme Regis. We were billeted in an



old laundry in the town and had to be on parade at the camp each morning. Several people had been sent out to farms to help with the hay harvest and there were only about a dozen of us left at Lyme. I was made the squadron dispatch rider and rode a 500cc Matchless motorcycle. We used to go to a café in the town for our breakfasts so I would go down with the order, pick up the papers at Smiths and after breakfast parade on the beach for PT. I would take the mail around to the various farms and once a week go to our regimental depot at Fargo Camp on Sainsbury Plain for our orders. Many glider pilots were also stationed at Leicester East, which was a Dakota Operational Training Unit. This was to enable Dakota pilots to get experience towing gliders and flying practice for the anticipated Far East Operations.

We still took leave every six weeks, and I was on embarkation leave in Dublin when the Hiroshima and Nagasaki bombs were dropped, effectively ending the war.

We moved from Lyme Regis to Wotton Bassett for two months and were then posted to the RAF Regiment depot at Market Harborough and then back into the RAF.

We had to fill in various forms, including if we had any weapon experience. Well, we certainly had! They thought that we were 'taking the mickey' so we were made to parade in battle order the following morning. We went through their battle school very easily and fired off all the weapons. They were shown up so badly that we were sent off on indefinite leave, which took us over Christmas. So, my part as a glider pilot was now at an end.

Brian Latham's Heavy Glider Conversion course at Brize Norton, November 1944. Brian is pictured in the front row, fourth from left. Eleven in this photograph were killed in action during Operation Varsity (Brian Latham)

■ I was selected to stay in the RAF and was posted to a Pilot Advanced Flying Unit at Wheaton Aston near Stafford to await further training. I was given the job as assistant to the assistant adjutant to a WAAF officer. By this time I was a warrant officer and was not made redundant. Regrettably, I was persuaded by my father to leave the RAF when my demob number came up and join him in the hotel business. This was a great mistake!

The sequel to this was that when I rejoined the RAF and was put through officer cadet training in 1953, all my glider pilot training paid off, and most certainly helped me obtain my officer's commission.



This page, anti-clockwise from top:

CH-47D flight engineer Thanos Giankou keeps a copy of S&G handy for reading in any free time. This photograph was taken after a pre-flight inspection for a night flight in Athens, Greece

Angus Watson flies his 'new to him' ASW 27b out of Cranwell on 13 June 2020 (Kevin Atkinson)

East Sussex GC's Mike Millar enjoys a flight in his Fournier RF-5 motorglider over Gatwick when it was closed, or operating at a very low level, during the Covid-19 pandemic – once we were allowed to fly again! Mike was in the RAF so he's not daunted by talking to ATC and got clearance to overfly the dormant Gatwick, full of sleeping giants

Gerard Robertson's last flight of the season, in mid-March, heading up the Coromandel Peninsula near Auckland, Australia

Facing page, clockwise from top:

Paul McLean consoles himself with last year's photographs from an RAGSA expedit to Sisteron, France

John McWilliam flew his PIK 20E to the seaside on 1 June 2020 to make use of Southampton CTA, which is closed a lot now and the controllers are either at home or are glad to welcome anyone. John took this photograph over Portsmouth Harbour

Some spectacular aerial photos of the flooding (earlier this year) of the River Ayr, which runs close to Burn's airfield, were published by local press, giving the club some useful positive publicity (Alastair Mackenzie)

A winter's day at Milfield, November 2019 (Adrian Loening)

Lochnagar taken from Geoff Palmer's Kestrel 19 when returning to Aboyne from a soaring flight on 19 March – four days before the lockdown

■ 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







A love of flying keeps Suzie Forbes determined to achieve her first solo flight at Upavon

FACING UP TO FLIGHT FEARS

Suzannah Forbes overcomes her nerves as she takes her first solo flight at Wyvern GC



Getting ready for launch

I KNEW the time for my first solo flight was fast approaching and I was very nervous. We'd been talking about it for a few weeks at the gliding club.

I didn't know if I could handle it mentally. Like all first-time experiences, I had a lot of anxieties and worried constantly. This would, of course, change once I'd experienced it. Add on top of this the fact that I have high functioning autism: Aspergers. Would I be safe to fly alone?

One of the club instructors had spoken to a BGA medical adviser and it was confirmed that I would be safe enough to not need a ghost pilot.

I'd always wondered if I was safe to fly having Aspergers. Dealing with my emotions, as well as learning the skills to fly, is quite a challenge for me. But I love flying so much I'm determined to keep it up. I tell myself: "I can do this," which is great self-motivation. Unlike

a lot of people, I feel that I need extra time to learn new things, hence why it took me a year from knowing nothing about glider flying to going solo for the first time.

On the morning of 19 April 2019, I'd had four dual flights with my instructor, Paul Jessop. Normally this would be enough and we would let someone else fly. However, Paul then said we would have another go. I went through my pre-flight checks not thinking about why he was standing next to me. Then it suddenly hit me! The shock of realising he was sending me solo for the first time was so intense that I was close to tears. I couldn't do it. I said I was too overcome with emotion and had to get out of the glider. I was immensely proud of myself at the same time.

With shaking hands, I unstrapped and clambered out of the K-21. "Oh my God! It's finally happening!" I thought, battling to calm down and hold back the tears. I would need some time to digest this new information before attempting to fly once more.

Several hours later, with a clear yet still



An appropriate T-shirt for Suzie, sent solo by Wyvern instructor Paul Jessop

slightly nervous mind, I strapped into the glider once more. I had handed my mobile over to another club member, who was happily snapping photos while I prepared for my first solo flight. Paul was standing quietly next to me, making sure I was OK and ready for my flight. There was a very solemn atmosphere in the air. He told me not to worry and just get up into the sky and do a circuit before landing. I wouldn't need to worry about thermalling (or attempting to, as was the case in those days).

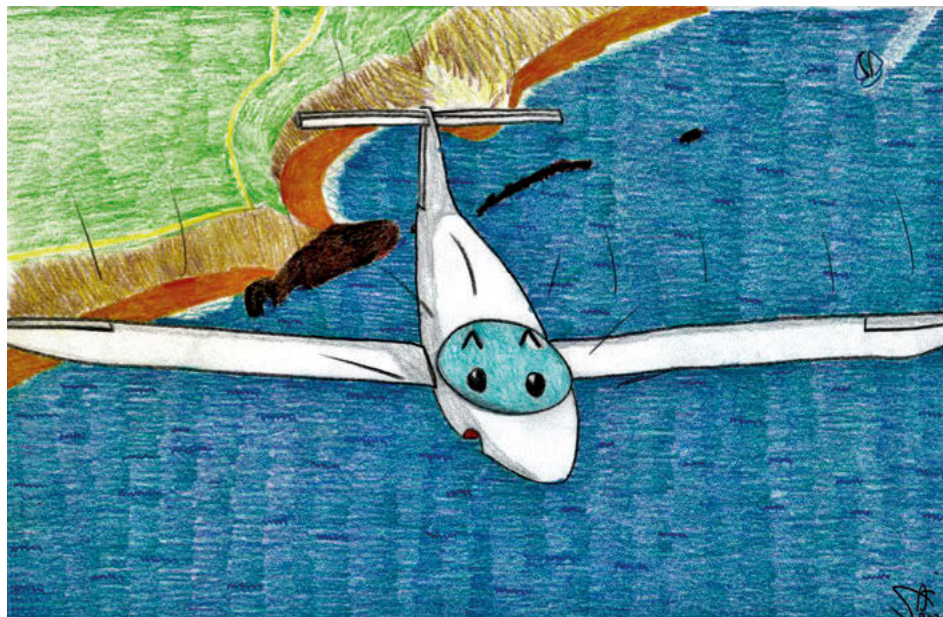
The next moment, the winch was pulling me and the glider up into the air. Even today I still have a slight apprehension in the back of my mind during take-off, in case there is a cable break (which apparently is normal). Unlike dual flying, the lack of weight in the back made take-off seem so much faster and lighter. Once I'd released and was gently floating a very happy feeling crept in. "I'm flying, alone!" I smiled. "This isn't as hard as I thought."

The few minutes I was in the sky were calm and peaceful until it came to landing. I started a normal circuit and things went fine until I was near base leg. Out of the blue another glider (from the ATC side) was on final! (For your information, both Army Gliding Club Wyvern, AGC (W) and RAF 622 squadron share the airfield at Upavon, where 622 is always on the left-hand side.) Where had this aircraft popped out from? I had been informed that no other aircraft would be flying during a pilot's first solo. It was a

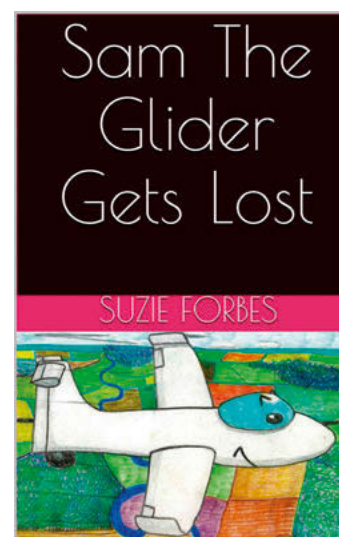
distraction and I suddenly felt on edge once more. But never mind...

Seeing my height reading about 500ft, I decided to play it safe and turned in early, flying over our club caravan and preparing for a (very) long final. My next worry was, was there enough runway to land? Fortunately, Upavon has about a kilometre of grass to land on, so I landed well into the middle of the airfield.

I'm very proud of what I've achieved. It goes to show that not all disabilities stop you doing what you really want to.



One of the illustrations from Suzie's book



■ Suzie Forbes has written and illustrated a gliding book for children. Hand-drawn illustrations feature in her book, which is aimed at pre-school to six-year-olds.

Sam the glider is learning how to fly and dreams of having an adventure. During his flying lesson, he gets lost and finds himself by the sea. Fortunately, a friendly boat helps him and he returns home to tell his tale.

Amazon paperback: £5.50
30-pages
Kindle version: £1.99
ISBN-13: 979-8644469574
Published independently:
11 May 2020



ADVISORY 14: THE RIGHT KIND OF CONFIDENCE...

Ebenezer Grimshaw returns to break taboos, dispel myths and restore reality for newbies, focusing on cross-countries and cows

MY BOY Scout patrol once escaped a herd of cows by climbing a tree. We agreed cows were harmless, but they were so much bigger than us no-one had the confidence to climb down! Knowledge is one thing... but confidence is something else! Well you're now a solo pilot... with five hours of stooging around your local patch. You know this game... you've got it sussed... or have you? Because the folly of any such notion will soon be exposed! I want to talk about flying away from home... visiting other sites... but before I do it would be wise to revisit your very first cross-country experience.

Let's go back to your Big Day. Armed with a personal briefing from the Duty Instructor... perhaps from the CFI Himself (don't look

him in the eye... just say 'Sir' and lower the head slightly) you're about to cut the airfield umbilical and fly at least 31.068 miles... yes it's your 50km Day! Many aspects require your attention, but a vital one... confidence... is not in the syllabus and needs looking at more closely.

You need the right kind of confidence because there's a whopping snag: most fools are also very confident! A warm glow of confidence might be something to worry about! As you move slowly up the launch queue checking and rechecking it's a good time to rub in Grimshaw's No 1 piece of advice: Never EVER think that you've got gliding sussed! Even World Champions don't make that mistake!

Despite what you hear on the telly you do not 'master' the air any more than you

ZULU GLASSTEK LTD

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



ASG32 – 20m world champion twice. Available as self launching also available with electric sustainer.



AS34 Me – standard class and 18m self-launch electric – available 2020



AS 33 most modern technology 18/15M class glider or with the proven ES sustainer system

SALES, REPAIRS AND MAINTENANCE CONTACT:

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

'conquer' a mountain. You may, however, on certain days... if you are bold enough... diligent enough... and experienced enough... be permitted, by Higher Powers, to go a bit further... or a bit higher... or a bit faster. That's It. And that's all it'll be today too. Please remember this at all times... especially when confidently over-ruddering slow turns.

Mind you, it's unlikely you'll be overconfident because your first cross-country is usually a doubly strange experience. Not only are you heading away into the unknown... but you're also about to do what you've always carefully avoided... despite cunning Instructors trying to lure you into it. You'll be deliberately flying out of gliding range of the airfield... EEK!

During your local solo stooges you had plenty of opportunities to examine this mysterious boundary zone... the one that Instructors have down to a fine line. I bet you scared yourself once or twice... forgot you were downwind... hadn't realised the wind had freshened. I bet you came in a bit tight... and hoped no-one noticed!

Now Instructors hammer correct procedures into you very thoroughly. They deliberately run you out of height for practice. They make quite sure you don't attempt a normal circuit when too low because that's when accidents happen. "Just head straight to the nearest part of the airfield at your most efficient speed" they say "and see how it goes". They've probably got their eye on an emergency landing area just in case they've overcooked it too... but they never tell you that! However, with no headwind surprises airfields tend to look further away than they actually are. You'll probably come over the boundary not much lower than normal... but your instructor will discuss the ins and outs of that particular approach with you. Remember... every flying site is different!

But my point is that if, when solo, you do happen to get too low... and you approach exactly as you've been taught... you tuck in early, but safely, with no attempt at a conventional circuit... good manoeuvring speed with no dangerous low, slow, final turn... the Duty Instructor is still liable to approach and demand an explanation! Telling him you took excellent, sound decisions will cut no ice. No-one warns you about this! Grimshaw's advice is to stand firm. Say you hit ten down sink or whatever and flew exactly as instructed. The duty Fuhrer will examine the sky from whence you emerged and form his own opinion! One

of two things will happen: Either he will say "Don't do it again," or he'll put you back on checks... depending how nervous he is! Remember: Your club subscription includes one free bollocking a year at no extra charge!

Grimshaw has a suggestion here. Why not ask your Venerable Ones how they were taught? In days of yore procedures were not so carefully formalised. Instructors had more leeway and some characters liked to teach you lessons you didn't forget! One older chap told me that when he was young his Instructor deliberately let him fly too far out. "Can you get back?" his Instructor asked. "*Oh.... crikey... er... I don't think so...*" he said nervously.

The Instructor agreed, "So what are you going to do about it?" "*I don't know... crash?*"

"No you chump... what do gliders do when they can't get back?"

"*Oh er... land in a field?*"

"Right... so you'd better pick one fast!"

"*What ME!!!? Blimey... YOU HAVE CONTROL...*"

But the Instructor was having none of it. "Oh no you don't!" he said emphatically. "You got us into this... you're going to get us out of it," and the student was made to reassess the wind... pick a decent-sized field very quickly... watch for poles and wires... check the slope... plan an approach instantly with an alien reference point. Over the hedge with two-thirds airbrake... land nicely... find the farmer and help de-rig. You don't forget lessons like that. I doubt he ever flew too far out again, but I should point out that as far as I know this is not the normal BGA method of teaching. At least not in the current Instructor's manual.

I mention this because such tales tend to hover in the back of your mind as you look for a good thermal for your first cross-country flight. You might have been briefed to climb to at least 3,000ft AGL before you set off and this is good advice depending what your site's like. Grimshaw says generally get high and stay high... within the limits of controlled airspace. But however high you get there still comes that lump-in-throat moment when you deliberately break all your instincts for self-preservation and fly on past the no-no line! You look back... during thermalling turns... and you ask yourself "Could I still make it back from here?" Maybe... *maybe*... and then the next tasty cumulus catches your attention... and it's all softly settled... *no!* You're off... you're away! ☹

**HOWEVER HIGH
YOU GET THERE
STILL COMES
THAT LUMP-
IN-THROAT
MOMENT
WHEN YOU
DELIBERATELY
BREAK ALL
YOUR INSTINCTS
FOR SELF-
PRESERVATION**





■ All cartoons by Ross Martin

✍ Now it's all up to you... and the next cumulus. And the one after that. There's no easy landing now. Keep an eye on your heading, but don't over-navigate... that small village probably isn't on the half million map. Identify larger towns and features... but also enjoy a new kind of freedom. Sat navs make it easy... but they could be programed wrong or have a naff battery... which was what happened on my third cross-country. I had to do nearly all the trip from the map, mechanical vario and first principles. An air map is a legal requirement, but this is your first cross-country in a cramped single-seater with sensitive controls. It's no place to discover that the huge awkward map needs completely re-folding. Trust me on this... and save the dodgy aerobatics! Check your position regularly and allow a safety margin for controlled airspace... even if it has just been blatantly and unnecessarily stolen from you. There are scores of things you should and shouldn't do so I won't try to pre-empt your briefing. But remember... your altimeter no longer reads AGL. *Use the Mk1 eyeball as well!*

I confess that, not being hugely experienced, I still get a bit twitchy whenever I drop below 2,000ft. Are there usable fields

in range? I've always found lift by 1,700ft or so, but if not... well... don't bite your nails in fearful trepidation. Or get distracted by a tiny flick on the vario at the last minute. You should know where the last usable field was... just programme in the right attitude.

Say out loud: *"Look I'm a man of Science and Ability... I've passed Field Landings 1 and 2! I have my Cross Country Endorsement. I am perfectly capable of putting this machine here down into that field there without doing too much damage... everyone better believe it... here we go!"*

Confidence... see? But the right kind. Oddly enough it tends to increase with practice. Because next time we'll be going on an 'expotition' as Pooh Bear would call it. We shall be driving our loaded trailers north to mountain country where practically nothing is familiar. And the right kind of confidence is what you're going to need... in spades!

But all that, you'll be glad to know, must await the next issue of this wonderful magazine... *(All attempts to butter me up will be fruitless – Ed.)*

*Ebenezer
Grimshaw*

■ **NEXT TIME:** Going on an 'Expotition'



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

A TRIBUTE:

› COLIN PENNYCUICK

COLIN Pennycuick, famous bird-flight scientist and former Cambridge University Gliding Club (CUGC) member, died on 9 December 2019 at the age of 86. An obituary* in the *Guardian* was published on 24 February. I saw him only once or twice after he left Cambridge for Bristol University, but we had some contact a little while ago when he told me that he had just stopped flying at Nympsfield in anticipation of the CFI requiring him to. I am happy to recall some of his CUGC exploits.

An Oxford graduate, he applied for a research post in the Cambridge Department of Zoology, where he was interviewed by John Pringle, a senior member of the department and also CUGC President. The interview did not go very well, and as it tailed off John asked him how he had come over from Oxford. Colin replied that he flew in a Tiger Moth. CUGC was short of tug pilots and Colin got his research post. This was the start of a brilliant career (which the obituary describes very well) that culminated in a professorship at Bristol. He was elected FRS (Fellow of the Royal Society) in 1990 – the third of CUGC's seven so far recorded.

He was of the generation that had to do National Service, which he did in the RAF. A natural aviator, he finished up flying the de Havilland Vampire, a twin-boom single-jet fighter. Gliding was no problem for him, and in July 1960 CUGC had a small expedition to the Clwyds in North Wales, based at the Clwyd Gate Hotel owned by glider pilot Bill Crease. I think we took just two Swallows: one from the club and 'Penguin', a blue and white Swallow that John Griffiths and I had built from a Slingsby kit in my garden shed in Barton. We auto-bungeyed from Bill's chicken run, or a little further up the hill if the wind was light.

One day there was no wind at all so we launched from the highest site we could find, on Moel Famau just below the Jubilee Tower at its top (1,817ft), hoping to catch a thermal before landing in the valley. Colin must have found lift because before long he was up to

the level of the tower, and spying two girls on its top he thought he would treat them to a tower-top flypast. Moel Famau is in a slight crook of the Clwyd range and, flying low along the ridge towards the tower, Colin was not concentrating on his flying. After passing the tower he found himself in sink on the wrong side of the hill. We collected him from a very small field, which it took an age to get to from the launch point. I also had a launch (in Penguin) and caught a thermal on my approach to the bottom field, getting away for a pleasant flight.

In January 1961, we had another Clwyds expedition with the two Swallows, with (from left in the photograph, right) John Deas – a Penguin syndicate member – Peter O'Donald, Colin, Graham Pratt, Bill Crease (not flying) and me. It was the camp at which Graham Pratt killed a sheep on landing without realising it and with no-one on the ground noticing. I landed shortly after, rolled up to the Swallow and shouted "Mutton for dinner" to a puzzled crew.

They had not been able to work out why the tailplane would not come off when derigging. Inspection of the sheep showed that it had been killed instantly by a hit on the head from a tip of the tailplane, which bore a mark of the evidence. Some of the tailplane attachment bolts had been bent.

In 1961, Colin bought John Griffiths' share in Penguin when John left to work in India. In June we went to the regular end-of-term camp at the Long Mynd. Colin probably flew Penguin for the first time then. Nothing daunted, he tried to soar the western side of the Stiperstones ridge, a miserable string of steep gullies with no obvious landing fields at the bottom. Somehow he managed to extract himself and fly forward to The Bog, this time landing in an even smaller field, the smallest I have ever seen a glider in, saved by its steep slope into wind.

Anthony Edwards reflects on some of Colin Pennycuick's memorable CUGC gliding exploits



Auto-bungeying Swallows on the Clwyds. This photograph was up in the Cambridge University GC workshop for many years with the caption: "Soarable? It's a piece of cake! I don't know what you're waiting for! What's come over Cambridge these days?"

* www.theguardian.com/science/2020/feb/24/colin-pennycuick-obituary

■ Anthony Edwards wrote as S&G's Armchair Pilot for many years

A TRIBUTE:

› JOHN WILLIAMSON

Gliding recently lost another of its legends with the death of 'John Willie', inventor of the John Willie Calculator and mentor to many young glider pilots



The cover of S&G August 1961 featured John and Böel being introduced to Prince Philip, wearing flying suits over their pyjamas (after another late-night retrieve from Cornwall) during the 1961 Nationals

JOHN'S father was the novelist Henry Williamson, whose experience in the trenches of WW1 made him a dedicated pacifist. This did not deter John from joining the RAF in 1947 and training as a radio fitter. He started gliding in 1948 at Wahn (near Cologne, Germany) using the solo training system on a primary glider – low hops, graduating to high hops and finally circuits. It was some years before he flew a two-seater. Returning to the UK with a Silver C flown in a Grunau Baby, John was posted to Farnborough. He continued gliding at Lasham, flying his first competition in the 1953 Nationals, part of a team entry in a Prefect.

He went on to gain Gold and Diamond heights flying a Weihe in a Cu Nim over Basingstoke; self-taught in cloud flying.

John completed his Gold and Diamond goal, also in the Weihe, flying over the Welsh valleys to St Davids. He said if his geography had been better, he might have chosen a different task as his maps didn't show hills. John became an instructor at Lasham, and one of his pupils was a pretty, young Swedish visitor, Böel.

In 1958 the RAF hinted to John that helping run an RAGSA club would mean availability of a competitive glider for the nationals; posted to Yatesbury he became CFI of the Moonrakers Club at Upavon. For the next few years John encouraged dozens of trainees from Yatesbury and Compton Bassett to take up gliding, a number of whom continued to become competition pilots. His

energy and enthusiasm to take expeditions in the winter months to ridges at Huish, Roundway and Westbury; cloud flying training when the cloudbase was below 800ft by winching into cloud; and trailer reversing

racers when the weather was completely unflyable all stick in the memory of those who experienced those days.

This energy included the design of a circular calculator for final glides that allowed for wind and thermal strength; the 'John Willie Calculator' became an essential piece of every UK soaring pilot's kit until eventually superseded by electronic aids.

In 1959 John flew the Olympia 401 to 7th place in the nationals; all the pilots placed higher (and most placed below) were flying gliders with at least three metres more wingspan. As a reserve pilot and radio expert for the British Team at the 1960 Worlds in Germany, he met Böel again (they had kept up a correspondence) and that winter they married in Sweden.

Champion

In 1961 he flew the RAGSA's Olympia 419 in the nationals. In spite of his crew chief rolling the trailer the week before, although fortunately the 419 escaped unscathed, John won the first day and remained in the lead throughout to become national champion. The tasks included a series of flights into Devon and Cornwall, with long night retrieves. While still in bed after one such retrieve he was summoned to be presented to the Duke of Edinburgh, and he and Böel quickly put on flying suits over their pyjamas to meet Prince Philip. A few weeks later John broke the out-and-return record and, in August, flew north across the Scottish border to complete the first Diamond badge flown entirely in the UK.

At this time he had the rank of sergeant; his abilities were acknowledged by being commissioned as a pilot officer and posted to RAF Locking (Weston-super-Mare), where he founded another RAGSA club. John then broke three UK records and became a member of the British Gliding Team, flying a Skylark 4 at the world championships in Argentina in 1963. He recounted his frustration at watching the Polish Zefirs cruise past 10kts faster yet getting higher in

the sky, but he still finished in 7th place.

In 1965 in the UK, John flew an Olympia 419, outclassed by the D-36 and SHK of the German team, and finished 6th. In 1968, in Poland, he flew a Dart 15W when most other pilots were now flying glass gliders. The canopy on his factory-modified Dart distorted the forward view so much that a crew member had to drive ahead, spotting the otherwise invisible gaggles and reporting on the weather. The result was inevitably John's lowest placing in a worlds. He did win the 1970 Sports Class/Standard Nationals, and his final team appearance was in Australia in 1974, where he developed an affection for the country and its gliding opportunities, to which he returned later.

On leaving the RAF as a flight lieutenant, John became a BGA National Coach, running instructor courses and cross-country training the Junior Squad, which developed into the Junior movement. In the 1980s one would often encounter a gaggle of young pilots being led by John; a radio call of "I'm getting low" was likely to get the reply "OK, I'll come up and join you."!

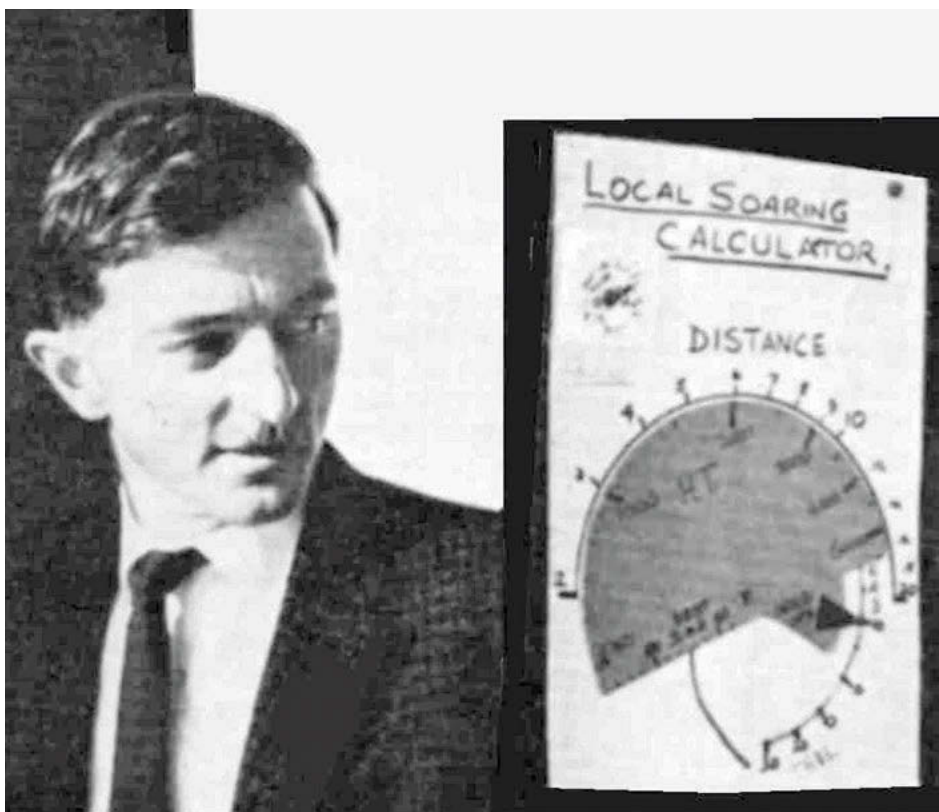
On handing over the soaring coach role to Chris Rollings, John emigrated to Australia to run the club at Benalla, where he broke a few records, but, more importantly, welcomed many 'Poms' and other nationalities to the pleasures of flying in Australia.

John was a consummate soaring pilot and communicator. When he started competition flying, the top pilots were very reticent to share their experience. John was the opposite, and eager to pass on his knowledge to others. If one of his former pupils beat him in a competition he regarded it a success, not a failure.

Peter Purdie, Lasham GS

Mike Young, British Team Member, adds:

I WAS part of the Junior Squad training in 1984, coached by JW and flying alongside the regionals. He was a gliding legend by this time and it would have been easy for him to intimidate a young 18-year-old with just 200 hours' experience. John had a rare skill to be able to quickly put you at your ease, freely sharing his knowledge, never patronising. I recall a 300km lead and follow with John flying the BGA ASW 19 and me following in a Ventus B. On several occasions he airbraked down to help me quickly find the core of a thermal. His enthusiasm and encouragement, particularly towards young pilots, was notable in an era when gliding appeared to be wrapped up in mysticism.



G Dale, British Team Member, sums up the feelings of those of us fortunate to have had John as a mentor:

I FIRST met JSW (callsign Magpie) when at a BGA soaring course as a retrieve crew. It was a great programme that opened my eyes to gliding sport, and JSW was just brilliant. I immediately became a serial consumer of BGA cross-country courses, absorbing all the lectures and, of course, the great stories.

John would stand at the blackboard at the start of the course and list the stories he could tell during the week: 'cream teas', 'the day I crashed twice', and so on. I remember him standing on a desk with his head up against the ceiling to show us how you couldn't see the route ahead from cloudbase. Pip, his faithful collie, watched from underneath the desk, having seen it all before. I was lucky enough to pass through John's hands right at the beginning of my time in gliding and he made a massive difference to my life. He taught me to soar, taught me to instruct, and inspired me to follow his example and to become a gliding coach.

Maybe two or three times in a life you come across someone who helps you up, who changes your world. John made a huge difference to many, many people. Thanks, Magpie, we'll miss you.

Even those who did not know John were familiar with the 'John Willie Calculator' – a circular calculator for final glides that allowed for wind and thermal strength

■ **John Shapcote Williamson (John Willie)** was born on 29 October 1928 and died 3 June 2020

■ **John was 4th in the 1962 Nationals at Aston Down, won by Nick Goodhart followed by Tony Deane-Drummond and then Philip Wills. In the Worlds at South Cerney in 1965 he was 6th in the Open Class, ahead of Nick Goodhart, who was 7th**

THE 'JOHN WILLIE CALCULATOR' BECAME AN ESSENTIAL PIECE OF EVERY UK SOARING PILOT'S KIT UNTIL EVENTUALLY SUPERSEDED BY ELECTRONIC AIDS

THEY THOUGHT IT'S ALL OVER...

Settling down for a nightcap at the club, a phone call heralds an unexpected 20-hour retrieve. Ron Smith tells the tale

A FORTNIGHT'S ab-initio course at RAF Swanton Morley was drawing to a close. There are just two people left inside the airfield peri-track. I'm sat waiting, cable attached, glider pushed back until the cable was tight, wings level, wingtip balanced on a pile of tyres, staring down the length of the cable as it disappeared over the hump in the middle of the airfield. Winch unsighted from the launch point. Waiting for Gary to drive to the winch, waiting for All Out.

Seemed like a perfectly normal, acceptable procedure at the time. Now it reads like a series of events leading up to... well, use your imagination.

When I launched and released the winch cable, I almost immediately rolled into 6kts.

As I climbed through 4,000ft, I looked down upon the abandoned airfield below. The last remaining soul, my winch driver, was departing in Jerry's car, trailer firmly attached. Both K-13s, plus the instructors' toys, an Astir, ASW 19, Vega 17m, K-6e and, of course, my trusty K-18 were all airborne. The hangar doors yawned in the Friday afternoon sun, bored by inactivity and lack of company. The green of the airfield, contrasting amidst the Norfolk patchwork of yellow oil seed rape and barley fields below, grew smaller with every turn. All bar Jerry in his Vega planned to land back at Swanton. An attempt at the UK 400km goal distance was his task, destination deepest, darkest Cornwall.

The era was before mobile phones and the master plan was for Gary Bennett, a paraplegic glider pilot, to drive Jerry's car (using a sawn-off broom handle for the pedals) and trailer in the general direction of Land's End, stopping every hour or so to phone Jerry's wife for any landout instructions and, hopefully, keeping the retrieve time to a minimum.

As the cumulus tired and the airfield grew in size once more, one by one Fenland Gliding Club (FGC) formed its de-rigging party by the sleepy hangar. The K-18 trailer had the words 'please pass quietly – sleeping Giraffe' written on the doors at the rear, which I doubt fooled anyone, but hopefully brought the odd smile to anyone stuck behind the convoy on the roads of Norfolk. By 7pm we were all being fed and watered in the local pub, whose car park was rammed with long trailers harbouring the club's forthcoming weekend of fun.

I eventually arrived back at FGC, ready for a night cap. As we walked down the corridor towards the bar, the air was filled with the sounds of multiple footsteps being drowned out by flight details boasted to the nth degree. After all, you could have thrown a hangar door into the sky and it would have soared away that afternoon. What with all the noise, at first I didn't register the phone at the end of the bar, ringing itself off the



Maintenance and repairs to all types in the South East of England. www.essex-sailplanes.com Tel. 07789 540123

Sole uk agent for HpH sailplanes
Shark 18m-FES-Jet-Self launch
20m Twin Shark with unrivalled wing loading range
in full production. hphuk@mail.com



wall; its angry tone suggesting it had been doing so for some time.

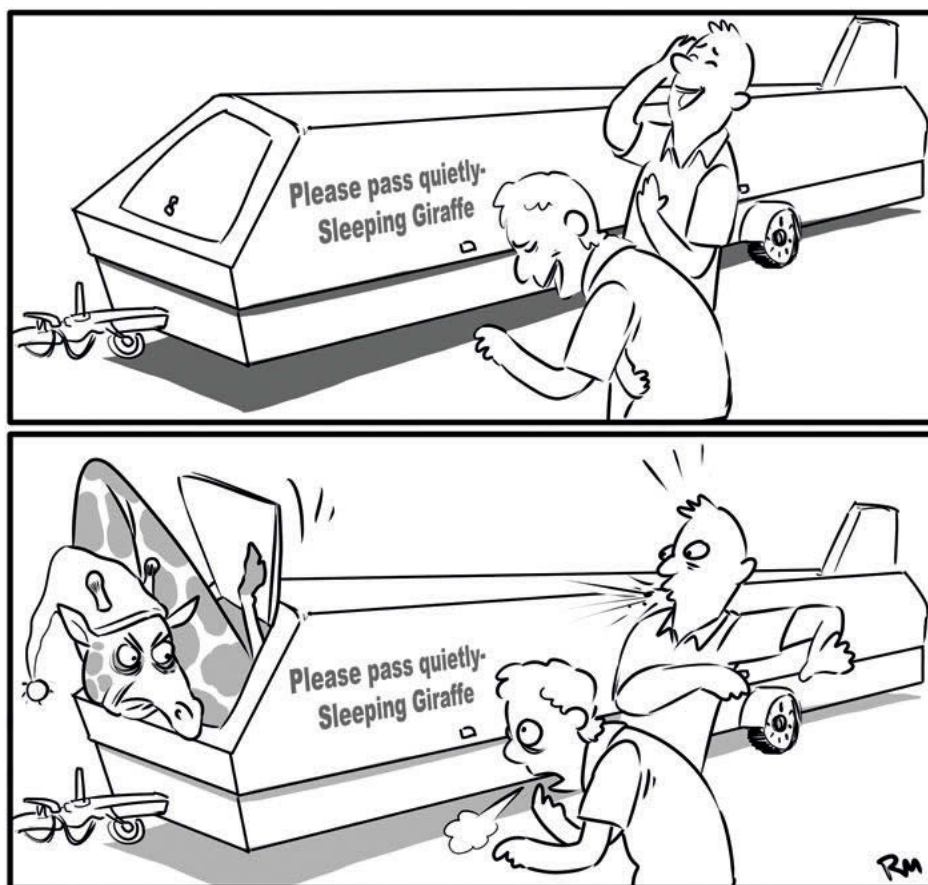
"Good evening. Fenland Gliding Club, Ron speaking." "Thank God for that, it's Gary here". Now, I know what you're thinking right now. We'd all forgotten about Jerry, and you'd be absolutely correct. After all, he was going to check in with his wife once he'd landed and within the hour his crew would be directed to his location. His plan had worked flawlessly and Gary was aware that Jerry and 133, his Vega, were in a field near Umberleigh in North Devon. An unfortunate landout 10 miles short of his goal.

Armed with the knowledge that Gary had departed Swanton early afternoon and that a good nine hours had lapsed, imagine my surprise when he reported: "I'm stuck on the M4, Reading turn off, broken down, engine overheated and seized. I need help, I've been stuck here for hours". (This is the polite translation of what I actually heard.)

In true gliding spirit, and on the stroke of midnight, I set off down the A10 on a most unexpected retrieve. By 3am, we'd temporarily abandoned the trailer on the verge of the roundabout and towed Jerry's car into Reading, parking it conspicuously on a garage forecourt, note under wiper blade addressed to whom it may concern.

Glider trailer now in tow behind my car, we pressed on. Seven am chimed whilst we ordered breakfast in Exeter Services, by which time my sides were aching from laughing at Gary's attempts to keep Jerry's engine temperature out of the red. Whilst on the A10, and again on the M25, the radiator was topped up with lemonade. Somewhere near Heathrow and all out of lemonade, Gary managed to transfer the contents of his colostomy bag into the radiator without spilling a drop. He appeared proud as punch as he recalled his deeds in detail.

Eight am passed by shortly before arriving



Cartoon by Ross Martin

at Jerry's B&B. We topped up on breakfast tea, grabbed a faceful of cold water and pressed on to the de-rig. The journey back to Marham remained uneventful. Including a garage stop in Reading to sort the broken-down car, we made good time, arriving back at Marham around eight **PM** on the Saturday. Twenty hours on the road to retrieve the glider, pilot, trailer, crew and deposit a broken-down car for repair. Longest time I've ever waited for a night cap. Maybe I should have had one for the road!

The car – anyone remember the Rover that Jerry converted into a winch? That's a whole different story.

■ Do you have a landout story – from heaven or hell – that *S&G* could include in this series of retrieve tales? Please send it to editor@sailplaneandgliding.co.uk



Can we save you money and improve your cover?

- Known to be competitive on pricing
- In-depth knowledge of gliding and gliding clubs
- We are active glider and power pilots
- Proven claims service - on your side

Contact our friendly team

Phone us on **0116 238 8874** or email info@forbesbrokers.com



www.forbesbrokers.com

Santiago Cervantes reflects on a love affair with gliding and why he chooses the Highlands

MY LOVE affair with gliding has lasted for over 52 years. Luckily my wife tolerates it with a stoicism that is truly remarkable. I suppose Carole got an idea of what life was going to be like when, after dating for six months, I announced that I was off to the Antarctic for six months and I would see her when I got back. The idea behind it all was that the job (British Antarctic Survey) entailed flying a Twin Otter down there at the start of the southern summer, zooming about for a bit until it started getting dark and flying back again to the UK. The wait for the sun to come back up again down south would be spent gliding and having a good time back home.

What could be better? The perfect job and it worked.... for a while.... and then love got in the way. You just can't control love; it is just impossible.

So here we are, 37 years later, two adult children, a somewhat varied २५

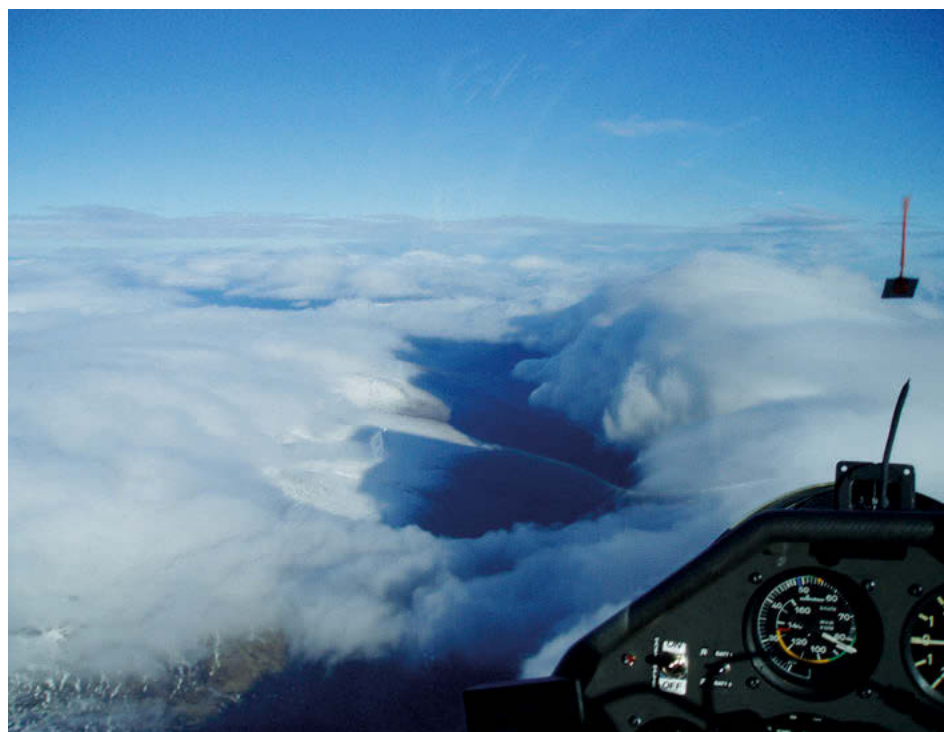
A PASS

Photograph by Steve Lynn

SION

FOR GLIDING

**IT HAS A SKY
THAT PROVIDES
SUCCOUR TO
MY SOUL. THE
SKY IS HUGE,
ALWAYS FULL OF
ACTIVITY AND,
ALTHOUGH NOT
OF ANTARCTIC
STANDARDS, THE
AIR IS PURE AND
CLEAR FOR A LOT
OF THE TIME**



Above right: A winter's cruise back to Aboyne along a wave bar after a wee trip down to Crianlarach



Antarctic wave – taken at Rothera Base, Adelaide Island, Western Antarctic Peninsular

✂ career and a surprising marriage of emotions, passions, disasters and successes that go to make up a life shared. The end

result has been that there are two constants in my life, my wife and gliding, and I'd like to share with you my love of gliding.

As I said, the whole idea of the job was to be able to get six months off just to gad about having fun. Little did I realise what a life-defining experience living and flying in the Antarctic was to be.

It takes 14 flying days to fly from Cambridge, in the UK, to the Antarctic. The Twin Otter cruises at 150mph with the skis on. It's a speed that you can relate to as you can drive down a motorway (?) at that speed. The world is a big place, but it makes you realise that, actually, it's not that big.

When you get down south, you are blown away by the beauty of it all. The place is immense, a continent which in those days had a population in the summer of just over 3,000, reducing to under 1,000 in the

winter. Everything can only be described in superlatives: it's the coldest, driest and windiest continent in the world. It holds 95

per cent of the world's fresh water; 99 per cent of the Antarctic is covered in ice – 12,500ft thick in places. If all the ice melted, the Earth's crust would rise 3,500ft because of the weight of it. With all that ice, the remaining one per cent is usually precipitous mountains (nunataks) sticking up through it.

All seen from our lofty perch with a startling clarity, the humidity being as low as 0.03 per cent at times.

The result is that you often fly on days where the visibility is absolutely pin sharp, no water moisture haze at all to dilute the various hues of blue, black and dazzlingly white colours. You can see as far as the horizon, often seeing mountains over 200 miles away.

An incredibly stunningly sterile, indifferent beauty.

There you are up aloft, a sentient being, made up of the same molecules and atoms as the frigid world beneath you and you cannot help but feel connected with it.

And so it is with gliding

Thermal soaring glider pilots spend a lot of their time flying looking up at the sky and the clouds, whereas wave pilots spend their time looking down on the clouds and the terrain below. Being above it all gives you a sense of isolation, of observation, of appreciation of the powerful forces of nature at work.

I live in Scotland by choice. It's a hilly country, not really mountainous by world standards, and it's at the northern end of a geographically rather small island. Nonetheless, it has a sky that provides succour to my soul. The sky is huge, always full of activity and, although not of Antarctic standards, the air is pure and clear for a lot of the time.

There are more remote places to fly in the world – the Alps, the Andes, the North American Cordilleras – but this one, the Scottish mountains, is on my doorstep. It's why I choose to live here.

An ocean of air

We live under an ocean of air. Each day is different, the changes can sometimes be subtle, but, more often than not in our climate, the conditions can evolve at some speed. We glider pilots have the privilege of being able to get up into our sky, to discover it, to be part of it.

Powered aircraft just pass through the medium, mainly oblivious of its energy and life whereas, when we are flying gliders, we become at one with it. We derive our energy from it, sometimes quite abruptly when, for example, tightening up into the core of a thermal. Other times it can be more subtle as we caress the almost imperceptible energy as we slowly work our way onto a wave bar.

Soaring is a voyage of discovery, not only of our surroundings, but of ourselves.

We extend our limits, sometimes more rapidly than we would like to, constantly delving, always trying to extract the most out of the sky so that we can fly faster, further and higher.

Now that I'm older my tastes have become more refined. I've been flying a long time so I'm bound to have achieved a certain degree of competency. Do it long enough and something is bound to eventually rub off. Which brings me to wave.

I love wave

Flying over the mountains of Scotland is about as remote as you can get within the British Isles. Scotland has a splendour and beauty all of its own and for those that wish to discover it, it is relatively easy to access.

I love the isolation of it all.

When flying wave, you look down on the world. It's quiet, the air is smooth and you are suspended in space. Most of the weather is beneath you. The forces in play are immense and the wave clouds



have a stunning beauty and grace. In your glider you are but a speck in this infinite expanse.

Now, I have flown in remote parts of the world. I've flown and landed at places where there is not another person for 600 miles. I get out of the aircraft; my feet crunching snow in areas never visited by humans before. I become aware of the sound of the engine turbine blades clicking as they cool, the sound slowly dissipating until there is total silence.

The silence is deafening. All that remains is the sound of my blood pulsing past my eardrums. I feel so alive as I appreciate the exquisite beauty of this dead, desolate virgin world. It does not care, it is indifferent, I am nothing.

It used to take me two weeks to fly around the world at speeds that one can comprehend to arrive at this immense continent. It is all, however, but a speck in our infinite universe.

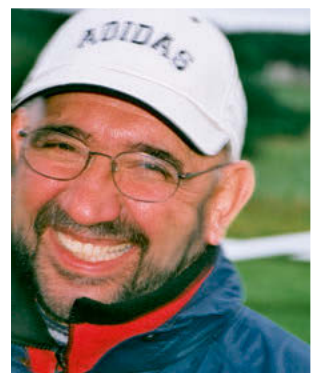
That was all a long time ago.

Now I travel the half mile to my gliding club. I go through the well-rehearsed ritual of preparing myself and my glider, launch and make my way into the skies over the Highlands. I become part of an immense sky, using forces that have the potential to overwhelm me, alone, isolated... and I connect.

I am at one, I am at peace.

That's why I have a passion for gliding.

Autumnal wave around the Crieff area, just a short gliding distance to the NW of Portmoak (photographs by Sant Cervantes)



Santiago Cervantes began gliding at 16. He now flies from Portmoak. A retired airline pilot, Santiago has all three Diamonds and a BI. He has 3,000+ hours gliding and 22,000 hours power

WHERE ARE THE MISSING T-31s?

Jan Forster looks at the history of Slingsby T-31s in Ghana and seeks information on what happened to them after the 1960s

GLIDING in Ghana? Certainly, if you go back at least 60 years! During WW2 there was, in Germany, an impressive glider pilot called Hanna Reitsch. She also flew motorised aeroplanes and even the first successful helicopter.

The Luftwaffe made use of Hanna during the war in their Nazi propaganda, letting her fly all sort of machines, even some without wings. She didn't have a problem with that because she always craved being the centre of attention. Hanna was notable for her unnecessarily dangerous challenges, including demonstrations of flying the world's first helicopter indoors in the late 1930s. This took place in the Deutschland Halle, an enormous hall in Berlin, and was considered good Nazi propaganda.

One could say she adored the Führer,

and was one of his favourite personal pilots. Hanna never accepted the truth of the Holocaust throughout her life and, in her books, the boastfulness with which she describes some of her exploits is apparent. However, in one such book, *Ich flog in Africa für Nkrumah's Ghana* (I flew in Africa for Nkrumah's Ghana), her story made me very keen to know more about gliding in this country, especially as I had read elsewhere a mention of Slingsby T-31 gliders locally. As a regular visitor to Ghana, I had always been intrigued by the people, how they live, their traditions and their history.

Dr Nkrumah had become its first president after Ghana obtained independence in 1956 from the British. The British left behind several entire airfields, large and small, but without any aircraft. Those airfields were left to languish, because Ghana did not have its own air force. In general, Ghana did not have any aviation history of its own. Nkrumah visited India and met Nehru, their president, and he advised Nkrumah to contact Hanna Reitsch, who founded a gliding centre in India.

After surviving many daring exploits in WW2, in the late 1950s Hanna was looking for a new purpose in her life, so the invitation from Nkrumah was very welcome. First she made moves to ingratiate herself with President Nkrumah; again she worked her way up to befriend a leader and she soon adored Nkrumah, rather like Hitler. Then she suggested to him that an ex-RAF military airfield should be changed into a school where they could build a workshop and start an introduction to aviation, beginning with making model gliders.

Subsequently there would be theory and, later, gliding in real gliders with 10 days training for each student. Schools from anywhere in the country could apply to take part and, during this time, the youngsters would be billeted on the airfield. Working in this way, they hoped to make Ghana into an aviation-minded nation. For Nkrumah, who wanted to build a new country with white people no longer in control, the proposal



The T-31b of the Accra Gliding Club (AGC) is the middle glider, shown here with the registration '9G-AAP' clearly visible on the upper wing (photographer unknown)

from the Army staff and Hanna to help move towards building an air force was very welcome.

They selected Afiénya as an airfield and then set about finding staff trained in Germany and the UK. These probably included some of the remaining British expatriates that were already in Ghana and who had been members of the Accra Gliding Club (AGC). The members of this club were not happy with Hanna's activities on "their" airfield and tried to stop her, with no success. There were also local Ghanaians on the staff to help manage the centre.

The Ghanaian training centre started with a TOST winch, two Piper Cub tow planes and seven gliders. That means certainly one (possibly as many as three) T-21s, and later a K-7 and K-8. The AGC had originally been a very active British gliding club, but after independence less so, primarily because of the lack of members still around. They had owned a Slingsby T-45 Swallow single-seater and, possibly, a couple of T-21 two-seaters. Now comes the most interesting part to me of my story: The AGC also had one T-31b Tandem Tutor, the same type that I own. There are even reports that there may have been as many as three T-31bs!

On 18 May 1963, the Ghana Training Centre was officially opened.

Some time ago, my friend Raymond van Loosbroek, knowing that I own a T-31b and that I was a regular visitor to Ghana, offered me a book – *Gliding: Handbook on Soaring Flight* by Derek Piggott, a 1985 first edition! Raymond asked me to open the book. I did, and in the inside cover was written: "P.G. Burgess, P.O. Box, Tema." Tema is a town in Ghana, one-hour drive west of Accra. Raymond then asked me to look through the book and I found four black and white pictures of gliders. On one of these it could clearly be seen – a T-31b registered '9G-AAP'; 9G is the official national aviation registration prefix for Ghana, followed by three letters. Possibly this meant that this T-31b was the 16th registered aeroplane in Ghana.

In these photographs there were also a Tutor and two Scheibe Spatz As. One of the T-31bs was destroyed (I did read in a British report that it had irreparable damage); the other gliders were scrapped from the register. What happened with the other two T-31bs? Were they destroyed at the same time? Were they taken back to the UK? Did Hanna use them with a new registration number and were they then part of the first seven for her centre?

President Nkrumah was deposed by a



coup in 1969 and from then on Hanna, who was opposed to the new government, became a persona non grata. She was sent back to Germany. Management of the school was now in Ghanaian hands.

Were those T-31bs still in Ghana, possibly on the Afiénya airfield? I could only find out by going to Ghana, and so that is what I did. Going by bus from Accra, Ghana's capital, to Akkosombo, you pass the Afiénya military airfield, which still exists. Turning right on the roundabout, I spotted the control tower with woods behind and an enormous green grass field in front of it (very rare in Ghana because of the hot sun and general lack of water). On that day, as always, there was a cloudless blue sky and it was burning hot, with the temperature over 40°C.

I left the bus and walked along a wide road towards the buildings. There was a low fence, only a metre high, around the whole complex, but at the entrance the fence was missing. There were no cars to be seen, and to the left and right were areas of very nicely maintained grass with occasional trees. It looked like a park. There were whole families walking around and some people were sitting together in the shade of the trees. This, in Ghana! Where public green lawns were almost unheard of.

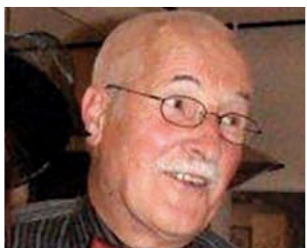
Before I realised it, I was at the entrance to the airfield. Here there was no fence, but a barrier was fully open with the arm pointing vertically upwards to the sky, and a big sign nearby read: 'Ghana Air Force Flying School'. Looking ahead, I could see the white painted control tower where the woods ended at

Members of the Accra Gliding Club? (photographer unknown)



Gerry Burgess, pictured in S&G August 1961, was a CFI at Accra Gliding Club

**NKRUMAH
VISITED INDIA
AND MET
NEHRU, THEIR
PRESIDENT, AND
HE ADVISED
NKRUMAH TO
CONTACT HANNA
REITSCH, WHO
FOUNDED A
GLIDING CENTRE
IN INDIA**



■ Does anyone know any of the people in these photographs? Please get in touch if you can help me. There must be more information out there somewhere!

Jan Forster (above),
Vintage Glider Club
jftandemtutor@hetnet.nl



Two members of the AGC?
(photographer unknown)

Sources:

- *Sailplane & Gliding* 1956-1970
- *Ich flog in Africa* für Nkrumah's Ghana Hanna Reitsch
- *Ghana one year old: a First Independence Anniversary Review* World Digital Library
- *Modernization as Spectacle in Africa* Bloom, Mies, eo

✎ the left of the airfield, and there were barracks visible in the woods.

On the right side of the entrance there was a huge hangar, built in an unmistakably English style. When I made this visit to the airfield back in 2011, those buildings must have been already at least 60 to 70 years old. Strolling families were passing by, giving me friendly smiles. In the shade of the woods a group of young military men in nondescript uniforms with red collars and neck scarves, was undergoing training exercises in marching. Vaguely I could hear the shouting staccato commands of their training officer. Air cadets possibly?

Until this time I had not seen any aeroplanes in all the years that I had been visiting Ghana. Just once I had seen a military rescue helicopter, flying low over the sea. Where do you find aeroplanes? In the hangar, and that was the direction of my walk. The big doors, eaten by corrosion, were jammed open on both sides, clearly in a condition that they would never close or open again!

I managed to squeeze inside through one of the openings and looked curiously around in the poor light. To my right I could make out a dismantled helicopter lying amidst a pile of rubbish. In the middle of the hangar, four small jet trainers were standing, only one and a half metres high, short and stubby. Later, I learned they were the four Italian Aermacchi MB326 trainers from the 1960s that Ghana had bought as their whole training fleet at that time. They were in a very bad condition with flat tyres and canopies that were cracked and discoloured from the sun.

In front of those badly neglected trainers, was a small twin-engine transport aeroplane – with some luck, possibly airworthy. No gliders, not even up in the roof, often the most usual place to find them. There were some parts looking like wings and fuselages, but no gliders parts visible. Suddenly an officer, with stars on his epaulettes and a badge showing a wing decorating his uniform, appeared. I quickly took some photographs of the aircraft I had seen before he could ask me what I was doing there. “I am looking to see if there are any gliders here!” I told him. “Gliders, what?” was his

answer, while taking me by my elbow and guiding me to a wooden bench on the grass. I explained to him what a glider was and that I was a glider pilot. I also told him the story of Ghana's gliding training centre that had once been on this airfield. He had never heard anything about gliders, and certainly not my story which was, however, of great interest to him.

“I never saw a glider, and there are no gliders, or even parts of gliders, in Ghana,” was his reply. Then he asked me to leave and, no, I was not allowed to walk over to the traffic control tower! I thanked him for this conversation and his time, and walked back, passing the barrier and giving a friendly wave to the incoming Ghanaian families. I was very happy that he did not ask any questions about the photos I had taken.

Character

In Martin Simon's book entitled *Slingsby Sailplanes*, he mentions that the T-31b was flown in several different countries overseas, specifically by the RAF gliding clubs stationed abroad. In his list of these countries, however, he failed to mention Ghana. But they were there, as I have proved! So where are those gliders now? And who was PG Burgess? In time, I found out he was a British glider pilot. I even read some articles about gliding with his name on them. The information that I had found in some old documents stated that he was the CFI of the Accra Gliding Club and one of its two founders, and so he must have been quite a character! In 1961 he won the Standard Nationals at Lasham, UK, and there was also a photo of him. If he is still alive he would now be over 90.

Another question is: how did it happen that my friend, Raymond, could acquire this book in Eindhoven, a town in the Netherlands? Possibly PG Burgess was an expat with Philips or DAF Trucks. Does anyone have more information about him? What was he doing in Ghana? Does anyone have any further information about the Ghanaian T-31bs, and the training centre in Ghana of Hanna Reitsch?

These questions are particularly for British and German glider enthusiasts. Perhaps your father, a family or club member was there in Ghana, possibly even instructing in Hanna's training centre! If you can find any information in one of those black and white photo books put together long ago, and lying forgotten in the attic, you could fill in a part of this story.

#2 REVERSE ENGINEERING THE SKY



GMAD – Gliding Mathematics and Atmospheric Dynamics

DESPITE varying thermal strengths, consideration of a level and flat cloudbase over a large area leads us to a better understanding of the mechanism of convection.

Sometimes an effective way to understand how something works is to reverse engineer it. That is, start from the finished product, take it apart and analyse the production/formation of it backwards.

When air rises there is a threshold where the cooling air can no longer retain the volume of water vapour and cumulus cloud starts to form as it reaches its dew point. We call it cloudbase whilst meteorologists refer to this as the Lifting Condensation Level (LCL). On a good day littered with cumulus, when we stop to climb in convective flows (thermals) we find that sometimes there are strong ones and sometimes significantly weaker ones, presumably due to the differing insolation rates of the sun on the ground. It is therefore easy to assume that the stronger thermal that we climb in is in some way 'hotter'. But does this simplistic deduction complete the picture?

The first anomaly with this simple theory is that whenever we climb up to cloudbase in any thermal, we find that the height of cloudbase in that air block is the same over a very large area. This means that the temperature (dew point) at that height is the same, despite the variety of strengths of the thermals feeding each cloud. Therefore the deduction in this situation is that the temperature of ALL thermals is the same.

Continuing to work backwards ie downwards; the second link (gas laws and physics) to consider is the fixed rate of change in temperature with height within

convective flows, which is determined by the adiabatic lapse rate of rising air. As the change in temperature of any rising toroid or shimmer is governed by physics, cooling at 3°C per thousand feet, this means that at the trigger height of each thermal, the properties of the air are fixed and the same. So strong and weak thermals are at the same temperature, even at the trigger height.

As we cruise around the sky in steady flight, we experience two structures of convection: the easily recognised and clearly distinct structure of the established vortex and the other light turbulent chop of the less useful shimmers. Why such a clear difference? To find the answer we must note the physics pioneered and formulated by Lord Rayleigh more than 100 years ago!

Whilst Rayleigh's calculations are about temperature differentials in ideal fluids, they can be applied with modification to the structure of general buoyancy in mixed fluids, in our case humid/warm air surrounded by dry/cooler air. From a simple practicable gliding point of view, in a very weak thermal stop trying to find the non-existent core!

Returning to 'all thermals are at the same temperature at the trigger height', we may be misled by text explaining thermals, where we can often read references to hot spots, which regularly don't conform to the real world.

So something else, rather than just the suggested differences in temperature, must be dictating not just the strength of each thermal but also the way each is formed to generate a disparity of strengths. So what is going on? Next time, we open the doors to the thermal factory.

Kevin Atkinson, Aim Higher lead coach

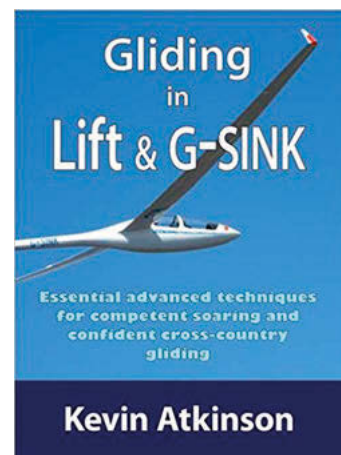


■ Aim Higher courses are held at clubs by arrangement, run either by Kevin or by club coaches briefed on the training materials and S&G articles developed by Kevin and Tony Cronshaw.

Please contact kratkinson@yahoo.com if you, or your club, would like to participate in future Aim Higher courses.



Kevin Atkinson is the club coach lead for the BGA Aim Higher initiative (www.gliding.co.uk/bgainfo/aimhigher.htm). With more than 7,500 military jet hours (Tiger Moths to Typhoon), Kevin started gliding at age 13 at Ouse GC (now York), flying his first solo on his 16th. Kevin has over 3,500 hours gliding, including competing in UK national and regional competitions



■ Kevin's book *Gliding in Lift and G-SINK* is available at www.bgashop.co.uk or direct from kratkinson@yahoo.com

A FURLLOUGHED FLYER'S TALE

Rod Witter tells of the happenings at Lleweni Parc during lockdown, taking an unexpected opportunity to rethink and reinvest in club operations

‘IT WAS the Bicester Times. It was the Worcester Times.’ In the whole of England, only two local papers reported the “Dickens of a time” glider pilots have been having!*

Punning aside; is it the Chinese whose script has the same symbol for “danger” and also “opportunity”? At Lleweni we were determined to see the positives, and explore the opportunities during the national emergency.

The Corona Closure provided us with a most unexpected opportunity to rethink, and reinvest in our operations at Lleweni. There came the sudden collapse of income, the disappearance of all visitors, the closure of our caravan site, the catastrophic failure of the engine frame in our vital DG-1001M,

the struggle out of the wettest winter ever seen in our parts, and council rejection of our planning application for onsite accommodation units. With us all grounded, our reserves of financial, psychological and physical resilience were stress tested as never before!

Firstly, we needed to address the technical failure of our DG-1001M. Before lockdown we had discovered substantial cracks in the steel tube engine frame. Investigation suggested it was due to gyroscopic forces when turning the glider with the motor running. I was unaware of this possibility in 50 years of aero engineering, but soon began to hear, anecdotally, of the problem. I have never seen the matter mentioned in Flight Manuals or ADs. The glider had to be returned to the DG factory in Germany, where they very kindly understood the urgency of the problem and finished the repair in time for us to extract the glider back to UK just before lockdown. At the first test flight we encountered a faulty engine retract jack. CFI Chris Gill was forced to a Pan-Pan landing – fortunately back on our Tarmac.

Grounded

Then the fun began, trying to diagnose the problem and source the spares whilst Europe was closed and largely incommunicado. After many false avenues we received the necessary new motor – from Italy as they began to slowly return to work in May. The DG had been grounded for some five months. A trivial and irrelevant problem compared to the horrors now being experienced in the global pandemic.

What to do at the airfield? Fortunately our locked gates provided the perfect, safe, setting for our hero of a groundsman, Ian Stewart, to continue working in compliance with the rules. Similarly our maintenance base, Morris Aviation, beavered on in the safety of seclusion.

We commenced the groundworks for three new hangars, a visitors’ clubhouse with bedrooms near the main hangar, extending the trailer park, and additional pitches on



BRITISH GLIDING ASSOCIATION

#thisis instructing
Teaching from the top to upside down
Start your training journey - chat to your CFI or search “BGA instructors”

our caravan site for the anticipated increase in demand for “staycation”.

With Chris Gill on job retention furlough, your correspondent spent many happy days on the dumper truck as we shifted hundreds of tonnes of spoil around the site. The weather was continuously gorgeous, and the exercise provided immense therapy – provided one did not look up at the sky!

All this resulted in five separate engagements with the planning process. What a debilitating and depressing tie-up in red tape that whole fandango of bureaucracy is! Fortunately, it can largely be conducted online via the national Planning Portal. All council officials appeared to be working from home, so that scarcely accelerated the process, and the delays were excruciating as the various ‘box ticking’ requirements were met.

At time of writing, we await the outcomes of these five initiatives. They are crucial to our gliding and financial future. So we hope that the local council will embrace our plans for significant investment and expanded facilities for the return of leisure activities to the area.

Investment

The council was co-operative in channelling the rate support grant, provided by the Treasury. Many thanks to the BGA's Diana King, who helpfully pointed out to the council that we should be classed as a leisure enterprise, rather than as the warehousing operation that they had categorised us!

So, hopefully, the council will recognise and encourage our significant investment, including ploughing back the rate grant itself.

Our new strategy is to provide a holistic location for individuals and clubs wishing for an alternative to soggy winter airfields and limited soaring. Our airspace and weather conditions all year round are well known. Now we plan to offer contract hangarage, increased trailer space, accommodation lodges and a maintenance facility for Annuals and ARC. Chris Gill will continue his service of daily briefings and offer either winch or aerotow as appropriate.

We are essentially a site for skilled pilots (we suggest minimum Silver C). The main skill tested each day is the ability to roll to the end of the landing runway, and clear for the next chap. Through much of the winter our grass is unlandably soft so we need this skillset on the runway.

We reopened on 1 June in a carefully controlled way – complying with national rules, and the Welsh requirement for five-



mile limited travel to the airfield. We took heart from the reported vulnerability of the virus to sunlight and UV, and conducted briefings outside. We are working on the question of masks and a possible screen to permit two-seater flying when the rules allow.

So, we hope that glider pilots will soon be attracted to return to North Wales by our maintenance base for winter ARC, our “isolation” satellite clubhouse with accommodation (very suitable for Covid-19 shielding via contract hire for six or 12 months) and our contract hangarage (not to mention the superb Dinorben Arms close by!).

We hear that Llanbedr is expanding its drone operations, which may affect gliding in that area. Developments are awaited, but these things take time in the world of airspace and ops.

Rod Witter spent the frustrating month of May averting his gaze from the sky, and concentrating on the improvements at Llewenni Parc

** “It was the best of times, it was the worst of times...” – A Tale of Two Cities, by Charles Dickens*

■ **Llewenni Parc is not a conventional members' club, but an enterprise owned and supported by Rod and Sue Witter, who are passionate about promoting the future of gliding in the UK.**

BGA Club Management Conference 2020

Sunday 22nd November, venue to be confirmed

Chairmen's Conference

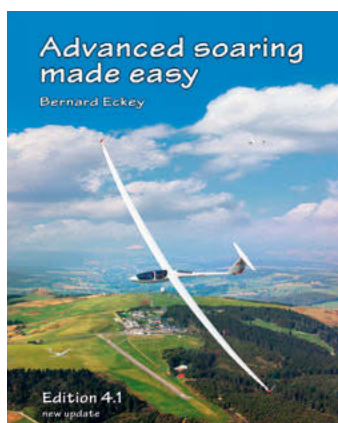
Treasurers' Forum

CFI Forum

Juniors' Conference

Clubs sharing information and ideas





Advanced soaring made easy
4.1 edition
by Bernard Eckey

432 Pages (190 x 254mm)
Hardcover

ISBN 978098034942

€54.90

Available online or direct from
the author:
eckey@internode.on.net

Advanced soaring made easy

New 4.1 edition,
by Bernard Eckey

WHEN Bernard Eckey's gliding "tome" first appeared back in 2013, it was a major landmark in terms of the quantity and quality of knowledge parcelled up in single volume: A fantastic resource for any soaring and cross-country pilot from novice to competition pilot. The fact that so many techniques were explained clearly and logically meant that the "made easy" part of the title was well deserved.

Seven years on, the latest 4.1 Edition is now out but the core messages remain the same, so no need to discard those earlier editions! However, there are so many improvements throughout the book, including new illustrations, improved wording and updated theory, it might just be tempting to repurchase. It's clear the author is dedicated to honing this book as a labour of love; it's not just about restocking the warehouse!

The fact the warehouse was bare is testament to word-of-mouth recommendations and the uptake by so many different pilots around the world. There are even sections explaining how different countries and climate zones affect soaring

conditions, which is really helpful when visiting new areas in different parts of Europe and beyond. For pilots lucky enough to have hills and mountains within reach, there are sections on ridge, mountain flying and wave.

Amazingly, the book really does cater for pilots through the spectrum from novice to advanced. For those starting out on their gliding career, the book explains how to acquire soaring skills with a minimum of assumptions and in a form that is very readable.

For the intermediate pilot, a myriad of techniques to improve cross-country performance are explained together with the vital topic of making safe field landings.

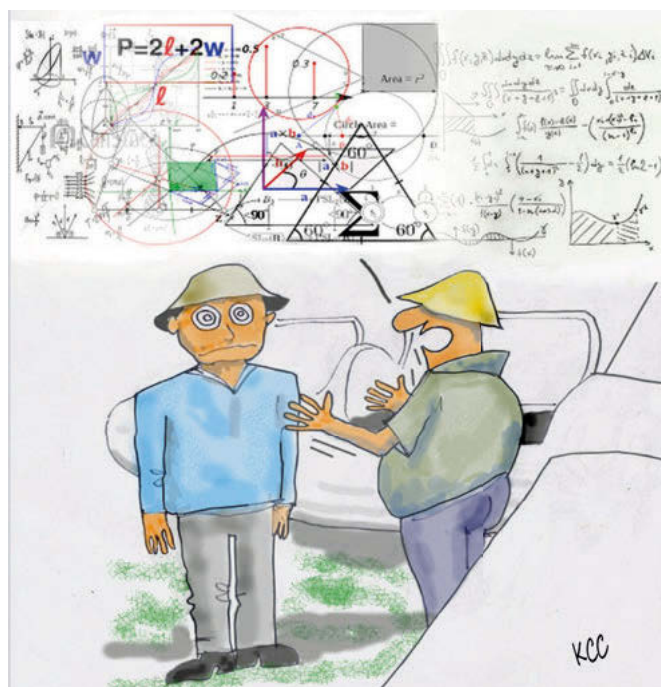
For competition pilots, there is a wealth of detail on tactics, glider fine-tuning and sports psychology. There are tips here equally for those aiming at club level comps and those growing into regionals or nationals.

It's evident that Bernard is a coach who has helped numerous generations of new pilot and he is willing to share everything he has found during his own extensive career.

Tony Cronshaw, Cambridge GC



■ G Dale's *The Soaring Engine, Volume 3 - High Performance Flying* is now available. A review will follow in the next issue. You can get your copy from:
www.bgashop.co.uk
www.navboys.com



All he did was ask what the difference was between a spiral dive and a spin

GLIDERTOONS

THIS cartoon is from Kevin Clark's recently-published book *Glidertoons*. Kevin flies at Wellington Gliding Club, New Zealand, and as an Ass Cat has cleared many visiting Brit instructors to instruct at the club.

Hard copies of *Glidertoons* are being sold in NZ to the gliding fraternity, and discussions are ongoing to arrange an online digital version.

Two topical Covid-19 related cartoons from Kevin featured in the June/July issue of S&G – one on page 51 and the other on page 64.

TRUE GLIDING

THIS small volume of 25 humorous observations and impressions by the Swedish pilot Bertil Ohlsson was published in Sweden in 1992. It should by rights have been published in English soon afterwards; indeed a part of it was in S&G in April/May 1994. Unfortunately, rather like a newly-emerged dragonfly struggling on a rainy day, it's taken a long time for its wings to dry.

Those pilots like me, who have been in the sport for longer than 20 years, will find this little collection fairly accessible. I don't suppose that the gliding scene in Sweden 1970-1995 was very much different to how it was here in the UK. So, this little book serves as a time capsule for how gliding was 25 and more years ago. In a sense it's quite refreshing and liberating (and amusing) to see how things used to be and, indeed, reflect that they still are in many cases...

Make no mistake though, this set of stories is unrevised and unreconstructed – and the author never intended it to be. There are no references to GPS, moving maps, logging, OLC, turbos, self-launchers or 100km/h romps. No references to airspace 'consultations', FLARM, transponders or transits. No internet, no mobile phones. Instead there are references to personalities and club politics, myths and 'events', and also developing films at competitions (remember that?). There are references to the many unique situations we find ourselves in as glider pilots and to the camaraderie implicit in the sport.

The writer offers his views and experiences presented as a fun and sometimes sideways look at what we do (or did back then). It's not really about the flying in *True Gliding*, it's about the situations and the culture.

I admit I did not find this an easy book to read, even with lockdown time on my hands. It's best taken story by story. Some of the translations result in quirky language and the descriptions of the gliding environment of 25+ years ago will be lost on many. Nevertheless, there are some amusing asides which capture some of the universals of gliding. For example:

Back to Earth

"Oh my, so you are stuck at 300 metres above the countryside in zero sink trying to force the

butterflies in your stomach to land before you make contact with the ground. Take it easy, thousands of glider pilots have been in your situation. If you only had listened a bit more carefully to their stories you would have known that the real adventure takes place AFTER the glider is at standstill. Follow the handbook and everything will be just fine. You don't have it with you? Oh well, an outlanding is just like entering a dark room (and) searching for the switch."

The introduction – by the much missed Mike Bird – reveal a collaboration between him and the author back in the early 1990s. His allusions to the Swedes are pure Platypus:

"When Swedish males gather they must dream fondly of the great days when being a berserker was something admirable; "I rather fancy going berserk this afternoon, if the weather is suitable" a chap used to be able to say casually without any of his neighbours looking askance."

Overall, this is a book for the longer of tooth. As years pass and we become more reflective, there are stories in *True Gliding* that will resonate and recall an earlier simpler time. There may be more gadgets and gizmos now – and it might be easier to get home, but the challenge is the same, the promise of adventure is the same.

I don't recall another book that tries to capture the culture of the gliding movement in any given era, but *True Gliding* makes an engaging and amusing attempt.

Martin Roberts, Lasham GS



True Gliding

Author: Bertil Ohlsson
Translator: Gösta Arvastson
Introduction: Michael Bird
Illustrator: Johanna Andersson

www.amazon.co.uk kindle version: £5.38

THERE ARE REFERENCES TO THE MANY UNIQUE SITUATIONS WE FIND OURSELVES IN AS GLIDER PILOTS AND TO THE CAMARADERIE IMPLICIT IN THE SPORT



Leaving a legacy

Supporting people to progress in gliding is important. A gift to our charity "Launchpoint" will help develop the next generations of pilots, and you will be part of the future of gliding.

Please see <https://members.gliding.co.uk/leaving-a-gift-in-your-will/>

BGA GOOD PRACTICE AWARDS

THERE is an annual award for the best good practice entry submitted and we're relying on your club to ginger up the competition.

What does your club do well? How do you innovate? What ideas have you introduced that have made a difference for your club members, or the management of your club? What might other clubs be interested in adopting?

The first prize is a place on a BGA instructor course. Full details are in the club management section of the BGA website. We've listed 20 areas of club development, but will consider any useful idea or system if it makes a demonstrable difference.

The closing date is 1 September and we look forward to receiving your entries.



Herefordshire GC won the 2019 BGA Good Practice award and is currently running a training programme for juniors

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

FINDING STRENGTH IN ADVERSE TIMES

THE silent threat to the survival of gliding is membership retention. So far, 2020 has provided the opposite of conditions conducive to keeping people – a hard winter followed by lockdown. Now we're experiencing inequality of frustration, with not all pilots able to fly.

So how do we navigate this, especially when club management volunteers have been working so hard to ensure our clubs remain safe places, despite the uncertain and uneven unlocking process? During lockdown, there have been some excellent examples of clubs innovating good practice. Here, I focus on one aspect each from Burn and London: Burn's adaption of an existing training group; and what London will be keeping for more normal times. Incidentally, both clubs appreciated the online RT (radio telephony) course, reporting plenty of pilots taking part.

There are certain principles for effective membership retention and a relatively small shift to a less leaky club can have a dramatic effect on club sustainability. Using good quality communication as the foundation, firstly, keep going back to the reasons why members join and the kind of value they were looking for as guiding principles and, secondly, encourage a thriving, engaged community of like-minded individuals.

Deputy CFI Mike Howey described Burn's 'Training Group 1', which has been running for a few years now. It is a small group of pilots led by two instructors, initially created for supporting pilots along the journey from post-solo to cross-

country flying. Once pilots join, they don't seem to leave. Each January, everyone gathers for a meal and together they all, instructors included, set their targets for the year. Traces are reviewed regularly as a group, discussing the decision making behind the climb rates and glides. This collective learning is invaluable. The group ethos is to have a specific target for every flight, day, month, season, year and they learn about many types of flying and learn to discern skill selection. Group members

appreciate the leadership and camaraderie. During lockdown the group has continued to meet on Zoom and was quick to get flying again, even though the original expectation was that there would be no flying until September. The group held its planned focused flying week in June and has already been achieving targets.

London Gliding Club has helped various natural groupings of pilots continue to meet up via Zoom, which was used for all sorts of purposes. When I asked chairman Andrew Sampson what the club will be keeping, it is these online communication methods. They are useful for presentations and seminars. The club forum was better attended, and more useful, than those previously held in the bar; 69 members discussed a wide range of topics, from the mundane to big issues. Every committee meeting held online has been more efficient, not taking as long with less deviation into chitchat. Andrew anticipates that the majority of committee meetings will be held virtually in the future. Zoom is the platform they happened to adapt, but, of course, there are many. We also discussed Lasham's online briefings, which open the possibility that everyone can receive the daily briefing even if they can't get to the club to attend in person at the designated time.

This has been an explosive period of learning for gliding. It's also been difficult, learning a new way of interacting in our usually very social gliding clubs. The limited access to two-seat training has necessitated the use of extensive online and ground training, with practical exercises in simulators, followed by closely supervised solo flying and de-briefs. With two-seat training being a finite resource in holistic club management, these techniques are ways to build club training capacity. It needn't be limited by club geography either. Potential learning opportunities for club pilots have suddenly increased. There is no reason why the virtual clubhouse should shut either.

Our clubs have so much to offer for members, what will your club be keeping or adopting from lockdown 2020 to ensure it is too valuable to leave?

An update from the BGA's Chief Executive Pete Stratten

ADJUSTING FOR THE WAY AHEAD

JUST as lockdown began and, with it, the most amazing run of spring weather for decades spread across the UK, it was tempting to reflect on the significant overall increases in first solo and cross-country endorsed pilots produced in 2018/2019, who would have been raring to go in 2020.

Further waves and local lockdowns permitting, by the time this article is published all BGA clubs will be flying regularly again and doing their very best to meet the needs of all club members, including, of course, our much-valued student pilots and those requiring refresher training. It may be that some clubs have restarted first flights (ie introductory flights and trial lessons). Introducing new people safely to the sport is as vital as it has always been.

During the lockdown period, BGA support and working arrangements have been adjusted to address zero gliding activity at clubs and temporarily revised priorities. We are gradually moving back to normal service as demand re-emerges, although some activities, for example events that require physical presence, need to be pushed back to a later date.

Where online delivery can be effective, we will continue to move in that direction. For example, the 'teaching and learning' module of the instructor course is being redeveloped as a mix of self-study and online training.

As the opportunity to access elements of any GA instructing and examining remains limited, the CAA intends to extend several existing Covid-19 exemptions. Exceptions to BGA requirements will continue to be applied where necessary. We will publish details as they emerge.

Licence privileges

We have been advised that the number of Aeromedical Examiners (AMEs) has reduced markedly in recent months and that results in a sharp and permanent reduction in capacity. In response, it is likely that the scope of the CAA Pilot Medical Declaration will be widened in future to helpfully include those using EASA licence privileges within the UK. We will advise as soon as we learn more. Meanwhile, anyone who needs to use the privileges of a licence or medical certificate is advised to ensure validity before getting airborne.

Beyond Covid-19, there are several

pipeline regulatory changes taking place or anticipated, such as those associated with leaving the EU at the end of 2020. The intended 'cut and paste' of EASA regulation into the Air Navigation Order has the capacity to introduce complications. The BGA and CAA are now meeting monthly to review the regulatory situation and agree next steps. As ever, our aim is to ensure proportionality and minimise impacts on clubs, on pilots and on owners. We have encouraged and have been invited to contribute to a post-Brexit GA 'Red Tape Challenge'.

With known future challenges in mind, and with the aim of ensuring that the BGA remains fit for the future, we have put together a small working group to investigate potential changes in BGA organisation that may be required to ensure that we continue to provide efficient, effective and relevant support to gliding clubs and the sport. The BGA strategy developed with club and other inputs of course provides direction and, as new issues emerge, we will seek further inputs.

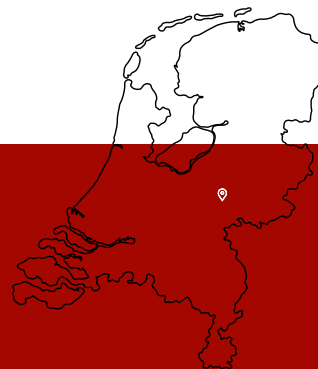
And last, but not least, as we roll into August and September, we must all be owed some more of the amazing flying weather we missed in the spring!

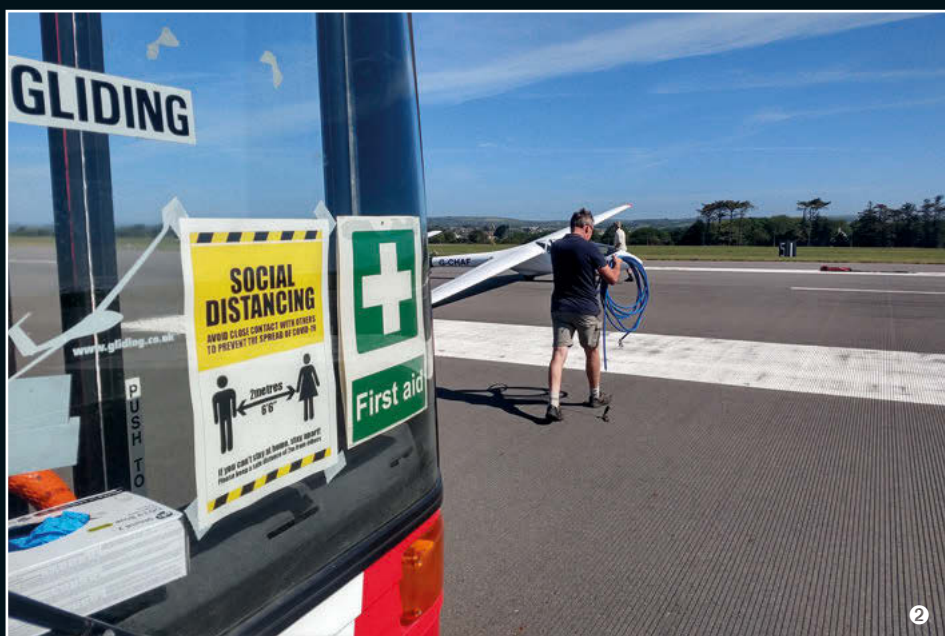


If Quality Matters

(Motor)Glider Repair and Maintenance
Avionics Testing and Calibration

www.sct-terlet.nl - info@sct-terlet.nl - +31(0)26 44 31 251 - Netherlands





This page:

❶ Water, water everywhere: selecting the correct bucket for the job in hand at Bath, Wilts & N Dorset

❷ Getting safely airborne again at Seahawk, while following Covid-19 restrictions

❸ London GC cut an NHS heart into the grass, visible from the top of the Dunstable Downs (Daniel Jamin)

Facing page:

❶ Sun sets on gliding before the lockdown. K-21 in foreground and Astir in the background in front of Fenland's hangar (Paul McLean)

❷ New second generation Arcus arrives at Lasham (Jordan Bridge)

❸ Wrekin's Geoff Matthews gets the K-13 airborne with a visitor, pre-lockdown

❹ Blast from the past: 2016 Sherington Regionals' end of comp party was themed 1970s... Cranwell staged a picket line for the Saturday briefing (Tess Whiting)

❺ Wimbleball Reservoir and Exe Estuary (Wyn Davies)

■ Our thanks to all the photographers and to our *Club News* contributors for sending these in.

Stuart Taylor and Richard Mitchell putting in the new mast for Staffordshire GC's webcam



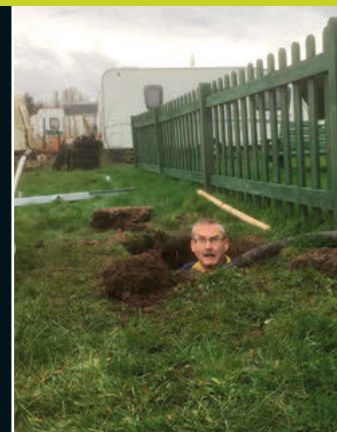
Where do you want the hole, Stuart?



Is this deep enough, Stuart?



No, deeper, Richard!



How about this?



1



2



3



4



Stop whinging, Richard, and clean out the bottom of the hole



Perfect... ah... Rich, Richard... where are you?



5

CLUB NEWS

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

A GROUP comprising Eric Hibbard, Jerry Berringer, Gwyn Thomas, Matt Clements, Jonty Sharpe, Paul Field and Finbar Billings have been virtually racing round the countryside a couple of times a week, doing up to 300km, on Condor 2. Hopefully, this will continue over the winter. Members have also been participating in Zoom training seminars provided by Alex Harris, CFI at Essex Gliding Club (EGC), who have spent the winter at Wattisham. Thanks to Alex and the EGC team for inviting us to learn from Alex's experience as CFI, regional examiner, aerobatics coach and also a commercial airline pilot. On 25 May, AGC(A)'s instructors got back in the air, courtesy of Norfolk Gliding Club. This is the first stage of preparation for our instructors to return to currency to enable club flying in due course, when WFS reopens. The instructor group flew again at Tibenham on 31 May, regaining winch launch currency. While a little behind many other non-military gliding clubs, we are all looking forward to getting back into the air.

Simon Ginns

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

BWND got back in the air on 23 May! There were lots of precautions, but the weather was lovely – except for the wind, which was pretty steady from north-west at about 20kts. We took out one two-seater, FUY, which CFI Mike Jenks flew solo for a bit. Astir JKW and K-6 BHN were available for booked pilots and a number of private aircraft flew as well. Gordon Figg was tug pilot and some aerotows took place, but most people opted for the winch. With the challenging weather, flights were not exceptional and it was a pity that some hopeful pilots were disappointed. On the other hand, we filled a whole flying sheet and a number of people are no longer as rusty as they were. At the end of the day I found myself wondering if Chris Chappell and Graham Hoyle were ever coming back!

Chris Basham

BIDFORD (BIDFORD) **WWW.BIDFORDGLIDINGANDFLYING** **CLUB.CO.UK 520803N 0015103W**

THIS has been the most frustrating year on record. When the field finally dried out after an extremely wet winter, all gliding

was banned due to coronavirus. Sadly our Wings & Wheels event, which was scheduled for May, had to be cancelled as was our competition, which was due to be held in July. Despite all the problems our membership has held up very well, with almost all members paying the required fee.

Mike Pope

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

IN VIEW of the limited relaxation in lockdown rules granted by the Welsh Government at the end of May, the club decided not to re-open at the beginning of June. At the time of writing, we hope that solo flying will recommence either late-June or during July. Accordingly, the committee has approved a provisional phased plan to get members safely back to flying. Courses previously scheduled towards the end of the season will hopefully remain available, pending the allowance of dual flying at that time. Looking at the skies overhead Wales throughout May, we relish the prospect of returning to them.

Mike Codd

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

WHEN the ban on recreational flying was lifted, we went on our second expedition of the year – to Chiltern Park – while we waited for Wycombe Air Park to re-open. We are grateful to the BGA for its contribution to getting the ban lifted, to Dennis Pearson of Chiltern Airports for his hospitality, to RAF Benson for understanding gliding, and to CFI Richard Crockett for setting all this up. The growing group of Condor contest flyers continued with their twice-weekly sessions, despite the availability of real flying.

Jane Moore

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

HAVING endured poor flying early in the year and being forced to stop flying on 22 March, our members were very keen to fly when solo flights were finally permitted. We returned to flying on 25 May and by the end of the week had 16 pilots, including several instructors, current on gliders. The week also gave eight of our tug pilots the opportunity to return to currency on towing. Our EuroFOX is now

back at the club, having been fitted with a new 115hp Rotax turbo to replace our 120hp Edge conversion, and our tuggies are keen to see how it performs. During the lockdown, we had a successful online open meeting with over 50 members participating. We then introduced a regular weekly Zoom chat session, which has also proved popular. Our AGM will now be held online in July.

Bill Brittain

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

LIMITED, socially-distant maintenance activities progressed during lockdown thanks to local members, with others being encouraged to partake of the illuminating BGA webinars. The vast majority renewed their membership, a great sign of faith in the club. Thanks to efforts by the chairman and club officers we were in a position to allow the majority of flying members to safely return to flight when the restrictions lifted. Members who cannot fly in the absence of the two-seaters were encouraged to support the operation in a safe manner. Everything is ready to support them when we can, including the new Bristol University DG-1001. The return to flight coincided with great weather, culminating in a remarkable O/R to Masham in Yorkshire by Trevor Stuart. His eyesight was not good enough to see Barnard Castle a further 38km north, perhaps he should be reported. Other flights to Devon and Cornwall were completed. Unfortunately, the Club Class Nationals were cancelled

Greg O'Hagan

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

WE ARE operating again according to Covid-19 control guidelines. Suitably experienced pilots are solo flying. The club has been active throughout the lockdown period, with over 90 pilots participating in our web lectures and Zoom meetings. We have had a lot of Condor flying taking place with our LSUGC members showing the way. Luka, our newest solo pilot – the day before the lockdown – has not wasted any time; studying hard he has completed his Bronze exams. Our treasurer, John Church, has joined a syndicate and converted successfully to their aircraft, a beautiful K-18. Various small teams have worked hard on our ground equipment and buildings. Matthew Barnard

(Left to right): Briefing on 20 May at Bath, Wilts & N Dorset; Darlton's predecessors were 40 years ahead of the curve in PPE, but don't know why ear defenders prevent coronavirus infection; Devon & Somerset's Dan Hender takes part in Condor races



led a team to paint our new logo on the hangar doors and Alan Middleton led the team to finish off Elsie (LC – Launch Control), our new airfield operations centre. Thanks to all those who have contributed to getting through this difficult period.

Danny Lamb

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

DURING lockdown we continued our cross-country training programme via Zoom, with a WhatsApp group to exchange thoughts and ideas. We set up also a whole-club WhatsApp group for sharing of information and as a medium for our 'Virtual Wheatsheaf' pub night. We resumed our wider lecture programme via Zoom and members engaged with the excellent BGA FRTOL course. Our committee has been meeting virtually with regular updates to members by email. The club's shout-box and website have also acted as important media for communication. Importantly, members' individual technology skills have determined their ability to engage with all that has been available. Plans have been adapted and grants obtained to keep us sustainable. We resumed flying on 18 May; all pilots who are not self-isolating, or require training, or require check flights have regained their currency. Sadly, we lost one long-standing member, Rod Salmon, who died in April. He was a 300km Gold distance holder, adept in glider maintenance, particularly wood, and was a very active member who will be missed.

Neil Bale

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

ALISTER Morrison has retired as an instructor. He has been instructing for longer than most of the members care to remember, and is responsible for making pilots out of many of our members. He has not only given much of his time and talent all these years, but has also done a lot of work at Portmoak and Milfield. Alister kindly and timously came to my rescue some years ago when he took over as CFI at a time that I really needed him, bad health having caught up with me. He was CFI for seven years after that and did a great job, only giving up to let present CFI, Mike Morrison, take the helm as Alister himself ran into health problems. Since then

he has always made himself available when we needed to bolster the instructor rota and seems to rarely get the chance of escaping to indulge in a good day of solo-flying. He owned a 17m Vega for a long time and hopes now to continue flying into the post-virus future we're all looking forward to. Thank you Alister.

Bill Longstaff

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

AFTER nine weeks of closure we are back flying again. For now we are limited to private owners and aerotowing with socially distanced rigging and gridding. During the lockdown we kept our spirits up with twice-weekly Condor racing, a virtual clubhouse hosting two video meetings a week, and a virtual quiz. Club officials have been working hard to minimise the financial cost and to prepare for a safe return to flying. Some of our valued staff have been furloughed and Andy Beatty generously took on the role of airfield caretaker. Congratulations to members Brian McBride, James Colville and Lucy Cotton on passing the Bronze written exam during this period. With regret we have decided to postpone the 2020 Gransden Regionals, but look forward to holding it next year.

Chris Davis

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

THIS has been a start to the season like no other, being on lockdown during the sunniest April/May on record. However, thanks to John Docherty and Barry Key for external essential work on the clubhouse. David Breeze, Mike Oliver and Chris Swann kept the airfield mowed, while Adrian Hegner has marked out the runway edges. Meanwhile, Robin Birch and others have completed essential maintenance on the club fleet, and computer-literate members have organised webinars. The committee has reviewed the club business model to ensure we remain financially secure. We have now resumed flying in single-seaters with launches by aerotow only and, already, experienced pilots have had some memorable flights. We look forward to the resumption of instructional flying and our summer courses and, hopefully, the Junior Nationals in August.

Frank Birlison

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

THE Covid-19 situation created some fantastic looking skies in recent months. Unfortunately, we have been locked down and unable to take advantage. At our last committee meeting via Zoom, one of our members, having flown his Jodel from a private strip (distancing rules of 3-4,000ft applied) said: "You do not want to know how much energy has been going up today!". (General groan!) Some of us have been Condor flying, but it would be nice in reality to be able to pick and choose thermals wind strength, wave and conditions generally. Where possible, we have taken the opportunity to update, adjust and generally improve our admin systems and prepare the club ready for take off again. Thanks to Luke, Tim and all involved.

Zeb Zamo

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

HAVING not been able to fly since October due to a very wet field, the sun came out and coronavirus arrived. After more than six months, we have managed to start flying again under very strict safety procedures. Our thanks must go to Al Docherty (CFI) for devising and supervising the operational safety procedures, allowing some of us to start flying solo again, and for his numerous emails with suggested reading on gliding during the lockdown. The club would like to thank Ron, Dave, John, Tim, David, Al and other members that have been going out to the club individually during lockdown to carry out essential maintenance.

BARRY PATTERSON

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

WE'VE been holding weekly ground school lectures on Zoom and have joined BGA webinars. Many members have been using Condor to get their flying fix and two members participated in a virtual Inter-Club League competition hosted online by the Scottish Gliding Centre. David Innes, deputy CFI, has been using Condor to continue with training of aspiring instructors remotely. Meanwhile, a few local members have also been completing essential maintenance on our fleet, with the new LS4 now ready to fly as restrictions are lifted. We resumed solo flying



(Left to right): In wet, winter months **East Sussex** made good use of its simulator running Condor 2 with the cockpit of an end of life K-8; **Essex's** Pawnee on its way back from a tow (Cathy Dellar); **Fenland's** CFI Paul McLean receives a trophy for RAFGSA member of the year from Andy Gough



on 29 May following easing of restrictions in Scotland, seeing 20 flights on that first day and more in the following days. We're looking forward to more restrictions lifting and still hope to run the UK Mountain Soaring Competition.

Steve Kenyon-Roberts

DERBY & LANCS (CAMPHILL)

WWW.DLGC.ORG.UK

531818N 0014353W

WE WERE able to start flying again on 19 May. Protocols were established. Small 'bubbles' were formed for each glider. Private gliders were the least problem. We have been able to get the majority of our solo pilots back in the air, even though many were outside our normal currency periods. Congratulations to Mike Armstrong for 300km and 500km flights in the last few days of May. We have been using Condor in the clubhouse simulator and running online Condor events three times a week. The group is known as the 'Camphill Condors' with over 20 club members involved from ab-initio to experienced cross-country level. Even though the lockdown is starting to ease, these events have continued and we have seen an increase in enthusiasm and belief in cross-country flying among the group. There are many other ways of using Condor to enhance learning at the club and remotely and these are now being actively explored to accelerate learning at all levels in the club.

Dave Salmon

DEVON AND SOMERSET (NORTH HILL)

WWW.DSGC.CO.UK

505107N 0031639W

AS SOON as allowed, DSGC's return to flying started with solo flights for those who met with CFI approval, and just a couple of 'same households' benefitting from the two-seater rule. Initially, everyone stayed local, and then the super cross-country weather enabled some good tasks to be set with really high cloudbases. Ad-hoc days were called where possible and many thanks to those members for running the operation, but still unable to fly. Meanwhile the Condor online racing group has been building some useful experience for those who haven't yet enjoyed real solo or cross-country flying. BGA webinars and the FRTOL course have been supported well by DSGC members – many thanks to those who organised them.

Jill Harmer

DORSET (EYRES FIELD)

WWW.DORSETGLIDINGCLUB.CO.UK/DGC504233N 0021310W

THE club reopened for solo flying on 16 May and we now have 19 solo pilots back flying on a regular basis, enjoying the current spell of sunny weather. In April, the Dorset Council awarded a Small Business Grant of £10,000 to the club, which was gratefully received. In order to develop their cross-country skills, a group of the members have been using the Condor software to compete around various tasks each evening. The club's EuroFOX is still for sale. If you would like to buy G-ODGC, please contact chairman Nick Barnes on 07793-203838 for more information.

Allan Powell

EAST SUSSEX (RINGMER)

WWW.SUSSEXGLIDING.CO.UK

505423N 0000618E

THE end of 2019 was disastrous as our field closed from mid-September due to water logging. Well, half our field; the other half was at the late stages of completing the installation of the first of two chalk-based runways. As the runway was being installed so were many land drains. These all worked well, so water logging is less likely to trouble us in the future. During late-February everything started to look good for us to start flying as the new runway was established well enough to use, but then came Covid-19. We kept a skeleton team of members busy during this period, working well in isolation to maintain our fleet in readiness for a return to flying. At the end of May we began flying again for solo pilots, our instructor team having to assess pilots, of which the majority were out of currency, to permit flying locally. At the beginning of May our contractors returned to site to start installing the second chalk runway and yet more land drains.

Mike Jeater

ESSEX (RIDGEWELL)

WWW.ESSEXGLIDING.COM

520253N 0003330E

AT THE time of writing, we have started the first few tentative flights whilst making sure that we can maintain social distancing, follow guidelines and keep everyone safe. Instructors were the first to regain currency followed by experienced solo pilots after some ground training tailored for each individual. We are happy to now have our Sim back in place so we can all gain some practice. Congratulations

to Nigel Potter, who passed his Bronze paper via Zoom, another first for the club. Thanks to CFI Alex for organising regular seminars and meetings, and for organising training to get as many people as possible flying again. Thanks also to club members for helping at the airfield, especially those not able to fly yet.

Cathy Dellar

ESSEX & SUFFOLK (WORMINGFORD)

WWW.ESGC.CO.UK

515630N 0004723E

IT HAS been a pleasure for some of our pilots to get back in the air. We began flying shortly after receiving the green light from the BGA and the DfT, after carefully reviewing the situation over the previous weeks. This ensured we had the relevant plans and procedures in place to ensure the safety of club members once flying resumed. We are now looking into ways in which two-seater flying may be possible with the hope of carrying out check flights for those solo pilots who are not self-briefing. A total of 154 launches in a little under three weeks and 170 hours of flying means our self-briefing pilots are making the most of the weather following the reopening of our club!

Edward Smith

FENLAND (RAF MARHAM)

WWW.FENLANDGC.CO.UK

523854N 0003302E

AS WITH all gliding clubs in the UK, Fenland has unfortunately seen an extended pause in operations. There have been a number of enquiries for potential new students, which is a very positive sign as we seek to grow the membership base. To support continuing operations we would like to put out a CALL FOR INSTRUCTORS. We are looking for Ass Cat or Full Cat instructors that are willing to support the club on a rota basis in order that we can provide consistency and flexibility to new students and maximise flying opportunities as they occur. If you are interested, we would love to hear from you. Please send an email of interest to cfi@fenlandgc.co.uk.

Matthew Clements

HEREFORDSHIRE (SHOBDON)

WWW.SHOBDOGLIDING.CO.UK

521429N 0025253W

STRANGE times, made easier with a virtual clubhouse hosted by Ken Powel, with quiz questions for pilots and non-flying-folk resulting in more concern about the humour than getting the question right. Add in some

(Left to right): Herefordshire CFI Rose Johnson delivers a socially distant brief – woe betides anyone who gets within 2m of her; Lasham grid on Sunday 1 June at the beginning of a brilliant day; frenzied rigging activity from around 1979 at Peterborough & Spalding (Kev Fear)



excellent webinars, Zoom events and the brilliant FRTOL course. Condor has kept people's eyes off some of the stunning weather we have suffered recently. We were back in the air on 19 May. Herefordshire Aero Club were only operating a couple of days a week, but after securing Out of Hours authority the gliding club could operate seven days a week. Several days of good flying led up to 31 May; Ian Evans completed a 500km and Martin Clarke got his Silver height. We had 16 gliders up at the same time; given this size of the club that's a huge achievement. Thanks to all those who have organised and participated in the extracurricular activities, or enabled others to fly, particularly Rose Johnson who gave up several opportunities to allow others to have fun in the air.

Bob Pye

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

PROBABLY the best lift of this year was the lifting of lockdown on 29 May. We lost no time in getting operations back online, albeit with social distancing and disinfection procedures. There was good co-ordination between the BGA and our fellow Scottish clubs in getting everything in place. We were able to access a £25,000 grant from the Scottish Government, which helped immensely with our cashflow. We have finalised plans to install solar panels on the clubhouse hangar roof and this should save us around £2,000 per year in electricity costs.

John Thomson

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

WE RESTARTED aerotow solo flying at Kent at the end of May, enabling some of our members to get back in the air, while taking extensive precautions to minimise the risk from the virus. Some excellent maintenance work has been done on our aircraft, equipment and around the club and thanks to all members who helped, especially those who sanded down the clubhouse. A tough job made even harder by the need to continually keep distant from others. We hope that the situation continues to improve over the summer and we look forward to more normal times and a return to the fun of our gliding club in its full form.

Mike Bowyer

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

AS I write, the airfield is still closed to gliding. Peter Lewis, our liaison officer with BAE, keeps us informed on the progress towards us flying again. We are a small club with some 70+ members, so it will be a restricted start when we do open. We use WhatsApp to chat amongst our members. Andy Tebay has hosted two meetings on Zoom. The first a general chat on how each other are coping with Covid-19. The second was a committee meeting to plan for the future. Graham Sturgen has put together our Covid-19 policy for when we start flying.

Peter Craven

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

WHILST lockdown has had a significant impact, the airfield has been kept in fantastic condition by our small essential team of staff, who remained working during lockdown to ensure we would be ready for re-opening. The Gliding Heritage Centre has been continuing its build at a pace of its new workshop, which stands as a legacy for member Trish Williams, who sadly passed away last year. Since re-opening in mid-May, with a temporary aerotow only operation for qualified solo pilots under strict social distancing protocols and restricted club facilities, we've had fantastic soaring conditions for members to take full advantage of, including some badges and a potential record flight and we continue to plan to be ready for the next phase as government advice is updated.

Jordan Bridge

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

TYPICALLY, the lockdown coincided with excellent soaring conditions. Luckily, they continued for a couple of weeks after solo flying recommenced. We have got into a new operations routine, which enables members to fly solo or dual if with a member of the same household. At the same time we still have many members self-isolating and, of course, we are still unable to offer dual instruction. Thanks to local volunteers we have managed to keep up with various maintenance tasks around the club. Our series of Wonder Wednesday online events

('wonder when we will be flying again') have been very well attended and, thanks to Condor, we have had several cross-country entertainments. At the time of writing we remain hopeful that the Dunstable Regionals (22-30 August) will still be able to go ahead.

Andrew Sampson

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

IT WAS good to commence flying again on 24 May. Our CFI, Simon Withey, and chairman Rod Coombs prepared an online safety briefing, including the protocol for sanitising club equipment and complying with social distancing. Mandatory attendance prior to start up was required. Simon also instigated a colour card system to assign pilots into groups subject to recency/currency records to regulate who could fly solo without a check flight, after a one-to-one briefing by the duty instructor. Thanks to the hard work of our chairman and treasurer Jeff Green, MGC was awarded a £10K grant from the Coronavirus Small Business Relief Fund, and £6K from Sport England Community Emergency Relief Fund. Condor 2 has continued to be a great source of virtual flying, with several of our ab-initios doing very well on simulated cross-countries. We have had a number of Silver badge claims; duration by Andy Harryman, and heights from Laurie Penrose, Mike Spalding, John Connor and Rob Grady. We look forward to the resumption of two-seat flying.

Barry Hogarth

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

OUR committee members have been working overtime to draw up temporary operating rules, in a rapidly changing environment. Currently, single-seaters are flying again and we hope it will not be too long before we can return to something resembling normality, whilst keeping safe and working within the regulations. Meanwhile, Thursday evening lectures on Zoom are very popular and have included topics such as planning cross-country flights, meteorology and, most recently, purchasing and owning a glider, including maintenance and also advice on setting up a syndicate. The MGC WhatsApp group continues to grow in popularity and on Friday evenings, the 'virtual bar' is the place to be!

Steven Gunn-Russell

▶ **SAILPLANE & GLIDING**
AUG/SEPT 20

▶ **NEWS**
CLUB NEWS



(Left to right): Gary Western took this picture from his K-8 during his first soaring flight after lockdown from **Rattlesden**; **Seahawk's** first autotow and aerotow launches back after lockdown on 23 May; looking down on **Edgehill** in August 2019 (Tess Whiting)



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

FINALLY, we are allowed to take to the air again. Even if we can't go very far it is a least a step in the right direction. Previously we entertained ourselves with a quiz once a week thanks to James Francis. The BGA webinars, YouTube gliding videos and an in-house chat line called 'Pee'd off Pilots', which has been quite a laugh. Thanks go to Mark and Gerry for keeping an eye on the site during lockdown and making sure the kit still works.

Adrian and Barbara Prime

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

WE REMAIN in this strange Covid-19 limbo of Zoom calls and online meetings as we keep our members engaged whilst we return to flight under new rules. Grateful thanks to Martin and the committee for all their hard work in documenting the previously unthinkable – clearly it is paperwork not airflow that makes aeroplanes fly. We were saddened to see the demise of our neighbours at Bicester and have extended many offers of help both as storage and as a new club to call home where members will be very welcome. We have reached agreement with Oxford University Gliding Club (OUGC) to allow its members to fly with OGC when Bicester closes at the end of June and we look forward to welcoming OUGC back to OGC after many years apart.

Norman G Nome

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

WE EVENTUALLY saw the return to flying and, despite restrictions, have been making the most of 7,000ft cloudbases and climb rates to match. Part way through the lockdown we decided to have some work completed on our Pawnee, not thinking that a return to flying would be so soon, which left us with the aircraft having its elevators being refurbished; in addition our Husky engine is still being repaired and waiting for the new crankcase from the US. Hopefully both aircraft should be back in service soon. A great example of neighbourliness from Saltby GC, who have supplied us each weekend with their spare tug, so a massive thank you. Our Grob Twin and two Astirs should also be back in the air after

the latest AD on the elevator control rods. Our membership has remained surprisingly constant considering all of the turmoil; there are several individuals who for very obvious reason are unable to fly, but nevertheless have remained loyal to the club.

Roland Pitch

RATTLESDEN (RATTLESDEN)
WWW.RATTLESDENGLIDING.COM
521001N 0005216E

VERY slowly we are getting back to doing a bit of gliding for the more experienced pilots. Hopefully before long we can get back to some sort of two-seater flying for our more inexperienced pilots. The weather throughout most of the lockdown was glorious. However, we were rewarded on our first few days back with blue, but glorious, soaring conditions. Gren Croll and Alex O'Keefe did their usual and disappeared for hours exploring the beautiful East Anglian countryside while the rest of us stayed a bit more local. We took the advice of the BGA and took advantage of applying for a government grant from the local council. This was very straightforward to apply for and you can imagine my surprise and delight when some weeks later we received payment for the full allowable amount. This money has and will be put to good use keeping the club afloat and for making purchases of items we did put on hold due to the current situation.

Gary Western

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

DURING lockdown some members have been flying tasks on Condor. Now we are back flying for real, solo only at present, with strict social distancing and hygiene measures in force. At present we are limiting the number of pilots on site to 30 using an online booking system. Most of the staff have been furloughed, with Martin and Steve Codd (our summer course instructor, also a glider inspector) holding the fort. Members have also been cutting grass, filling in rabbit holes and redecorating the clubhouse. The CFI and SGU board have been working flat out to ensure the survival and long-term success of the club. And, most importantly, having had a share in DG-300 393 since Autumn last year, I got to fly her at last (now there are two ladies in my life!).

Chris Robinson

SEAHAWK (RNAS CULDROSE)
WWW.SEAHAWKGLIDING.CO.UK
500509N 051520W

MOST of the period has been affected by the Covid-19 lockdown, however, once the go ahead for workshops was issued, the Thursday Warriors were able to progress the outstanding ARC work on our single-seat gliders. Club flying recommenced on the third weekend of May – solo only. Fortunately, the majority of the solo pilots last flew in mid-March so, with careful briefing and choosing a benign weather day, we were able to get the majority airborne again safely and while following the Covid-19 restrictions. This group of pilots, including the instructors, will allow the club to keep current and be in a good position to recommence training once the limitation on two-seat flying is lifted. All we need now is for the weather to be kind!

Chris Bryning

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

WE HAD a couple of people locked down on site; thanks to Sean and Charlie, who have been continuing some of the maintenance on club buildings and vehicles during this period. Our committee and, in particular, our treasurer Christine have been very busy trying to manage club finances and we have been successful in applying for a grant from our local council. Sadly, the proposed merger with Bicester GC will not be going ahead, though we will be welcoming some of their members to fly with us. Thanks to members who helped check over the fleet just prior to the relaxation of lockdown. Members have been flying solo, but we can't conduct our normal midweek instructing operation under current rules; there is still midweek flying with supervision on some of the better days. Our 2020 Regionals is currently postponed until 15-23 August. Congratulations to Lech Zakrzewski and Alan Langlands, who have gained their BGA inspector ratings this spring.

Tess Whiting

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

SOON after a perfect and unexpected wave day in mid-March, northerly winds arrived at Parham, but to no avail. The equally unexpected arrival of the coronavirus pandemic inevitably led to the closure of the

(Left to right): Social distancing outside the clubhouse at **Southdown**; lockdown and **Wrekin's** Colin Haynes is downwind, left hand, for Heathrow Runway 09L; **Yorkshire's** deputy CFI, Mike Howey, lands on the 'spot' after his first check flight



airfield. A virtual reality competition gave members the opportunity to relieve their frustrations without the usual risks. Judging by the number of virtual outlandings, it would appear that a degree of recklessness was creeping in. Full marks to the committee, who have been active in keeping up our spirits. Solo pilots, who are current, have been able to take advantage of the fine weather and northerlies at the end of May. June brought big fat thermals and James Hiley set a fine example with a five-hour flight. Sadly, training of our new young ab-initios has been put on hold for the duration. We are building a classroom extension to the new clubhouse and all ground studies will be taught there. This will leave the club room entirely free for post-flight banter, tall stories and club socials.

Peter J Holloway

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

IN WALES, as well as having to cope with UK-wide restrictions, our members have been subject to more prolonged restrictions on travel than in England. Nevertheless we are surviving financially, thanks partly to many members who have continued their monthly standing order payments. We look forward to resumed flying before too long, albeit aerotow only, no winching, and just for very experienced, reasonably current single-seat pilots until we are eventually able to fly two-seaters again. Meanwhile, Scott Hazeldine and others have kept the grass cut, Geoff Williams has held an online quiz and at least one group of members regularly soar competitively online using Condor.

Stuart Edinborough

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

WE HAVE been busy with some interesting things since the last issue although bad weather followed by lockdown has put the mockers on the main object of what we do – flying – but even that has begun again, albeit for more experienced pilots. However, gratitude must go to those members who can't yet fly, but still turn up to help others. On another note we have recently signed a new 40-year lease on our site, securing gliding at Seighford until 2060. Four of our members attended the BGA FRTOL course and found it really helpful and our CFI Paul

Whitters has been doing Bronze coaching on Zoom, with those attending finding it both challenging and useful. We await a return to two-seater flying.

Graham Stanford

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

GLIDING is more than flying and with flying not available due to lockdown we have been busy trying to maintain the social side of our club using a 'virtual club room' and a Facebook group. Several members have been busy working on their Bronze theory, others have been following the FRTOL course, and there has been a lot of flying on Condor. We managed to keep on top of airfield maintenance so that when rules were relaxed we could start flying with minimal delay. Now we are back in the air and enjoying fantastic soaring conditions. Hopefully we will be able to start instructing very soon. Our courses are still on hold until we know more about when we can instruct and what the rules will be. Our Wooden Wings Week is scheduled for 19-25 July, but whether we can go ahead with it will depend on how things develop.

Andy Balkwill

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

SINCE the last issue we have lost two colleagues: Simon Cousins, a lifelong policeman, died after contracting coronavirus, and Peter Bolton, an ex-chairman of the club, died suddenly a couple of weeks later. We send our thoughts and prayers to their families and friends. We have now got the majority of our solo pilots back in the air, thanks to hard work from Richard Fitch, our CFI, and the committee in general. We now look forward to the rules being relaxed so the training flights and public flying can resume. We had a successful online AGM, with at least as many members attending as in previous years, and we continue to have weekly open clubhouse electronic meetings as well as regular social media and email communications.

Chris Leggett

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

THE lockdown has not prevented progress with preparation for the move of the club

to Shawbury. Joint monthly meetings take place with RAF Shawbury and we have an action plan for the move, tentatively planned for September 2020. Essential basic administration and maintenance has continued, but, with civilian clubs making an earlier start than here at RAF Cosford, some members have been able to take advantage of their dual membership to get ahead. Some have found the BGA online tutorials a good source of knowledge whilst for others Condor has filled the gap, the more ambitious even making a landing at Heathrow!

Geoff Catling

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

SINCE the club ceased flying we have taken steps to implement ways of minimising outgoings to reflect the inevitable drop in flying revenues. We've also taken the opportunity to carry out essential maintenance and the airfield is looking magnificent! For many members, the only gliding 'fix' has been through online channels, such as the excellent series of lectures presented by experienced pilots from all over the UK. As we start June, we have returned to very limited flying by solo pilots who are able to maintain social distancing. For those needing dual flights it remains unclear as to when we can expect to be airborne. We remain optimistic!

Andy Carden

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

DURING our eight-week shutdown, lots of use of our Virtual Soaring Club and lively chat on WhatsApp kept club atmosphere going. Then, 20 May saw solo flying within strict protocols. In the next week, more than 30 of our experienced pilots took to the sky. Eagerly they flew locally multiple times playing with prevailing wave conditions, which allowed Mark Newburn and Martyn Johnson to top 10,000ft. As confidence in operations within the guidelines grew, cautious cross-country flights resumed in the continuing good and sometimes blue soaring conditions. Meanwhile, the restricted flying enabled the north runway drainage project to near completion in anticipation of the further lifting of restricted operations.

Ken Arkley



Photo: Roger Fielding

> CLUB FOCUS

DERBY & LANCASHIRE

AT A GLANCE

Membership:

Full: £470pa
Student: £145pa
Under-18: £95

Launch type:

Winch: £9

Club fleet:

3 x Puchacz, 2 x K-13,
2 x K-18, 2 x K-8, T-21

Private gliders:

35

Instructors/Members:

18/130

Types of lift:

Ridge, thermal, and wave

Operates:

Seven days a week in
summer, six in winter

Contact:

Office: 01298 871270
Clubhouse: 01298 871207
Launchpoint: 07977 850208
www.glidingclub.org.uk

Long and Lat:

531818N 0014353W

Radio:

Camphill Base on 129.980

THE origins of the club go back to 1935 when the Derbyshire Gliding Group and the gliding section of the Manchester Aeronautical

Society joined together. After an itinerant period, the club took a lease on Camphill Farm, where it has been ever since, buying the freehold in 1990.

We are in the Peak District National Park, situated at about 1,300ft, with a main west-facing ridge and with south and north-facing ridges that can be reached easily from a winch launch. Slightly further away are other ridges working in almost all wind directions. Thermals are plentiful, perhaps a little tighter than further south, and wave is often flown in.

There are bunkrooms, dining room and kitchen, and a clubroom and bar, all converted from the original farm buildings. We have a simulator based on a Janus cockpit and using Condor with three projectors. This is being slowly integrated into the training programme.

We have a very well-equipped transport workshop and an excellent aircraft workshop where the club gliders are maintained and inspected, as are some private gliders.

Each year we host a Vintage Rally; there is ample room for camping, camper vans and to park rigged gliders, joining our own T-21. Launching is by two Skylaunch winches, using Dyneema cable.

Visiting pilots are always welcome, we have reciprocal membership with many other clubs. Club or single pilot expeditions are very welcome.

Normal operations are seven days a week from around March to September, when professional staff are there to help you fly. For the rest of the year we operate six days a week with volunteers.

Although there is a lot of CAS (controlled airspace) around, much of it is high enough not to be a problem, and we have agreements with Scottish to allow wave climbs and airway crossings, and with East Midlands.

Dave Salmon



Photo: Dave Upcott

The BGA Team and General Information



Executive Committee

Chairman

Andy Perkins
chairman@gliding.co.uk

Vice Chairman

George Metcalfe

Executive Members

Nick Garland, Peter Hibbard, Matt Page,
Peter Bennett, Rebecca Bryan,
Bill Brittain and Richard Brickwood

Treasurer

Anthony Smith

Company Secretary

Anthony Smith

HQ

Tel: 0116 289 2956
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
Luke Walker luke@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

Alan Langlands

British Gliding Team Manager

Graham Garnett

Development

Dave Latimer

Development Officer

Alison Randle
alison@gliding.co.uk

Aim Higher

Kevin Atkinson

Schools and Colleges Lead

Yvonne Elliott - *via the BGA office*

Operations

Safety

Tim Freearde

Airspace

Pete Stratten

Instructing

Colin Sword

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>

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 email: office@gliding.co.uk

COCKPIT MUDDLE

BGA safety team highlights danger of control confusion

A 1947 paper by P M Fitts and R E Jones [1] is regarded as seminal in the field of human factors or ergonomics [2]. It established 'pilot-error' as a natural consequence of stress and workload and, by analysing 460 cases from WW2, found categories of errors that could largely be eliminated through cockpit design and standardisation. Half were *substitution errors*, in which the wrong control was operated; a further six per cent were *reversal errors*, moving a control in the wrong direction.

Seven decades later, our accident reports continue to describe the same errors. Since 1974, more than 70 gliders have been damaged, including six destroyed. Ten pilots have been injured: one fatally and one

STRAIGHTEN
UP & FLY
RIGHT

seriously. Despite a decline in gliding over this period, the accident rate from control confusion has not fallen significantly. Sadly, we still don't have a proper solution.

Reaching for the wrong lever

Skilled activities, Fitts and Jones explained, involve actions that are coordinated and automatic: a motorist need not look when moving his or her foot from accelerator to brake. Yet the authors found that even hugely experienced pilots were seldom sufficiently familiar with the controls of a particular cockpit to avoid occasionally operating the wrong control. The arrangement of throttle, mixture and propeller levers was a particular problem, and the adoption of distinct shapes in a standard layout was the suggested solution.

The most common substitution error amongst glider accidents is to use the undercarriage lever instead of the airbrake. Since the wheel has little effect upon a glider's approach path, the pilot is unable to steepen the descent, and the glider typically flies the length of the landing field, crossing the far boundary with significant height and often subconsciously increased airspeed. It is not unknown for a pilot to attempt two or three landings on the chosen field before coming to a halt. This nearly annual occurrence almost always damages the glider – usually seriously – and, while most pilots have survived unscathed, it must be utterly terrifying when the aircraft fails to respond to the control so near to the ground.

The problem is almost entirely limited to a single fuselage design, with the ASW 19/20

and Pegase accounting for 30 of the 35 events (and the only accident from using the undercarriage for flap), and the ASW 15 for three of the remaining five. Sadly, we cannot change the design of such lovely aircraft [3].

There have been 17 cases of using the flap instead of the airbrake. This can steepen the glideslope, but rarely enough to avoid the same result. A nasty consequence is that, if the pilot decides to put the 'airbrakes' away to turn at the far end of the field, the negative flap causes a sudden loss of lift that in some cases can stall the glider.

Fitts and Jones suggested that substitution errors might be reduced by ensuring adequate separation between controls, but, although positioning controls to avoid confusion is now a design requirement [4], glider designers have few options when cockpits are tight and control-run options limited. The authors also suggested that controls should have different shapes and modes of operation (eg turning rather than sliding), and aeroplane design codes now specify particular shapes for undercarriage, flaps and engine controls [5]. Many gliders do not distinguish, although some pilots have found their own solutions [3].

Confusion is not limited to similarly shaped controls, though. Pilots have used trim levers and release knobs instead of airbrakes; flaps, undercarriage and trim instead of the wheelbrake; flap instead of trim; trim instead of release; and the canopy jettison instead of the ventilator.

Moving the right lever the wrong way

A further principle of cockpit design is that controls should act in an intuitive sense. Pushing the stick, trim, airbrake or flap lever, throttle, carburettor heat or mixture control will generally help a post-war glider or aircraft speed up. To arrest our descent in the round-out, however, we can move the stick backwards or the airbrake lever forwards. Whether for this reason we do not know, but six pilots have opened airbrakes when they intended to close them. Poor currency and inexperience may have contributed.

A more direct problem occurs when the stick and airbrake or spoiler layout is



Left internal side wall of an ASW 20

**IT IS NOT
UNKNOWN
FOR A PILOT
TO ATTEMPT
TWO OR THREE
LANDINGS ON
THE CHOSEN
FIELD BEFORE
COMING TO A
HALT**

reversed, as in one or other seat of many side-by-side aircraft such as the T-21 and Grob 109. Nine aircraft have been damaged from the resulting confusion.

Uncertainty about the sense of a control has also caused many wheels-up landings.

Warning devices

Short of buying a different glider, there's little you can do to change the arrangement and action of different controls. Even changing the shape and feel of the handle would require airworthiness approval to ensure security and check for possible interference.

If mis-operation cannot be engineered out of an aircraft, the next recourse is to interlocks, sensors and alarms [6]. A warning might sound, for example, if an aeroplane's landing flap is extended before the landing gear has been lowered; or weight on the undercarriage might prevent its retraction.

Unfortunately, alarms can have unintended consequences, and previous accidents prompted the BGA to advise against fitting undercarriage warnings to gliders [7]: it is safer to land wheels-up than try to lower the wheel on approach. Few other control combinations would provide useful alerts, though a warning that the undercarriage is unlocked might have value.

Confirmation bias

The pilot is likely to realise immediately that the control is not having the intended effect, and in many cases will quickly correct the mistake. The trouble occurs when the pilot assumes that the problem lies elsewhere: strong lift or sink, or control failure. If the circumstances can be made to fit the erroneous assumption (*confirmation bias*) the pilot does not address the true problem, which persists, worsening the situation and increasing stress, urgency and panic. These in turn are known to reduce one's analytical ability and prompt a reversion to reflex responses and rehearsed actions.

The holes in the 'Swiss cheese' [8] are starting to line up. After standardisation, design and warning devices, the remaining barriers against an accident are down to the pilot. If we are not to rely upon the presence of mind of a flustered pilot with an incorrect diagnosis, that leaves only procedures, training and preparation.

Procedures and training

Procedures can help avoid grasping the wrong control. Airworthiness inspections ensure that the control handles are

differently coloured, and the BGA trains to 'Identify and take hold of the airbrake lever' on the diagonal leg [9], well before it's needed for the final approach. If we look at the lever and check its colour (a good idea with any control), we should be well set up. Some countries include a downwind test of the airbrakes: it's mainly a check for icing after high altitude flight, but will also reveal if you've used the wrong control.

Procedural checks can fail: a straight-in approach has no diagonal leg, and the pilot might adjust another control after correctly selecting the airbrake.

Preparation

We're trained to consider *eventualities* before we launch, to prepare ourselves mentally for possible scenarios like a wingdrop or launch failure, and to decide in advance what our actions will be – release the cable or lower the nose, ensure airspeed and, if necessary, turn in a given direction. If stress affects our ability to analyse, we might at least be able to carry out a prior plan.

Pre-flight Threat and Error Management (TEM) might prepare us for some control confusion situations. This is particularly important on conversion flights: nearly one in 10 of these accidents were amongst the first six on type. Pilots of susceptible aircraft in particular might decide that:

- if the undercarriage isn't down on approach, I'll land wheels-up
- if the airbrakes don't steepen the descent, I'll look to see whether they're deployed/ check I'm holding the right lever
- if there's strong sink, or a long ground roll on take-off, I'll check the airbrakes
- in a side-by-side aircraft, I'll fly from the seat with conventionally-handed controls; or
- the other pilot will fly the approach.

The last is an example of Crew Resource Management – the extra layer of defence against errors that's available in multi-pilot operations.

We can't measure the effectiveness of TEM at preventing or mitigating accidents, but it's considered a valuable approach. If all this fails, though, our accident records suggest one final pre-flight decision:

- if I can't control where I land, I'll at least keep flying the aircraft to the ground.

Controlled flight into a forgiving object is usually survived by the pilot, if not the glider.

Tim Freearge and the BGA safety team

■ Clubs can obtain printed copies of Safety Briefings from the BGA Office.

SEVEN DECADES LATER, OUR ACCIDENT REPORTS CONTINUE TO DESCRIBE THE SAME ERRORS

■ The video *Of Men and Machines* [2] is a fascinating account of the pioneering days of human factors or ergonomics. For more specific information, see the BGA's *Managing Flying Risk* [7] and *Instructor Manual* [9].

- [1] P M Fitts and R E Jones, *Aero Medical Lab Report TSEAA-694-12* (1947) <https://tinyurl.com/flyright2019>
- [2] *Of Men and Machines*, Nat. Educ. Television & Am. Psych. Assoc. (1962) <https://tinyurl.com/flyright2020>
- [3] BGA Safety Alert (2010) <https://tinyurl.com/flyright2021>
- [4] EASA CS-22.777 <https://tinyurl.com/flyright2022>
- [5] EASA CS-23.781 <https://tinyurl.com/flyright2023>
- [6] E L Wiener, *NASA Report 4547* (1993) <https://tinyurl.com/flyright2024>
- [7] BGA *Managing Flying Risk* <https://tinyurl.com/flyright2025>
- [8] J Reason, *BMJ* 320, 768 (2000) <https://tinyurl.com/flyright2026>
- [9] BGA *Instructor Manual* section 14-7 <https://tinyurl.com/flyright2027>

PREVIOUS 'FLY RIGHT' ARTICLES

The Perils of Distraction (Apr/May 19)
Keeping Safe in Thermals (June/July 19)
Why It Is Good to Think Ahead (Aug/Sep 19)
The Effects of Wind Gradient (Oct/Nov 19)
A Fun but Safe Introduction (Dec 19/Jan 20)
Stop the drop (Feb/March 20)
Avoiding Upset (Apr/May 20)
Backroom Boys (June/July 20)

BGA accident/incident summaries

AIRCRAFT Ref	Type	Damage	Date, time	PILOT Injury	P1 hours
4	Puchacz	substantial	09/10/19, 14:00	none/none	not reported
Undercarriage frame tubes fractured. The glider made a normal landing onto the grass landing area but when the pilot applied some wheelbrake a loud bang was heard and the glider quickly stopped. The two port side support tubes in the undercarriage frame had fractured just above the axle housing, the starboard tubes had then bent inwards. The glider had to be de-rigged on the runway. The maintenance engineer suspects previous damage.					
7	Grob Astir	minor	13/10/19, 11:15	minor	134
Broken canopy. PIO on final approach ended with a heavy landing. The pilot's head hit the canopy, breaking the canopy and leaving the pilot with a stiff neck. The FLARM trace and eye witness accounts report that the approach was flown at at least 70kts, despite the light wind.					
9	LS4	minor	09/10/19, 13:35	none	17
Landing gear collapse. The pilot reports lowering the undercarriage during his pre-landing checks and physically checking that the lever was in the down and locked position. After touching down on the runway the wheel retracted and the glider scraped to a halt, damaging the underside of the fuselage.					
10	SF 25C	minor	22/10/19, 11:15	none/none	1313
The engine started to run rough during the take off ground run so the P1 closed the throttle and stopped the TMG on the runway. The engine had blown a valve.					
11	Grob 109	minor	19/11/19, 14:00	none/none	not reported
Engine failure during circuit training. After flying a go-around, the TMG turned onto the crosswind leg but, at about 700ft agl, the engine note changed, there was a smell of burning and the engine lost power. After landing on the runway the engine stopped completely. Having removing the cowlings, the pilots found that the silencer had cracked and the rest of the exhaust was missing. The CO2 detector had also changed colour.					
15	Jabiru Junior	substantial substantial	27/10/19, 14:20	minor/minor	not reported -- --
Collision with parked glider. The Jabiru was on approach to land when it struck the Junior, which was parked in the winch queue. See AAIB monthly report 5/2020.					
18	K-21	substantial	10/11/19, 11:20	none/none	2,188
Glider hit tree. The glider took an aerotow intending to do some stalling exercises; during the tow some low cloud with a base around 1,300ft agl was encountered a few miles upwind of the airfield. The glider released at 2,000ft agl abeam the airfield before turning downwind to conduct the stalling exercises, including stalling in a turn. At the completion of the exercises the glider was nearly 6km downwind of the airfield. The P1 took control for the glide back to the airfield. He judged that the trailers near the airfield entrance were "very, very slowly" moving down in the canopy while flying at a constant airspeed so assessed that they would be able to glide back to the airfield. Even after passing through a small drizzle shower the P1 felt confident that they would reach the airfield. As they approached a line of trees about 400m short of the airfield the glider suddenly lost height, possibly due to curlover, and the glider lodged in the top of the trees. Neither pilot was injured, but the pilots had to be extracted by the emergency services, the glider was later removed by crane.					
20	Grob 102	substantial	07/11/19, 14:55	none	205
Glider hit vehicle during landing ground run. Due to the wet ground the launchpoint was positioned further down the runway than normal, leaving about 400 metres of runway available for gliders to land and stop short of the launchpoint. The glider landed close to the end of the runway, but the pilot allowed the glider to continue rolling to minimise the retrieve distance. By the time he noticed the vehicle it was too late to stop or turn. One wing hit the vehicle, yawing the glider until the nose struck the car. The wing suffered some compression damage to both the lower and upper surfaces, a cross tube support bracket in the fuselage was dis-bonded and there was some scuffing damage to the nose. The pilot reports that the vehicle was not there when he moved the glider into the launch queue and that he had seen other pilots extend the landing ground run and thought that it was a good idea.					
23	K-21	minor	16/11/19, 11:50	none/none	1,000
Tailwheel tyre damaged. After a 4,000ft tow and an aerobatic training flight, the P2 set up a circuit. Both pilots recognised that the glider was high on approach, but the P2 felt that, at worst, the glider would be landing long. The P1 took control at about 200ft agl and initiated a steep sideslip. Although the P1 took off the sideslip before rounding out, a bang was heard from the rear of the aircraft as the glider touched down. The tyre had been torn off the rim of the tailwheel and the glider was taken offline until the tyre could be replaced.					

BGA accident/incident summaries *continued*

AIRCRAFT Ref	Type	Damage	Date, time	PILOT Injury	P1 hours
Incidents					
5	PA 25	none	12/10/19, 13:35	none	428
Tug field landing after engine failure. The aircraft had been refuelled and the oil levels checked before the flight. The pilot reports the engine running roughly after applying carburettor heat during the descent, but then settling down for the rest of the descent. When the pilot reduced power and closed carb heat on the base leg, the engine started to cough, black smoke entered the cockpit and all engine power was lost. Pumping the throttle had no effect. After turning onto final approach, the pilot applied full flaps and sideslipped into a field short of the airfield. By holding off as long as possible the pilot was able to prevent the tug from nosing over in the soft ground. Leaning the fuel supply did not stop the engine so the pilot had to turn off the magnetos.					
6	Pilatus	minor	02/10/19, 15:00	-	-
Towing incident. After landing on the airfield, club members brought the pilot's tow gear to the glider and towed it off the landing area behind a campervan. As he unhitched the glider the pilot noticed some slight damage to the trailing edge of the elevator. After looking further he noticed that the top of the fin had been twisted and the trailing edge buckled. The tow gear had adequate clearance when the glider was towed behind a car or SUV, but the higher rear end of the campervan caught the edge of the elevator when turning.					
8	SZD 59	minor	12/10/19, 11:50	-	-
Towing incident. The pilot was towing his glider between a line of parked cars and a parked glider. His attention was mostly focused on keeping clear of the parked glider and he didn't notice that one of the cars was closer than the others. One wingtip caught on the car and the tail dolly was pulled off the towbar. The tip of the starboard tailplane was damaged and the port side of the fin under the tailplane spar was split.					
12	EuroFOX	none	17/10/19, 13:40	none/none	12,000
Engine failure. The tug had just had a new engine fitted and was being flown on its annual Permit to Fly renewal flight test. At about 3,000ft agl the oil pressure dropped to zero and the oil pressure warning activated. The pilots noticed some oil smoke coming into the cockpit and opened the vents to clear it. The power was reduced and the pilots headed back to the airfield, but after a few minutes the engine began to run rough and then stopped. The pilot made a safe field landing two miles from the airfield.					
13	Junior	none	19/10/19, 15:10	none	-
Airprox between soaring gliders and parachutists. The reporting pilot was heading towards another thermalling glider when he saw a parachute open "very close" to the other glider. He turned away and then later started his circuit but as he turned onto final approach he saw another parachute heading straight towards him, about 50-100ft above him. The gliding airfield is located within the ATZ of a nearby airfield with a parachuting operation; on this day the gliding club was upwind of the parachute airfield. The club had a code of practice agreed with the previous operators of the parachute centre, but had not yet had a chance to meet the new parachuting operation.					
16	Grob 103	none	27/10/19, 10:40	none/none	961
Landing run too close to the launch point. The instructor requested that the winch driver initiate a launch failure at a random height. The P2 reports recovering from the launch failure and preparing to land ahead before the P1 took control. The watching CFI was also expecting the glider to land ahead and was subsequently surprised to see the glider turning sharply to the right at low level before setting up an approach to land in the narrow gap between the launchpoint vehicle and the airfield boundary. Marks left in the soft ground show that the glider first touched down 35 metres west of the launchpoint vehicle, but bounced slightly and remained airborne. The glider was now running out of landing room so the P1 started a turn to the left. The wingtip skid touched the ground 3m from the launchpoint bus and missed the back of the bus by 2m. The glider landed again 30m east of the bus and bounced a couple of times before its final touchdown ended in a skidding turn to the left.					
17	Duo Discus	none	30/10/19, -	none/none	407
Landing runway over-run. The pilots were part of a club expedition to a wave site when the P1 was asked to fly an aerotow instruction flight with the inexperienced P2 in the Duo. The P1 had not instructed from the rear seat of the Duo before, nor had he instructed at this site before. However, he rationalised that he was current at this site in his own glider and the P2 was a Bronze level pilot. The pre-flight briefing focused mainly on the take-off, but the circuit and landing was also discussed, although approach speed in the light wind was not covered. At the end of the flight the P1 let the P2 plan and fly the circuit to assess his judgement. The downwind leg was extended but, even so, both pilots recognised that they were slightly high on the approach and the P2 recalls increasing the airbrakes. The P1 reports that the approach was flown at 65kts, the P2 reports maintaining the reference point before starting to round out at 65kts. The glider touched down in the second half of the runway, but bounced					

Continued on p66

BGA accident/incident summaries *continued*

AIRCRAFT

Ref	Type	Damage	Date, time	PILOT Injury	P1 hours
-----	------	--------	------------	--------------	----------

Continued from p65

slightly. The P1 took control when the glider touched down again and immediately applied maximum wheel brake. The glider drifted off the right side of the runway and as it approached the steep slope at the end of the airfield the P1 groundlooped the glider, which subsequently rolled slowly backwards down the slope. The P1 suggests that he should have taken control during the final approach, but that he had not fully appreciated the implications of light wind when landing on a short runway.

19	K-21	none	19/10/19, -	none/none	1000
----	------	------	-------------	-----------	------

Rope break during aerotow. The glider got out of position during the tow and the P1 prompted the student. The P2 was able to get back into position, but there was now a bow in the rope. The rope broke as it tightened at the same time as the P2 pulled the release.

21	Ventus 3	none	29/11/19, 10:00	none	8,000+
----	----------	------	-----------------	------	--------

While flying abroad the pilot needed to make a rapid descent so selected negative flap, full airbrake and accelerated to about 120kts. Once down to about 3,000ft agl he found that he was unable to reduce the airbrake by more than 10 per cent so prepared to fly the circuit and land with full airbrake. Only after several attempts and slowing down significantly was the pilot able to regain full control of the airbrakes. The pilot suspects that when using full airbrake at high speeds the airbrake lower blade may deflect and catch on the top surface of the wing aft of the airbrake box.

22	Puchacz	none	02/12/19, 15:35	none/none	259
----	---------	------	-----------------	-----------	-----

Take-off started with the canopy unlocked. The P2 suggested closing and locking the canopy to shelter from the wind, the P2 agreed to closing the canopy, but suggested not locking it until the at the usual time during the pre-take-off checks. The eventualities self-brief was longer than normal and when it was over both pilots forgot that the canopy was closed but not locked. The P1 noticed the canopy latch position during the auto-tow ground run and locked the canopy.

24	DG-505	minor	01/12/19, pm	-	-
----	--------	-------	--------------	---	---

While being pushed into the launch queue some scuffing and a hole was noticed under the port wingtip. The damage had not been reported at the DI, the report speculates that a loose stone might have punctured the skin.

During BGA Club Safety Officer seminars it was proposed that, to further encourage reporting, it would be a good idea to remove site names from summaries. This has been reflected in the summaries on these pages. Edward Lockhart continues to provide a little extra detail, where available, in these listings. 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.

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

WELCOME TO THE BEST GLIDING IN THE ALPS !
WELCOME TO THE MAGIC OF PROVENCE...
WELCOME TO SAINT-AUBAN !



Write to us to organise dates and prices for a memorable week at the CNVV - booking@cnvv.net - www.cnvv.net

@Janik Eggler

Allstar@motion®
Totally relaxed flying

Electrical propulsion systems
of Allstar PZL Glider



Allstar Glider

www.szdallstar.com



**The Bristol &
Gloucestershire
Gliding Club**

Fly at Nympsfield, enjoy XC, ridge
and wave soaring. See our
website for courses, task
weeks and events.
Visiting pilots
welcome.

Learn to fly or develop your skills with the BGGC
Thermal, wave, ridge running & convergence soaring
Open all year round, new members & experienced pilots welcome
Excellent for club expeditions & visiting gliders
Clubhouse with bar, members kitchen and 'The Old Flying Club' Café

Website: bggc.co.uk, or contact office@bggc.co.uk, Tel. 01453-860342

AAIB BULLETIN: 5/2020

THIS is an abridged version of the UK Air Accident Investigation Branch report on a fatal Std Cirrus accident. The full report can be found in the AAIB Bulletins at www.aaib.gov.uk/publications/bulletins.cfm

Aircraft Type and Registration:

Standard Cirrus 75, G-DDGX

Year of Manufacture: 1975

(Serial Number 619)

Date & Time: 27 July 2019, 1130 Local

Location: Gwernesney Airfield,
Monmouthshire

Injuries: Crew 1 - Fatal

Nature of Damage: Aircraft destroyed

Synopsis

The glider was undertaking an aerotow launch to the west at Gwernesney Airfield, which was operated by the resident gliding club. During the early stages of the ground roll, the tailplane detached from G-DDGX and fell to the ground. Club members assisting with the launch signalled for the take-off to be aborted, but the message did not reach the aerotow tug pilot; the accident pilot did not appear to hear or see the stop signals either. The glider became airborne and climbed rapidly, before the tow cable released and the aircraft's nose dropped. The glider descended steeply and struck the ground nose first. It came to rest inverted pointing in an easterly direction. First responders extricated the pilot from the aircraft before he was airlifted to hospital. He died five days later from complications related to injuries sustained in the accident.

The investigation determined that the tailplane had not been correctly attached when the glider was rigged and this condition was not detected prior to the flight. Several possible mis-rigging scenarios were identified during the investigation, but the precise manner in

which the tailplane had been mis-rigged could not be determined.

Analysis

The accident pilot held an insurance share in the syndicate that owned and operated the glider and he was qualified to fly it. It was the pilot's fifth flight in G-DDGX. Prior to the day of the accident, he had rigged G-DDGX four times, including once under the supervision of the owner. On one previous occasion he had asked the club technical officer to check his rigging of G-DDGX, but did not do so on the day of the accident.

Tailplane rigging on the day of the accident: Other than receiving help fitting the wings, the accident pilot had rigged the glider without assistance. It was therefore not determined precisely how he attached the tailplane to the fin, or whether he encountered any difficulties in doing so. It was not determined whether the pilot had encountered any interruptions or distractions while rigging the tailplane, nor to what extent he was familiar with the mechanical principles of the tailplane attachment mechanism. Having only recently started to fly G-DDGX, and rigged it four times previously, it is likely that the pilot had not yet developed extensive experience in the rigging process for this glider type.

Opportunities to detect the mis-rig:

Other than the locking lever, the tailplane attachment mechanism is not visible once the tailplane has been fitted. Therefore, the only potential opportunities to detect the mis-rig condition after completion of the rigging may have been during the DI or a secondary rigging check, during a positive control check or during a full-and-free check of the controls prior to flight. The pilot signed the DI book prior to the

accident flight, which suggests that he undertook the DI himself.

Another club member assisted the pilot to carry out positive control checks, but they did not reveal any rigging anomalies. Although the tailplane was not securely attached to the fin, it must have had the appearance of being so. Additionally, it must have been attached in such a way that it was capable of moving in response to control stick inputs during the positive control check and remaining attached during the tow to the launch point.

It was not established whether the pilot carried out a full-and-free check of the controls before the launch and, as the precise nature of the mis-rigging was not established by the investigation, it was not determined whether it would have been detectable by such a check.

Launch signalling: G-DDGX's tailplane was not securely attached and separated from the glider shortly after the aerotow ground roll began. A stop signal was made as soon as the rigging failure was detected by the wing runner. The signal was relayed by the forward signaller, but the tug pilot did not see it. Given his training, ops manual direction and the known take-off risks, it is considered likely that the glider pilot had one hand on the cable release lever during the take-off roll. That the tow cable remained attached until after the glider was airborne, strongly suggests that the accident pilot did not hear or see either stop signal. It was not determined whether the tow rope back-released from the glider or if the accident pilot operated the cable release mechanism.

Had the stop signal been received and the cable released from the glider or the launch aborted sooner by the tug pilot, it is possible that the glider would not have got airborne. In any event, an earlier



Locking lever when tailplane attached (above left) and when locked with safety pin inserted (above right)

cable release or launch abort could have resulted in reduced height gain and a potentially survivable accident.

It was not club policy to use radios for launch safety signalling. There was no requirement for G-DDGX to be equipped with a radio or for one to be used to coordinate the aerotow or for launch safety calls. A stop signal was made but did not reach its intended recipients, therefore the signalling system was not effective in this case. After the tug began its take-off roll, the forward signaller ceased to have an effective function. They were out of the tug pilot's primary visual field and the noise from the tug's engine drowned out their stop call. Relocating the forward signaller and equipping them with a signalling bat would increase their visibility, but the attention of both pilots would remain primarily forward focused during any launch.

Visual signals can only ever be effective if they are seen by the intended recipient. The BGA's guidance notes highlight the limitations of hand signals and 'strongly' recommend that radios are used during aerotows. While pilot-to-pilot communications would not have

prevented this accident, intervention by a radio-equipped launch observer may have influenced the outcome.

Conclusion

The glider tailplane was mis-rigged in such a way that it passed positive control checks, but was not secure for flight. It detached early in the ground roll and the aircraft became airborne with no pitch control available to pilot. Stop signals were relayed by the forward signaller, but they were not effective in alerting either pilot to the failure. Effective signalling, radio or visual, might have prevented the glider taking off or reduced the severity of the outcome.

Safety actions

As a result of this accident the club undertook the following safety actions:

- The forward signaller position was formalised in the club's operations manual and their use of a white winch-signalling bat was made mandatory.
- Where appropriate, lever alignment marks were to be added to gliders at the club as additional confirmation that rigging had been completed correctly.

Safety recommendations

The following Safety Recommendations are made:

Safety Recommendation 2020-012

It is recommended that the British Gliding Association specifies in its Operational Regulations the minimum requirements for an 'adequate system of communication' for glider launching.

Safety Recommendation 2020-013

It is recommended that the European Union Aviation Safety Agency require a means to detect incorrect alignment of the tailplane locking lever on gliders with locking features similar to the Std Cirrus 75.

■ S&G extends its profound sympathy to the family of the pilot involved.

■ The BGA Executive Committee has responded to the AAIB recommendation and in doing so has approved proposals developed by BGA subject matter experts, including club CFIs, that update BGA Operational Regulations and provide revised guidance on signalling in the BGA publication *Managing Flying Risk*.

Glider Insurance specialists



Contact Hayward Aviation to find out how we can help you.

Our competitive rates and policy covers offer excellent value for money and peace of mind, in increasingly turbulent market conditions.

Call Nigel, Tim or Jack on + 44 207 902 7800 or e-mail info@haywards.net

Please quote F1603

Aviation insurance people, working for you



HAYWARD AVIATION IS A TRADING NAME OF ARTHUR J. GALLAGHER (UK) LIMITED

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



HAYWARD AVIATION IS A TRADING NAME OF ARTHUR J. GALLAGHER (UK) LIMITED WHICH IS AUTHORISED AND REGULATED BY THE FINANCIAL CONDUCT AUTHORITY
REGISTERED OFFICE: THE WALBROOK BUILDING, 25 WALBROOK, LONDON, EC4N 8AW. REGISTERED IN ENGLAND AND WALES. COMPANY NUMBER: 1193 013

HAY/0220/1003

BGA BADGES

No. Pilot Club (place of flight) Date

FAI 750k Diploma

130 Hugo Ribeira London 28/11/2019
(New Tempe, South Africa)

Diamond Goal

2-2639 Hugo Ribeira London 28/11/2019
(New Tempe, South Africa)

2-2640 James Howarth Cambridge 12/02/2020
(Benalla, Australia)

Diamond Distance

1-1301 Hugo Ribeira London 28/11/2019
(New Tempe, South Africa)

Gold Badge

Hugo Ribeira London 28/11/2019

Stefan Astley London 07/03/2020

Andrew Ratcliffe Edensoaring 11/03/2020

Gold Distance

Hugo Ribeira London 28/11/2019
(New Tempe, South Africa)

James Howarth Cambridge 12/02/2020
(Benalla, Australia)

Gold Height

Hugo Ribeira London 28/11/2019
(New Tempe, South Africa)

Stefan Astley London 07/03/2020
(Lleweni Parc)

Andrew Ratcliffe Edensoaring 11/03/2020
(Denbigh)

Silver Badge

James Howarth Cambridge 12/02/2020

Silver Distance

James Howarth Cambridge 12/02/2020
(Benalla, Australia)

Silver Duration

James Howarth Cambridge 12/02/2020
(Benalla, Australia)

Silver Height

James Robertson Deeside 19/01/2020

Nicholas Robinson Herefordshire 22/03/2020

Cross Country Endorsement

Benjamin Edkins Stratford 31/05/2020
On Avon

Congratulations to everyone listed achieving
badges and instructor ratings

PETER BOLTON (1935-2020)



IT IS with great sadness that I must report the death of Peter Bolton at the age of 85. Peter Bolton was a long-standing member of the Surrey Hills Gliding Club having joined in the 90s. Up until this year, he remained a social member, having only stopped flying a couple of years ago.

Peter came to gliding quite late on in life, but he threw himself into the club and contributed enormously to it. In some ways the club would not exist were it not for him. In his time as a member he took on almost every role from club secretary and then on to club chairman, as well as the editor of the club magazine *Cabletalk*, where he often kept the members amused with his cartoons depicting stories from the club.

During his time as chairman, the club was forced to cease flying by the MOD over an historic issue of land ownership and it was only through the careful negotiations by Peter with the MOD and our local MP that an arrangement was eventually made to allow the club to continue operating under a licence with the MOD. Some of Peter's negotiating skills were undoubtedly gained during his successful career as a civil servant when he worked in the House of Commons.

After retiring as chairman of the club, Peter still wanted to help as much as possible and when the club bought a two-seat glider from a club in France, Peter happily volunteered to go and retrieve it with our CFI, Richard. Richard fondly remembers that Peter brought a blanket along in case he got cold in the car, but this blanket doubled up as a dog blanket and Richard still remembers the smell of dog to this day!

I will always remember Peter as a witty and fun person to be around, who was great company and always smiling. He often participated in the club trips to other airfields, both for the flying as well as the social aspect, and was extremely good company. He would often volunteer to crew for badge attempts (as he did for my Silver), or just to visit another club on a weekend and I am incredibly grateful for all his help when I started gliding.

Peter was well loved by everyone that had the pleasure of meeting him, which can be seen by the number of people

leaving messages for him on the club's Facebook page. Ben Watkins also has fond memories of Peter and wrote the following:

'I was a young lad hanging around the gliding club in the early 90s and Peter was very kind and encouraging to me. He was always the first to offer me a lift when going on club trips away. He retrieved me on my first field landing in HCZ, probably in around 1998 or 1999. When Peter took over as editor of *Cabletalk*, we discovered he was rather a talented cartoonist and the drawing of Peter Wann towing a trailer home from Hus Bos with a man walking in front of him waving a red flag is still fresh in my mind 20 years later. In the early 2000s the club nearly went bankrupt and we convened an Extraordinary General Meeting to decide how to save the club. Peter was club secretary at the time and at the end of this sombre occasion there was one person whose name wasn't on the register, so Peter called out "your name is not on the list, what is it?". There is no doubt in my mind he knew the resounding answer from everyone else in the room would be "Don't tell him, Pike!". Thank you, Peter, for some of the happiest memories of my life.'

Peter, you will be sadly missed by all who had the privilege to know you, but especially by your wife Gill, son Tim and grandchildren Toby, Chloe and Briony.

Chris Leggett, Surrey Hills GC

SIMON COUSINS (1955-2020)



SIMON sadly passed away on 6 April as a result of contracting coronavirus. He was a committed policeman for 30 years, as well as a proud husband, father and grandfather.

Born in Leeds, West Yorkshire, from the age of five Simon said he wanted to be a policeman. He joined the Metropolitan Police cadets at 16 fulfilling his childhood dream and making lifelong friends, and collected a wealth of stories from his varied and interesting career.

His first posting was to Kentish Town and he was later promoted to the rank of sergeant at Lehman Street in East London. Soon after that he met his future wife, Debbie.

Simon and Debbie had two children, Sarah and Peter. The romantic side of Simon never waned throughout their 36

years together. Sarah says he kept the florists in business sending a red rose to Debbie's work for a year; there were always bouquets for the anniversary of the day they met, the anniversary of their first date; their engagement and, of course, their wedding anniversary.

Simon was later transferred to Royalty Protection, initially working for the Royal family in general and then for Princess Margaret. It was from this time that Simon would summon up stories which he would happily tell at a dinner parties, on the golf course, at the gliding club or, latterly, on cruise ships to an eager audience. Simon was proud to be made a Member of the Victorian Order, which was given by the Queen as a personal gift to members of her household. When he received the award, the Queen asked Simon how long he had been in the service of Princess Margaret. "Ten years, Ma'am," Simon said. The Queen responded: "Well, you deserve more than this."

Simon kept busy in his retirement. He learned to play golf and played at Effingham Golf Club. He had a passion for flying and learned to fly gliders at Surrey Hills Gliding Club and was most proud to have earned the right fly solo. He had a lifelong love of history; particularly that of the Air Force during WW2, and was delighted in retirement to take a flight in a Spitfire from Biggin Hill. Simon was overjoyed when the pilot allowed him to take the controls. He was able to fly over RAF Kenley, as the gliding club was not flying, which made the flight even more special.

Simon will be remembered as a storyteller; he was lucky in the last few years to combine his love of travelling with tales from his varied and interesting career. This started with talks to the local Scout movements, Rotary Clubs and the WI. Later he took his tours international! He and Debbie cruised the world, with Simon delivering talks on board and guests would often invite them to join them for a drink in the evening or dinner in the hope of hearing some of the stories that didn't make the approved edit.

Simon was a committed member of the Surrey Hills Gliding Club; he flew most weeks and always had a story to tell. The club owes a great deal of thanks to Simon for his generous donation that enabled the club to overhaul and upgrade the winch to use Dyneema.

He will be missed by all at the club but, of course, particularly by his family and friends.

Chris Leggett, Surrey Hills GC



BILL MALPAS (1927-2020)

WILLIAM (Bill) Malpas, known to many for his contributions to teaching mountain flying, has passed away peacefully at age 93.

Bill was originally a sport balloon pilot and later a glider pilot in the Bristol area. After a very successful career in the oil industry, Bill retired to central France.

Always a keen Alpine pilot, his annual support to RAFGSA expeditions to the Southern French Alps and his flying stamina were legendary! Despite his senior years, Bill was most content to land back from a three-hour training flight on the slopes, take a short break to munch a sandwich (always kept in small tin box), and then head off for a second three-hour training session. And do the same almost every day for two weeks, weather permitting (which it often was!).

Bill had been trained traditionally by the best mountain pilots around at the time. The lessons he subsequently taught and the simple, safe disciplines he insisted on, have ensured many other glider pilots have been able to go on to safely enjoy some of the best and sometimes most challenging gliding available anywhere.

Our thoughts are with Bill's family and friends.

Pete Stratten, BGA Chief Executive

DAVID HILL (1934-2020)

DAVID Hill became a member of the Yorkshire Gliding Club in 1954 and, sadly, died at the end of May this year at the age of 86. David was remarkable in that he suffered his terminal cancer so cheerfully and considered his friends, family and roots more important than his own discomfort. The club was lucky that he considered us to be an important part of his life and he did so much for YGC in his lifetime.

David joined YGC at a low point in the club's history. It had become remote and for a while even "left the BGA". As a young man he progressed quickly as a glider pilot and by 1957 was an instructor, with a Silver C by 1958. By 1959 he went solo on power and by 1966 was an established tug pilot. It was around this time that YGC started

to become the club it is today, one of the leading clubs in Britain. This coincided with and indeed to a large extent was due to Erik Reed joining the club and making a large input, with both energy and cash.

David became treasurer as Erik became chairman and the iconic clubhouse was conceived, along with huge alterations to the airfield, changing from heather moorland to the grass field it now is. David conceived the idea of providing an opportunity of life membership to enable a large chunk of money to come into the club. A few of us took this opportunity, but not David. As he remarked at the time: "I will be married in a few years and I won't have time to come to the club then, will I?" He remained for ever one of the most eligible bachelors in Yorkshire.

His tact, ability and sense of humour enabled him to get along with Erik to the enormous benefit of the club and by about 1968 the present clubhouse was complete. During that time, David had been both treasurer and secretary and it was around then he began further training that enabled him to become a power instructor and to move into commercial aviation with Casair Aviation. His main routes were mostly local to Belfast and Amsterdam, but one flight he was proud of was ferrying a motor glider to Helsinki using a radio that barely worked and paper maps.

David's work as a farmer with an interest in several farms and a commercial pilot, coupled with his enjoyment of golf and gliding, perhaps meant that he remained a bachelor. Shortly after the millennium, the club had a visit from Daphne Sharp, by then the widow of Norman Sharp – one of the founding fathers of the Yorkshire Gliding Club in the 1930s. Daphne was interested in benefiting the club as a memorial to her husband, but wanted to know more about what it was doing and whether indeed it deserved any benefit at all. David could not have been a better guide to help in the situation. An eligible bachelor with a fast open sports car, courteous, amusing and totally unriskey in Daphne's eyes. They hit it off splendidly and Daphne would often visit the club and ask her curious questions, going for drives over the moors with flowing scarves and turban – a regular Daphne Dumaurier. We named the the DG-1000 we subsequently bought after Daphne, but perhaps it should have been named David.

Nick Gaunt, Yorkshire GC

Oxfordshire Sportflying

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.



www.enstoneaerodrome.co.uk
Telephone 01608 677208

FOR SALE

RELUCTANTLY FOR SALE: a complete set of *Glider* and *Sailplane & Gliding* magazines, from No 1 Vol 1 to date. No sensible offer refused. Tel no: 01980 653252.

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

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 **Oct/Nov 20** is **8 Sept 2020**.

Text: 80p/word, minimum 20 words (£16). Photographs: £6 extra. Box number: £3 extra. All prices include VAT.

**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: Dave Unwin

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

AERO PAINT SERVICE
...because your glider deserves the best...

www.aeropaintservice.com



@aeropaintservice



life cover for glider pilots

Without specialist advice glider pilots can often face expensive premium loadings when applying for life insurance.

We can help you minimise or possibly avoid such loadings altogether.

- Life insurance 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

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



- ▶ 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



"A fully re-engineered by SkyLaunch winch delivered to Ballenstedt in Germany"

Tel: 44(0) 1939-235845 mike.groves@skylaunch.com www.skylaunchuk.com



"It's like going up on rails"

ARE YOU LOOKING FOR:



- A club that flies all through the winter
- Somewhere to stay winch current
- A club that regularly bungee launches
- Somewhere to fly ridges
- A club with accommodation, catering and a comfy bar
- Somewhere with access to the Welsh mountains and wave
- A club that welcomes visitors
- Somewhere away from all that airspace



Midland Gliding Club on the Long Mynd in Shropshire is currently offering **Second Club Associate Membership** to members of other BGA affiliated clubs for just £15 a month.

(Ts & Cs apply)

Call for details or visit our website.

midlandgliding.club 01588 650206 office@midlandgliding.club

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

WE WOULD LIKE TO THANK OUR ADVERTISERS FOR CONTINUING TO SUPPORT S&G



Ron Smith Photography

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 pyrotechnics
Tim@Airbornecomposites.co.uk
The Hangar, Wing Farm, Warminster, Wilts BA12 7DD

GROB
HpH sailplanes UK
Tel: 01985 840981 (Workshop)
or 01985 841125 (Home)
Mobile: 07778 963277

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



INDEX TO DISPLAY ADVERTISERS

AFE/RD Aviation	inside back cover
Aeropaint Service	72
Airborne Composites	74
Allstar PZL	67
Anthony Fidler	72
Bristol & Glos GC	67
BGA	IFC + 46 + 47 + 61
Centre National de Vol á Voile	67
East of England	74
Essex Sailplanes	36
Forbes Brokers	37
GASCo Flight Safety	72
Hayward Aviation	69
Hill Aviation	32
John McCullagh	73
Kennedys Law	73
Midland GC	73
North Yorkshire Sailplanes	74
Oxfordshire Sportflying	72
Philip Wills Trust	9
Service Centre Terlet	51
Skylaunch	73
Soaring Oxford	74
Soaring Safaris	72
Southern Sailplanes	back cover
Stein Financial	73
Sydney Charles Aviation	9
Zulu Glasstek	30

EES Aviation Services

www.eesaviation.com
Tel: 01858 880807 07729 322804
Hemploe Farm, Welford, Northants NN6 6HF

Complete maintenance, repair and refinish for all gliders and motorgliders
Professional spray paint facility

BGA, LAA & BMAA inspectors, authorised CT microlight repair agent

Photograph courtesy of glidingsport.com



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.



RAF-style flying gloves

Flying gloves are once again a flying essential rather than just for showing-off at the launch-point. These RAF-style flying gloves are made from the softest leather for better feel and comfort, whilst offering maximum protection. Measure your hand as shown (around the knuckles of your dominant hand) to find the correct fit for you.

Quick Find: F/G **£19.95**



To find your correct glove size, measure around the knuckles of your dominant hand as shown; the measured distance in inches is your glove size.

Available sizes are:

6½	7	7½	8	8½	9	9½	10	10½
----	---	----	---	----	---	----	----	-----

CAA Charts update

Several of the major CAA charts changed whilst gliding was grounded, so now is the time to check that you have the latest edition for you flight planning and in-flight navigation before you infringe controlled airspace. Don't fly with an out-of-date chart!

Chart	Edition	Release date	Next edition date
1:500,000 series			
Southern England & Wales	46	27/02/2020	
Northern England & Northern Ireland	43	23/04/2020	
Scotland	33	20/06/2019	(05/11/2020)
1:250,000 series			
North Scotland West	10	16/08/2018	(13/08/2020)
North Scotland East	10	19/07/2018	(16/07/2020)
Northern Ireland	11	12/09/2019	(09/09/2021)
The Borders	12	18/06/2020	
Central England & Wales	13	15/08/2019	(12/08/2021)
England East	13	18/07/2019	(15/07/2021)
West & South Wales	11	10/10/2019	(07/10/2021)
England South	24	21/05/2020	
London Heli Routes	18	13/09/2018	(10/09/2020)

Charts in bold are new editions in 2020

See afeonline for a complete list of CAA charts

TOST Tyres

AFE holds a comprehensive stock of TOST tyres, inner tubes and wheels to fit all common glider types (and most of the uncommon types too!). So if your tyres are starting to look a bit the worse for wear, replace them now before they stop you flying on the perfect soaring day. TOST recommend that when replacing a tyre, you should always replace the inner tube too rather than re-installing the original.



See afeonline for a complete list of TOST tyres, tubes, wheels and accessories

TOST launch accessories

Now is the perfect time to replace worn launch accessories and safety items. AFE carries a full range of TOST launch accessories including:

- weak links
- reserve weak links
- weak link sheaths
- shackles
- hooks and notched rings

so there's no need to launch with worn-out or damaged accessories.



See afeonline for a complete list of TOST launch accessories

VFR Flight Guide 2020

Once you start flying cross-country again you'll need to most up-to-date information for airfields and landing sites – not to mention en-route frequencies, airspace details and operating procedures, flight planning data and so much more. The UK's favourite flight guide is available in softback, loose-leaf and spiral-bound versions, each with a free amendment service.



Quickfind: VFR2020 **£26.95**

All prices include UK VAT



AFE Manchester
1a Ringway Trading Estate
Shadowmoss Road
Manchester
M22 5LH
t: 0161 499 0023
sales@afeonline.com



www.afeonline.com

1000'S OF PRODUCTS AVAILABLE ONLINE

OPEN FOR BUSINESS ONLINE!



@afeonline

@afeonline

- Supply
- Maintain
- Repair
- Certify

Membury Airfield,
Lambourn Woodlands,
Hungerford,
Berkshire RG17 7TJ

tel_ 01488 71 774
evenings_ 01488 668 484
mobile_ 07774 429 404
email_ office@southernsailplanes.com



Class, in every class*

* WARNING: The Ventus 3 and New Arcus are not toys. They may cause you to fly further, faster, in more comfort and style than ever before.

To see our facilities, or use our ever growing online shop please visit us at: www.southernsailplanes.com

We can maintain all models, from all manufacturers. To find out more or make a booking, please contact Pete Pengilly: pete@southernsailplanes.com

For more information on the new Ventus 3F, Ventus 3M, the Discus 2c FES, New Arcus or any other Schempp-Hirth masterpiece please contact Philip Jones: phil@southernsailplanes.com



GIORGIO

For sale on behalf of the charity Aerobility. Their proceeds will go towards the G109ABLE Project. www.g109able.org



SCHEMPP-HIRTH

Performance without equal.

SOLE UK AGENTS FOR SCHEMPP-HIRTH | GLIDER SALES, PARTS SUPPLY & SUPPORT | INSPECTIONS & ANNUAL MAINTENANCE | COMPLEX REPAIRS & INSURANCE WORK | APPROVED FOR ANY EU-REGISTERED GLIDER | GLIDER COMPONENT REPAIR | SOLO ENGINE INSPECTIONS | OEHLER PROPELLER REPAIRS | EASA PART M SUBPART G APPROVED | EASA PART 145 APPROVED | CALL US FOR FURTHER DETAILS: 01488 71774