

Rally Reports

Feature Article / 100 Years: 1st Rhön Gliding Competition

> We Remember Hawley Bowlus, Part 3

and much, much more...











Keen to send them off, 5-year-old Nick Zahn hooks up the Klaus 'magic carpet' to the winch and prepares to launch mum (Brit seated on the right) and dad (Christoph seated on the right) into space! . **Photo: Christoph Zahn**



PIN BOARD

The VGC welcomes the following new members :

5848	Henk Van Putten
5847	Jakub Potmesil
5846	David Hopgood
5845	Ravi Dube
5844	Nigel Potter
5843	Matthias Nieporte
5842	Nigel Jardine

Netherlands Czech Republic UK Romania UK Germany UK

7-year-old Ben Zahn is about to launch with his favourite friend in 'Uncle Klaus' (Schickling) magic carpet! Photo: Christoph Zahn



Alex Gilles is wasting no time in the education of his daughters as Marina shows dad the correct way to install the floor panels in the cockpit of his Standard Austria. **Photo: Alex Gilles**



Not to be outdone, Marina's sister, Sarah is assembling the tail-plane of the club's Ka2 after some maintenance. **Photo: Alex Gilles** Sarah also invited her classmate, Jonas (who is also very interested in aircraft) to the club's workshop. Here grandad, Bernd Hurrle, continues the brainwashing by explaining them how glue joint repairs are carried out in the air-brake box...surely a good example of ensuring our future generation is assured through the encouragement of children, which can only help the sport through their participation. **Photo: Alex Gilles**

Why not join the VGC Kids Club and send in your children's gliding related photos?



CONTENTS



http://www.vintagegliderclub.org

Objectives of the Vintage Glider Club. To promote the international preservation, restoration and flying of historical and vintage gliders: to collect, preserve and publish information about the above; to locate and preserve documents and artefacts connected with gliding; to cooperate and negotiate with government bodies and other interested organisations to ensure that members' best interests are protected; and generally to do all such acts as may be conducive to the objectives of the Vintage Glider Club being met.

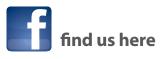
VGC News is published by: The Vintage Glider Club Ltd 1 Maplehurst Chase, Basingstoke, Hants RG22 4XQ, United Kingdom

Copy deadline for the next issue: 15th October 2020 Please submit material to VGC News Editor: editor@vgc-news.com Bruce Stephenson Napier House, 201 Bridge End Rd, Grantham, Lincolnshire NG31 7HA England

Design by: Rosa Platz, Cologne - Germany Published by: Eqip Werbung & Verlag GmbH, Bonn, Germany

Front cover: Dave Unwin puts David Gibbs' T-31 through it's paces over Saltby airfeild. Photo: Keith Wilson/SFB Photographic (Keith is happy to shoot air-to-air images of your own glider/aircraft and can be contacted by email: keithewilson@gmail.com)

Rear Cover: Where the Rhöngeist still blows... The Wasserkuppe museum's Blaue Maus strips off after dark. Photo: Alexander Gilles



Pin Board	2
Contents	3
Officers of the VGC	4
Board News	5
President's Corner	
Chairman's Report	
Editor's Comment	
Club News	7
'Tupperware'® versus more members	
A journey into the blue	
how not to become a museum boss!	
An airworthy Vampyr replica	
Upcoming Events	11
2020 Rally Calendar	
2020a game of musical chairs	
All is not lost!	
Some great vintage events still to come in 2020	
2020 VGC Annual Dinner Reminder	
Rally Reports	14
Old-Timer Šohaj Cup	
2020 Keepit Regatta	
Dunstable Glider Production - Part 2	18
Getting to know the affable Ka 4 Rhönlerche II	21
We Remember – Hawley Bowlus - Part 3	24
Feature Article -	
100 Years: 1st Rhön Gliding Competition	
News from around the world	39
Model News	
Letters to the Editor	
Book Nook	
For Sale	50
VGC Sales	51

The views expressed and the contents of all material, in this magazine are the opinion of the author(s) and may not necessarily reflect those of the Vintage Glider Club Committee or the Vintage Glider Club membership.

No responsibility is accepted by the Vintage Glider Club Committee or its Membership, for any safety related (ar any other) technical advice, transmitted in the magazine or any document issued by, or on behalf of, the Vintage Glider Club. No responsibility is accepted by the Vintage Glider Club or its Membership, for any adverts placed in the magazine by individuals or commercial entities.

Except as otherwise permitted under 'copyright, design and Patents act', 1998, this publication may only be reproduced, stored or transmitted in any form, or by any means, with the prior permission in writing of the publisher.

No. 159 - Summer 2020



Rally Reports Sohaj Cup

Page 14



Dunstable Glider Production, Part 2 Page 18



We Remember Hawley Bowlus, Part 3 Pa





Feature Article – 100 Years: 1st Rhön Gliding Competition **Page 32**



OFFICERS OF THE VGC

President



ANDREW JARVIS (Board member) e-mail: president@vintagegliderclub.org

VICE-PRESIDENTS



PETER OCKER e-mail: vpD@vintagegliderclub.org



MARTIJN HOOGENBOSCH NETHERLANDS e-mail: vpNL@vintagegliderclub.org



MARK WILLS UK e-mail: vpUK@vintagegliderclub.org

CHAIRMAN



International Council

DAVID GOLDSMITH - AUSTRALIA

email: daveandjenne@gmail.com

FIRMIN HENRARD - BELGIUM

email: potk.josef@post.cz

email: negjoerup@mail.dk

GORAN BRUUN - FINLAND

email: bruun.goran@gmail.com

email: henrard.firmin@gmail.com

NIELS EBBE GJOERUP - DENMARK

JOSEF MEZERA - CZECH REPUBLIC/SLOVAKIA

KLAUS SCHICKLING e-mail: chairman@vintagegliderclub.org

Board



ANTTI JOUPPI VGC SECRETARY e-mail: secretary@vintagegliderclub.org

VGC TREASURER CURRENTLY VACANT



VGC MEMBERSHIP SECRETARY e-mail: memsec@vintagegliderclub.org

MARTIJN HOOGENBOSCH VGC INTERNATIONAL RALLY SECRETARY email: rallysecretary@vintagegliderclub.org

WOLFGANG ULRICH PUBLIC RELATIONS e-mail: pr@vintagegliderclub.org

ANDREW JARVIS - UK



RALLY SECRETARY e-mail: ukrallysec@vintagegliderclub.org

DR. JOACHIM JESKA - GERMANY email: jojeska@web.de

VINCENZO PEDRIELLI - ITALIA email :vincenzopedrielli@gmail.com www.vincenzopedrielli.it

JÜRG WEISS - SWITZERLAND email: juerg.weiss@computer.org

BILL BATESOLE - USA email: bill.batesole@aol.com

Payments to the VGC / Zahlungen an den VGC

Bank transfer / Überweisung UK£ payments: Bank Account: IBAN: GB14 HBUK 4014 1441 8711 53 BIC: HBUKGB4122G



Non-Board Positions



The Board is assisted by : DAVID WEEKES - VGC SALES e-mail: sales@vintagegliderclub.org



SUE BROOKE ACTING TREASURER e-mail: treasurer@vintagegliderclub.org



JAN FORSTER EGU REPRESENTATIVE. email: egu@vintagegliderclub.org



FRANCIS HUMBLET COORDINATOR VGC HISTORIC GROUP e-mail: historic@vintagegliderclub.org



DAVID WILLIAMS ARCHIVIST email: archivist@vintagegliderclub.org



IAN PATTINGALE TECHNICAL OFFICER e-mail: technicalofficer@vintagegliderclub.org



BRUCE STEPHENSON EDITOR email: editor@vgc-news.com



KLAUS FEY PUBLISHER Sprottauer Str. 52 53117 Bonn, Germany TEL. +49.228.96699011 FAX +49.228.96699012 email: fey@eqip.de

Paypal: www.vintagegliderclub.org/membership

UK Cheques: Payable (UK£) to "VGC Ltd" to Ray Whittaker; 8 Hamilton Road, Church Crookham, Fleet, Hants, GU 526AS, United Kingdom, memsecuk@vintagegliderclub.org

4 VGC News





Andrew Jarvis

From the President's Corner



All our yesterdays...

No doubt you're all desperate to know about the 2020 AGM- surely the high point in your gliding year! In 2020, for reasons which are all too obvious, the AGM will be a one-off virtual affair with printed reports in this issue of VGC News, followed by online voting provisionally on 10th October. Chairman Klaus will give you more details.

In this weird year, our magazine has never been more important in keeping us together and what an outstanding issue number 158 was. While trying not

to sound sycophantic, let's just leaf through it again- and I do apologise for leaving out many deserving writers. On the cover a smart Trabbie, open trailer and a pretty Orlik, what a perfect vintage 'still life!' Next, some rambling stuff from the president, followed by crisp words from our chairman; two detailed pages from Rally Secretary Martijn, summarising a huge amount of painful work. Conservation from David Williams and Jim Short. Rally dates, mostly cancelled. A dinner reminder from Jan, who is still hanging in there. Genuine rally reports from Down Under. A fascinating but sad account from David Underwood (the VGC's official thatcher!) about the struggling Dunstable Aircraft Factories. Next a real gem- Paul Dickson's story of his beautiful Dart 17R and its larger-than-life first owner, fighter ace, Tony Gaze. Yet more great contributions from David Williams and the tireless Raul Blacksten.

On page 38 we meet our new French correspondent, Benoit Auger. We warmly welcome the French brigade back to the fold, like the biblical Prodigal Son! Benoit's report was full of amazing items, especially Marc Weibel's rescue of the Brequet 900, 'number 01.' You have to read carefully: Breguet 900, 'number 1' is a different glider in Marc's incredible collection. Paul Halliday brought us up to date with the amazing achievements of the GHC team at Lasham. I must mention Chris Williams' modelling page, once again featuring models which you just can't tell from the real thing. Then followed four very important obituaries. Even the 'For Sale' page was packed with incredible gliders and lastly there was an unforgettable back cover from Alex Gillies, showing the angular but very important, Vampyr of 1922. What an amazing issue. But even before 158 arrived, I had a nice email from Markus Klemmer (you must remember him; the banjo player at Stendal!). Markus told me of an exciting project to celebrate the centenary of the Vampyr's brief career in 1922. So, it all fitted together perfectly.

Just now, we still don't know where we are heading in 2020, but let's assume 'normal service will be resumed shortly'. We've held the first of a series of Board meetings on Zoom, which worked well. The 2020 AGM will incorporate online voting. The 2020 Annual Dinner is still 'live' as I write this, and Jan Forster warmly invites you to his beautiful home city of Maastricht. Let's hope it goes ahead, but if not, the whole event gets time-travelled into 2021, as we did with Achmer's 3rd International Rally. The first time I met Jan back in 1995, he told me: "we VGC people live in the past!" He's right of course, though we are just managing to keep up to date with technology. But let's briefly go back to the past- it's nicer there! The first time I set eyes on a 'vintage' glider- or indeed any glider, was in 1957. My grandmother had just bought a small cottage largely built of asbestos, overlooking the natural harbour at Christchurch on the South Coast. Close by was Christchurch Airfield (where 695 wartime Horsa gliders were built). In the 1950's, 622 Gliding School of the Air Training Corps was very active flying T31's and T21's (what else!). I spent hours watching the winch launches. The gliders would make their low final turn just above the bungalows facing the aerodrome. You could hear the instructor, still busily instructing as he dodged the TV aerials.

On Easter Day 1958, there must have been a light northerly wind, creating a vigorous sea-breeze front. High above the airfield in a sun-lit late afternoon, I saw a beautiful vision: a sailplane with a bright red fuselage and long, translucent wings with its countless ribs all visible! In time, this amazing craft came down and gently landed. I heard the pilot say how cold he was, as the glider was towed to the black ATC hangar. Years later, a gliding friend, now sadly gone like so many others, told me this must have been Lorne Welch, flying his Weihe. So this moment started a lifelong love of what we now call vintage gliders. You don't need me to tell you this is a very strange year, but one can turn the strangeness to advantage. How about overflying Gatwick Airport? Just recently Mike Millar, who is my partner in the Presidential Oly 463 BYE, flew his Fournier RF5 motor glider from Ringmer across to Gatwick, which is quite close. A call to Gatwick ATC cleared Mike to overfly the dormant airport. Gatwick also features in the logbook of Oly 2b, BGA 687, which once belonged to Wally Kahn and which I owned for many years. In 1953, I think it was, there was a cross-country flight ending at Gatwick!

I'm sure many of us now have remarkably tidy gardens and I'm tempted to ask Editor Bruce if he has space for a Gardening Page! (Oh well, I thought I'd ask). We often say the VGC is like a huge, slightly dysfunctional family, which it certainly is but I also like to see it as a sort of gliding university. Not the sort of Uni which is all about exam marks (kms flown) but rather one where you meet remarkable people and plan future adventures. That's the best way to deal with this very strange year!

> Andrew Jarvis VGC President



Klaus Schickling Chairman's Report



Back to flying

We are back to flying after the shutdown. This is the good news. The bad news is that coronavirus is still with us and we will have to live with restrictions in our daily lives until a vaccine has been developed. This might be if we are lucky, be somewhere at the end of this year, or early in 2021.

Almost all vintage events and rallies planned in June, or earlier, have been

cancelled or postponed. The VGC UK National Rally will now to be held in September. Our big international events, the VGC Rendezvous and VGC International Rally at Nordhorn-Lingen and Achmer planned for this year will now take place next year, 2021. The International Rally in Celje will now be in 2022. Thank you Mitja for being so very helpful. Along with the International Rally our AGM has had to be postponed too. Coronavirus will bring us some quite new experiences with our meeting. All information required such as Board reports will be included with this issue of the VGC News. We will establish an internet platform for you to vote on all necessary points. Details are in the information pack included with this VGC News. Our Annual Dinner is planned to be held on October 3rd in the Netherlands near Maastricht. Jan Forster has planned a very interesting event. Can everybody intending to attend please register with Jan.

The Board has decided to change our membership database to a new system. This will allow us to send emails to the membership, if required. The main source of information for you, will remain the VGC News. If you want to make sure that we have your correct email address please contact our Membership Secretary Walther Hoekstra. We hope to meet you soon, wishing you all good health.

Klaus Schickling

Wir fliegen wieder

Wir fliegen wieder nach dem Shutdown, soweit die gute Nachricht. Die schlechte ist, dass Corona immer noch da ist und wir weiter mit täglichen Beschränkungen leben werden müssen, bis ein Impfstoff entwickelt sein wird. Dies wird, wenn wir Glück haben, Ende dieses Jahres oder Anfang 2021 geschehen.

Fast alle Treffen und Veranstaltungen, die im Juni und davor geplant waren, wurden abgesagt oder verschoben. Die UK National Rally findet jetzt im September statt. Unsere großen internationalen Veranstaltungen, das VGC Rendezvous und die Internationale Rally in Nordhorn-Lingen und Achmer finden nicht in diesem, sondern im nächsten Jahr statt. Die Internationale Rally in Celje wird nun 2022 stattfinden. Mitja, besten Dank für deine Hilfe.

Mit der Internationalen Rally wurde auch unsere Mitgliederversammlung verschoben. Corona wird uns neue Erfahrungen mit unserer Versammlung bringen. Alle Informationen wie Board Reports werden als Beilage zusammen mit dieser VGC News versandt. Wir werden eine Internetplattform für euch einrichten mit der Möglichkeit, über alle nötigen Punkte abzustimmen. Alle Informationen hierzu findet ihr in der Beilage zu den News.

Das Annual Dinner ist für den 3. Oktober nahe Maastricht in den Niederlanden geplant. Jan Forster hat eine sehr interessante Veranstaltung geplant. Bitte meldet euch bei Jan an.

Der Vorstand hat beschlossen, die Mitgliederverwaltung auf ein neues System umzustellen. Dies erlaubt uns auch, wenn nötig, Emails an die Mitglieder zu verschicken. Die Hauptinformationsquelle bleibt die VGC News. Bitte prüft mit Walther Hoekstra, dass wir eure aktuelle Emailadresse haben.

Wir hoffen euch bald bei bester Gesundheit wiederzusehen. Klaus Schickling

Bruce Stephenson

Editor's Comment



As COVID-19 restrictions begin to relax all over Europe, we are slowly seeing a welcome return to some sense of normality, even in the gliding world. Many of us are now back in the air but social restrictions still apply to 2-seat training in some countries. Hopefully this will change in the nottoo-distant future. The unseen danger remains amongst us however, it's something we all have to adapt to and yes, it comes at

real human cost, both in lives and careers. Losing this year's International and Rendezvous rallies as a result, as most will agree, is trivial to the hardships that some are enduring...sobering indeed. It has also had a marked effect on the amount of content the magazine has received. Luckily our stock of material, albeit article heavy, will carry us through the current and possibly the following issue, but hopefully by then we would have indulged in enough activity to start generating some more news and updates?

Talking of the unseen, it was interesting to see your reactions to Issue 158, in as much as there were none! We made some subtle, but significant changes to the magazine which you probably failed to notice. I have been long concerned over the size of the dead-space of the cover and the fact that when the printed version arrives, it always looks a bit 'flat' compared to the many hours we spend looking at the super-sharp, crystal-clear, PDF



BOARD NEWS/CLUB NEWS

drafts that can readily be expanded to any size for detailed editing. There was quite a bit of discussion behind the scenes as to how we may invigorate the cover slightly more. So two changes were made; we reduced the size of the banner at the top of the page and are now trialling glossy-paper. Perhaps you might like to compare Issue 158 or 159 to older issues and give us your feedback on your preferences?

You will also notice that this issue celebrates 100 years of the Wasserkuppe. I cannot stress just how important this event was

to the fledgling sport and marks the start of a series of 100th anniversaries to come in the next two or three years. We here at VGC News, will of course, be attempting to cover these significant events as these anniversaries fall on their respective dates. Stay tuned!

Well unsurprisingly, there is not a lot more for me to comment on in this issue, so I will bid you goodbye and wish you all happy reading,

Bruce

Jan Forster

'Tupperware'[®] versus more members

eading the last VGC News magazine, I noticed that the VGC Chairman, that means the Board, wanted more members and that they want to gain this by attracting Tupperware (GRP) owners. This is an interesting new vision: 'GRP versus more members.'

Before we start the discussion on 'plastics,' we first have to answer the question: why more members?

1/ If we look at the AGM report in the last VGC News, we read that for the last 8 years we have a growing number of members with an average of increase of 23 members a year. In 2014, there was a drop in membership of 45 (due to the magazine crisis), and in 2018 we had a drop of 63 members (Germany introduced a new paying system for their members with the loss of 57 members), and in 2019 we saw a gain of 114 new members. There are many gliding clubs who will be jealous!

2/ A regular gliding club needs more members because of the exploitation of the club. They own expensive gliders, buildings, retrieve vehicles, winches, and tow-planes and have to pay a rent for the airfield and clubhouse. All we own is the archive and that is not very expensive. We even had a small profit last year that means no costs. The overall costs are less than in a regular gliding club, who also have a magazine. All the flying costs, dinner, and other activities, are paid for by our members, so again no costs for the VGC; sometimes even at a profit.

3/ We are a rich club with £57,400 as Reserve (Treasurer report 2018). Therefore we don't need more members for more income. **4**/ We want more members to spread the word? Non-members are already welcome with their gliders to the International Rally. It means if they want to take part the next time, we push them to become a member, otherwise we have in some years' time, 'non-members only taking part in the Rally' and that can't be the case. More effective ways to gain members is for VGC members to offer giving lectures at their own, or other clubs. You and your vintage glider could hold open days, maybe in the form of a symposia, like the AERO, which gains members every year, or write articles in (club) magazines. That means vision and coordinating by our PR representative, so there is some work to be done!

5/ We are already the biggest gliding club in the world, no argument. But do we need to be the biggest club? So there is no reason for more members, which brings more difficulties about things we don't know and more things for the Board to do!

6/ Before we talk about the GRP gliders I wanted to mention that I am not against GRP gliders, they are great and where will it end with what they can perform...exciting! There are already many GRP gliders who are 50, or more years of age, but are they Vintage? Possibly Historical? If you have some nice photos of Vin-

tage (wooden) and GRP gliders, even 60 years old and ask the average (glider) pilot, or even a non-pilot: "what does a Vintage glider mean to you?" Predictably we know where they will put their finger. Is it the same reason as to why owners redesign their historical gliders like the Ka-6, 8 and 13 with open canopy? Is it because of missing the nostalgia? I never saw a group of people gathering around a GRP glider and discussing its construction. If a GRP glider gets damaged, the owner sends it to a workshop and simply asks; "is he ready tomorrow?" pays the bill, and that's it. If we invite GRP glider owners, the first thing they are looking for is; "can I perform long flights?" and "what is the cost?" Secondly, the priority of most GRP owners is that they are first and foremost only interested in flying, flying, and flying! Far from this, their second priority is fun. So yes, if you want you can fly a lot, long and far, during the International Rallies and relatively cheaply. So many of them will take part, it's a bit like the Ka 6 owners for example; in Tibenham 57 gliders took part. Eight of them were Ka 6's, which equates to 14%. So in a short time we will be outnumbered by GRP gliders. What does that mean for future rallies?

Members taking part in the International Rallies.

Last 8 years the average number of members is 860		
Number of participants	Percentage number of members; (860)	
Minimum 70	8% (of 860)	
Maximum 100	13%	
Average 85	10,5%	
Growing; let's say to 1250 members, with the same percentage		
Minimum 100 = 8% (of 1250)		
Maximum 163	= 13%	
Average 132	= 10,5%	

That means a big adventure for our Rally Secretary! Where to find a suitable club who can handle up to 132, or even more gliders? At least we are a club of (Vintage) glider owners and flying is not always the first priority, maintaining our family and friendships is also very important. These are our three pillars: (wooden) gliders & their history, technical, and family and friends; there is no number one. We are a social family, helping each other, giving a hand to repair, sitting down socially together, flying different types of gliders, and sharing in on the fun. If we can keep it like this, GRP gliders can be welcomed but only if we keep it OUR club.

This is my vision but you will also have your own vision. Please take part in the discussion, it could be the first big move we make in a new direction, it's the future of your/our club.

Jan Forster



CLUB NEWS

The VGC Board responds:

Thank you Jan for your observations. The Board has not to date, introduced any classification to accommodate glass but it is inviting an ongoing conversation as to how the club views both itself and its long-term future in a fastmoving world. The Board therefore wishes to open the subject

across the entire membership and encourage members to voice their opinions as to how they currently view the club and its future moving forward over the issue.

Klaus Schickling, VGC Chairman

VGC Editor, Bruce Stephenson replies:

Thanks for a well thought out view Jan.

As I am probably the prime instigator of this discussion over the past few years by arguing the case for more inclusion, I feel it only right to respond to your measured views. From a club stance I would argue that we cannot ignore the fact that early glass is more than classic too and, in many eyes, only constrained by what it really is, glass. By this I mean, if we are to remain true to our aims as a club, and indeed our own aging gliding history, we must recognise the phenomenally important role glass has had in developing our sport into the modern age; a legacy without which, may have seen the sport in a very different place today!

It also raises the question as to what we are, both as a club and one of the few, if not only, organisations that exists specifically to protect and promote the continued flying of our older gliders. The club grew out of the roots of pre-WW2 gliders and has grown from there. The last time there was such a debate was when David Shrimpton (our then Chairman of many years), opened the debate for more modern 'classic' gliders. Hence the name-change of the club logo, which by the way, succinctly covers glass too. David's shrewd move actually saved the club and turned its financial fortunes around!

But this subject is different to the situation that David faced back then. We do not have a dwindling membership in the 400's. Nor will glass have the same effect as classic did all those years ago, far from it. Today the VGC is still being run to our tried and trusted formula of wood and fabric, so I totally get the reluctance at what is seen as a major change to our almost sworn enemy of some, glass. Of course I view it from the stance of looking forward, not back. I also view it after having exposure to more liberal sister organisations, who like the VSA, VK, etc, often highlights our European stuffiness to accepting change, which of course, comes from our more conservative culture. What that lesson tells us is that glass has far from taken over from the more traditional wood and fabric. In fact it has had limited impact at Vintage and Classic meetings but a wider, more positive, impact on both the glass community and glass members who are formally welcomed into the fold.

So my point is this, the debate isn't really about glass itself, it's about the VGC formalising the acceptance of glass, some of which surely must now be more than worthy of being classed as classic by any stretch of the imagination? Nobody really knows what our typical future member will look like and if there are glass gliders out there that genuinely meet our criteria of being a classic (which would be up to us to decide anyway), then why not bring them into the fold? After all it is probably only a matter of time before someone will start feeling frustrated enough to start a rival 'Classic Glass Gliding Group/Club.' Why allow ourselves to miss out on that opportunity?

As I said, I completely understand anyone's reluctance over the issue. I can well remember the passion some members had when 'classic' was formalised and brought into the club; the purist was aghast!

As for current club finances, Jan points out that the club is rich. I would potentially argue otherwise. It runs on a relative shoestring and leans heavily on volunteer labour, some of which is at significant cost to the individual. For instance, I currently invest at least 2 months full-time work on producing the magazine each year, yet the club cannot afford, or relies on the minimum of investment outside contracted costs for actual magazine production. Think about that for a minute, I lose 2 months a year of my private life to the club for free, yet we are seen as 'cash-rich' by some, despite the fact that Board members travel to meetings, often in other countries, largely entirely at their own cost.

Some may also argue that glass doesn't fit in with our current operation of vintage and classic gliders, especially with slower gliders like the Hutter or GB. My retort to that has to be, we currently hardly bat an eye-lid over, for instance, an Austria, Dart, Cobra, or SF 4 attending our events, so why early glass? They all have similar performances, and in some cases, the wood ships often have slightly higher performance! As for glass members that may want to fly, fly, fly, isn't that what we vintage enthusiasts are all about? We still get to talk and socialise like everyone else when we are not upstairs enjoying ourselves...the bit of string is the same, only one bit is longer than the other.

Lastly, yes, we might unofficially welcome anyone to join in our fun, but as a club, and an organisation that people turn to, we are far from making that point clear as we officially hardly even recognise glass in our objectives. In my opinion, the club can only enhance its long-term future by being more inclusive and stop ignoring the elephant in the room.

At the end of the day, the membership and circumstance will ultimately decide the issue, not any one individual but the first step has to be with opening the debate, which hopefully we have finally started?



CLUB NEWS

Peter Ocker

A journey into the blue... ...how not to become a museum boss!



Peter rises to the task of leading the museum into the 21st Century and being 'the face behind the Wasserkuppe.' Photo: via Peter Ocker

Some may wonder why the German Vice-President of the VGC hasn't shown up to any VGC rallies since VGC Rally Dunaújváros 2017? Apart from family, or career reasons, there maybe some other reasons!

Peter Ocker explains his challenge.

The late VGC member, Gerd Allerdissen, had been ill for some years and it was clear that his illness would one day get the better of him. As a result, Gerd called me some weeks before he sadly passed away and asked me if I would take over the "Förderverein Deutsches Segelflugmuseum mit Modellflug" (the supporter's club of the German Gliding and Model Museum). Although being a member for a number of years, I had no idea what the role entailed, and thinking that there shouldn't be too much involved, I thought "OK," after all, such a request from a friend should not be disregarded, so I agreed.

And so it was that in April 2017 I was elected as the Chairman of the supporters club. Some 850 members donate a minimum of 25 Euros each year, which is like a health insurance for the Museum, and acts as a reserve for any urgent big investments, so the supporter's club is always there ready to step in with help if needed. The Museum itself had two board members, and together with two volunteers, Uli Braune (president of airsport association of Bavaria and dedicated aero-modeller), and Bernd Vogt (aero-modeller specialist), we started working together on the museum's programme for the coming months. All of us were excited about the enthusiasm and motivation of the membership, but it was only then that I began to understand the enormity of the role in which I had taken on! It guickly became apparent that not only was I the head of the supporters club; the supporters club being one side of the role, but on the other side, was the museum itself. A so-called 'Kuratorium' (Board of Trustees), formed the literal 'roof of the organisation!' And the overall boss, as it turned out to be?.... Well that was me too.

Things got off to a challenging start as we worked on our future plans and in early 2018, one of the 2 museum's board members decided to step back. At the same time, the common direction was starting to get lost, which led to the sudden stepping down of the museum's remaining board member. Obviously with the need of support for the daily functioning of the museum and at the same



The new Meise for the Deutsches Sport and Olympia Museum in Cologne looks absolutely splendid and is a true testament to the skill of our restoration team.

time the need to respect the new views and ideas from Uli, Bernd, and myself, clearly caused some discomfort in some quarters. Here we were, 3 men and a new task. Uli and Bernd didn't hesitate and took over responsibility for the museum, the employees, and everything connected with it.

After sorting out the daily business and ensuring the museum's viability, we discovered several hidden issues in infrastructure and other areas. Running a museum is much more than opening and closing its doors in the morning and evening, along with ordering some toilet paper. A huge traffic-jam in investment was more than obvious. Restless, we worked in a fevered manner; on site, by phone, WhatsApp, by mail; we exchanged our views almost daily and continued on our planned track. Our co-operation works without much fuss, with many sharing the same values. Luckily we never ever had any real issues to discuss.

The employees showed a new motivation and started bringing their own ideas to the table. Years of experience and views, proved to be immensely helpful. The volunteers in our workshop, many of whom are into their 80's, started a new project on the 'Olympia Meise' for the Cologne-based 'Sport and Olympia Museum' (see VGC news 156). Without their 30 years of experience and work, we would not be where we are today in terms of the amount, and quality, of gliders in the exhibition and in storage.

We began to benefit from the positive feedback, which came from many sides as we strengthened and built up our contacts and reinforced our relations with our neighbours in not only understanding their views and needs, but also past experiences with the museum. Since then we have been working for more closely together on common targets.

The museum on the Wasserkuppe has two main buildings. The new hangar was opened in 2007 and the old hall that was opened back in 1986. It was soon discovered that the old hall needed some essential repairs and there was a need for improvement. This ranged from what must have been the oldest telephone-line in the area (I have no idea how this old line was still working?), through to a leaking roof! Going through the bookkeepers records, we found out that a huge amount of money was being spent daily on electricity, which of course increased substantially during the winter





CLUB NEWS



Renovation work is essential in presenting a clean and inviting environment for our valued visitors.

New LED lighting transformed the displays, but best of all, it's saved so much in energy consuption that it will soon will have paid for itself.



The nightmare of all the boxed 'stuff' that no one had any idea of what was contained within.

months in costs, simply for having on the lights on in the building; let alone thinking about the daily heating costs. Clear analysis of visitor numbers led to a first winter of 2018/19 where we were closed during the working week, with the museum only being open on weekends and during the Christmas break. This alone proved to be a massive saving in both heating, and electricity bills, plus wages. At the same time, we contacted several people, with a proposal to better light the old hall with more efficient lighting and enhance the exhibits.

Thanks to Bruno Gantenbrink, a well-known glider pilot and multiple champion, we received LED lights from his company, BEGA, for a very fair price. Together with employees and volunteers, we installed the LED's which creates a completely new and exciting atmosphere in the museum's old building. Already within the first nine months, our energy consumption was lower by 7000€! So, this investment will pay itself off in less than 2 years!

Despite a cold January 2019 in the unheated basement (the Wasserkuppe is a 3300 ft mountain!), I worked 2 weeks in the archive of the Museum to find out what is down there. I was down there for no less than 12 hours a day, wearing thick winter clothes, including warm boots! What a challenge; tons of papers (magazines, books etc.) were moved and were loosely catalogued. There is still a lot to be done however in ensuring that any historian can easily work and find items within the archive.

The archive consists not only of printed papers, but also of plans, logbooks of gliders, photo albums, and donations of both famous, and unknown pilots. It also includes souvenirs of all kind, glider parts (ranging from instruments to bigger aircraft parts), models of all kinds and scales, remote-control items from early times to today, a model aircraft engine collection, and so much more. At the same time, we are fortunate to continue to grow the archive through ongoing donations and collections of books to the museum.

We currently have two different libraries (one recently kindly donated by VGC member, Jankurt Hoffmann), plus two more donations of collections which still need reviewing and cataloging. The target is to eventually combine the libraries into one big library with an online catalogue and public access several days per year. The worst thing a museum can do is to hide things away from the public, but at the same time, we must be cautious with what we have, if it is to remain intact and be preserved for the future. We have collected together all kinds of gliding magazines and have them in one place. That's tons of paper that had to be checked, sorted, catorgrised and finally moved and will be soon ready for researchers.

Last summer saw the renovation of the entry area and to our conference room, not to mention a cleanup of our storage areas. A new website is online (the old one failed to meet new legislation that was recently introduced), and step-by-step, it will keep improving. Last autumn saw some additional renovations being carried out, along with the cataloguing of all the museums gliders' instruments (for this there is no one better than the well-known VGC photographer, Alexander Gilles). This has been completed in combination with the Annual Dinner 2019 at Münster.

Although we are volunteers, we always need more money! So I decided to explore a novel way of raising more money through the legal system by talking to all our German federal courts in terms of fines and donations levied by judges. Sometimes a judge may order an offender to donate a set sum to local social organisations and charities. In order to gualify and benefit from these court orders, we need to ensure we meet each individual court's criteria. This proved not to be such a straightforward exercise, as there is nearly 20 different courts in Germany, all of which have differing processes and papers that need to be filled out. What a nightmare, not to mention the obligation of ongoing contacts, but we hope that this will bring in some money for the future? Needless to say it took several nights of burning the midnight oil in going through all that! Due to coronavirus, some governmental support programs were launched. Applying for them took up additional nights of hard work as they needed to have business plans, finance plans, and details what we think would support our case. Until now we



CLUB NEWS/UPCOMING EVENTS

await the result, as the governmental offices in charge have received a large amount of applications from all kinds of museums. So now maybe some of you will understand why my free time has been so limited the last two years. On top of all this is my new challenge in the automotive industry that saw me flying around the world in 2018. From 2019 on, I started a job closer to home, so my weekends have become much better. Nevertheless, the work in the Museum keeps me busy.

The VGC rally 2021 at Achmer is definitely on my future list.

All photos: Peter Ocker

Andreas Koch (via Peter Ocker)

An airworthy Vampyr replica

The interest group 'Technik- und Industriegeschichte Hannover' (Technical and industrial history Hanover) intends to recreate an airworthy copy of the forefather of modern sailplane construction.

With the introduction of the Vampyr at the Rhön competition 1921 on the Wasserkuppe by students of the Akaflieg Hanover, a new era of design and manufacturing of high performance sailplanes had begun and the base for related developments had been founded.

Designed by the Hanoverian engineer Dr. Georg Madelung, omit and along with the three students, Blume, Hentzen and Martens, in the workshops of the Hanoverian Wagon (HaWa) Company. Aeronautical achievements and world records would be set by this significant aircraft.

Now the 'Technik- und Industriegeschichte Hannover' challenges the idea to realise the dream of duplicating an airworthy copy of this historically important sailplane.

The goal is to document the industrial history of Hanover, to secure important inventions, and to make outstanding projects available to the public. In 2005 there was an attempted to prove that the first succesful powered flight had been made in Hannover before the first flights of the Wright brothers, by the Jatho bi-plane. Later a diesel-powered 'Hanomag' world-record car was rebuilt. Currently, the replica of an electric car, a HAWa EM3 from 1922 is being built.

The working group is being supported by a few members of the 'Thermik Alfeld' gliding club, who intend to build the Vampyr and carry out the first test flights. After completion, the plan is to present the Vampyr in flight at special occasions. We hope and anticipate to have the Vampyr join us at some our future events.

First, we will need clarify the question of how we will obtain type-approval. That is why we are approaching VGC members. We are looking for any historical documentation, especially



Photo Caption: The Vampyr was a revolutionary design with its pnuematic undercarriage and a single-spar, stressed skin plywood D-box wing which set the trend for decades to come. Photo: Martin Simons, Sailplanes 1920-1945, Eqip Verlag, Bonn, Germany

drawings, pictures, technical documents etc, in order to evaluate the task and to prepare the approach to the LBA.

Currently we are being supported by the 'Deutsches Segelflugmuseum mit Modellflug' (Wasserkuppe) and the 'Deutsches Museum' (Munich), which both have a Vampyr on display in their exhibitions.

Furthermore, the Danish VGC archive is involved as well, as our Danish friend of Niels Ebbe Gjørup has copies of some important drawings for us. (Due to the pandemic we currently cannot get these in our hands.)

We would appreciate any support with information or documentation. We would also appreciate information or support for a possible foreign approval for registration as a backup if we encounter insurmountable problems locally.

Please contact:

Jürgen Dreyer: juergen.dreyer@w-funke.de Andreas Koch: andreas.koch@gmx.tm

2020 Vintage Rally Dates

Please note: Due to coronavirus, all 2020 events are currently under review. Please check VGC website for daily updates.

CANCELLED	VGC Rendezvous 2020	Flugplatz Nordhorn-Lingen, D
CANCELLED	VGC International Rally 2020	Achmer, D
21/08/2020-23/08/2020	32 th Annual Swiss Vintage meeting 2020	Ambri, CH



UPCOMING EVENTS

22/08/2020-28/08/2020	27 th Czech National Rally	Pribyslav, CZ
26/08/2020-30/08/2020	23 th Kleine Segelflugzeug-oldtimertreffen	Dessau D
29/08-2020-30/08/2020	Whispering Wardrobes 2020	Booker, UK
29/08/2020-30/08/2020	Dutch Ka 6 Rally	Nistelrode (NL)
29/08/2020-05/09/2020	Yorkshire Gliding Club, Slingsby Week 2020	Sutton Bank, UK
29/08/2020-30/08/2020	23 rd Classic Glider Rally, Fliegerclub "Hugo Junkers" Dessau e.V.	Dessau (D)
04/09/2020- 07/09/2020	Experimental Soaring Association Western Workshop/Vintage Sailplane Regatta	Tehachapi, CA, USA
12/09/2020-18/09/2020	UK National Rally 2020	Long Mynd, UK
14/09/2020-18/09/2020	19 th Dutch Vintage Glider Autumn Rally	Asperden (D)
17/09/2020-20/09/2020	Great Plains Vintage/ Classic Regatta	Wichita Gliderport, Wichita, KS, USA
19/09/2020-20/09/2020	End of Season Rally	Mengen, D
25/09/2020- 28/09/2020	Autumn slope flying above Rana Hill	Rana, CZ
03/10/2020	VGC Annual Dinner 2020	Maastricht, NL
09/10/2020-12/10/2020	Eastern Vintage/Classic Regatta	Chilhowee Gliderport, Benton, TN, USA
17/10/2020-25/10/2020	VHZ Basic wood and fabric courses	Nistelrode (NL)
31/10/2020-03/11/2020	Melbourne Cup Vintage Glider Rally and Australian Gliding Museum Open Day	Bacchus Marsh, Vic, AUS

Martijn Hoogenbosch

2020...a game of musical chairs

hat a disastrous year 2020 has become for us vintage glider pilots.

Our rendezvous and rally in Germany did not take place and if you look at the website you can see that many events around the world have not taken place due to COVID-19. Gliding has become difficult due to hygiene measures and the lockdown. Fortunately the rules for us here in Holland are getting better and flying together is gradually easing. Club life is slowly getting going again and very carefully we can think about gliding events again.

Due to the loss of our international VGC rally this year, it has been decided, in consultation with the rally hosts, to postpone the program for a year. That means that we will go to Germany, Lingen and Achmer, next year in 2021. It is very nice that Achmer and Lingen can still organise the rally; they had done so much work and are very keen to see us again. The Achmer and Lingen Rally website remains up and running, so if you have already registered, you do not have to do it all over again.

In 2022, the rally in Slovenia is scheduled with a rendezvous in Italy.

In 2023 we would like to go to England again, for the VGC rally, which will mark our 50th year. The first rally in 1973 was in Husbands Bosworth (GB). The Rally location for both the International and Rendezvous have not yet been determined.

In 2024 Lithuania is on the program but we are still looking for

another field nearby that is a maximum of 400 km away for the Rendezvous. If you have any suggestions for a suitable Rendezvous location, please let me know.

In 2025 we hope to return to France. We are excited to have a proposal of Florac (Central Massief), which marks a long-awaited return to this fabulous country! Astonishingly, when this Rally is due to go ahead, it will make it almost 20 years since we were last there! Where does all the time go? In the past we have travelled several times to France for VGC rallies, of which we have great memories of Montagne Noir, Pont san Vincent, Angers and Anguleme. So it would be magnificent to go to France again, admire the French glider types, and get in touch again with our wonderful French friends.

The International Council has still to vote on the Rendezvous in Italy and subsequent rallies.

I also wanted to draw some attention to the Annual Dinner. Fortunately, the COVID-19 rules for gatherings here in the Netherlands are becoming more flexible. New rules allow for bigger indoor groups to gather together. We have not been able to see each other very much and this is an excellent opportunity to catch up. Jan Forster has put a great programme for us to be together, you shouldn't miss it!

Keep emailing us about your vintage flying events so I can post them on the website.

Martijn Hoogenbosch. VGC International Rally Secretary



Andrew Jarvis

All is not lost! Some great vintage events still to come in 2020

R oris has just announced that 'Our great national hibernation is coming to an end.'

We must be through the worst and we send commiserations to the organisers of all the cancelled rallies: The Park, Long Mynd, Southdown, and Camphill. However, this is an exceptionally sunny year, so there will be some great vintage gliding ahead.

The forthcoming vintage events are:

Wooden Wings Week at Stratford upon Avon's Snitterfield site (19-25 July). Stratford featured in the Club Focus in the last issue of S&G. The organiser is Nick Jaffray.

Lasham Vintage Task Week (17-25 August). The organiser is Glyn Bradney. (Note that this is a GHC event, not VGC).

Whispering Wardrobes a month earlier this year, happens at Booker (28-29 August), organised by Graham Saw.

Slingsby Week, at Sutton Bank, goes ahead as always (29 August- 5 September). The organiser is Jerry Henderson-Newton.

2020 UK National Vintage Rally (postponed from May), IS going ahead, at the Long Mynd. (12-18 September).

Last but not least, please remember the **VGC Annual Dinne**r (3 October). This will be a unique event, in Maastricht, Netherlands, organised by none other than Jan Forster! The actual venue is Fort-Eben, the site of the first-ever assault glider landings, in 1940. Note that the event is still 'paused' as I write this. In the event of cancellation, it will be re-launched in 2021.

On the subject of 2021, the first VGC event will be Park and Glide, at the Park during the 'Early Spring Bank Holiday'. The organiser is Phil Drake. Next will be the long-awaited UK National Rally hosted by Ulster Gliding Club at Bellarena, which is 20 miles from Londonderry. The organiser is Owen Anderson.

I haven't listed the various web addresses, but you'll find them easily via the VGC website and elsewhere. Finally, the COVID miasma still hovers over us, so please check with individual clubs for final advice before committing to a long journey.

Andrew Jarvis

Last chance to meet your VGC family in 2020!

3rd October, 2020



Vaeshartelt with its rich history has hosted hunts for kings, welcomed important military figures and housed wealthy families. Now it welcomes the VGC for its 2020 Annual dinner! Photo: holidaycheck.at

The VGC has had to postpone most of its activities in 2020 because of the coronavirus, but the traditional VGC dinner will, with a little luck, still take place. This year it is to be held in the city of Maastricht at the 'Buitenplaats Vaeshartelt,' an old 17th Century Kings estate. A guided museum tour to visit the famous site where the first military gliders in the 2nd WW made their landings to conquer the 'Eben-Emael Fort,' gateway to the invasion of Belgium and beyond. The price for the guided tour of Eben-Emael Fort is only **€8** (www.fort-eben-emael.be).

Price for the dinner is **€46.50** and includes a 4-course dinner + welcome drink at the 'Buitenplaats Vaeshartelt' restaurant. Accommodation is available at the hotel, with a double room costing **€149**/night. Single rooms are also available and all prices are inclusive of breakfast. (www.vaeshartelt.nl)



Eben-Emael Fort, the location of the world's first assault by military gliders. Photo: Fort Eben-Emael website

For more info go to the VGC web-site;

www.vintagegliderclub.org

To ensure your place, please book as soon as possible by e-mail to Jan Forster: jftandemtutor@hetnet.nl

Please include your name, number of participants and numbers for both the dinner and Fort tour.

Payment details for the dinner can be made out to Jan Forster at the following account details: **IBAN; NL59 ABNA 0864 4339 13** in the name of J.F.J.M.Forster.

Bookings for the hotel can be made directly with the hotel itself. We look forward to welcoming you all!

Martijn Hoogenbosch and Jan Forster





RALLY REPORTS

Old-Timer Šohaj Cup

CZECH



Josef Mezera Contact: Czech@vgc-news.com Raná, June 2020



The conditions proved to be moody but made for a magnificent time, with all being rewarded with wonderful memories, as Jiří in the French Oly soaks up the evening atmosphere. Photo: Johannes Fischer

In the third week of June (which is later than normal), the Sohaj cup, a competition for low performance oldtimer gliders, again took place at Raná this year. Although the participants were generally pleased with the favourable weather, they were less pleased that the surrounding crops in the fields had grown quite tall.

This year 15 gliders from four countries met on the grid. The oldest was a Nord 2000, (which was the first glider produced in France after WWII), the Czech two-seater, Kmotr (with side-by-side seating), three VT 125 Šohaj 2's, a VT 425 Šohaj 3, and two LF 107 Luňák's. Added to this was a number of German designed gliders, including L-Spatz 55, Bergfalke, Schleicher singleseaters, Ka 8, Ka 6CR, and the higher performance Ka 6E. An absolute rarity was the participation of the Austrian single-seater, a Musger Mg 23SL. The focus of the competition is the glider, not the pilot, so for this reason there were some entries that had alternating pilots flying some gliders. A peculiarity of these old-timer races is the fact that the tasks are flown by traditional means of comparative navigation, using only maps for orientation. The GPS recorder is used only to evaluate the flight by the official observer. This adds the long-forgotten element of adventure of navigation of yesteryears gliding.

Unfortunately, the beginning of the competition was marred by unfavourable weather. It was absolutely terrible for the entire first Saturday. The day off was used for some necessary last-minute technical maintenance of some of the gliders. Weather was more welcoming on the Sunday, with several of the remaining participants finally reaching Rana airfield by road (as they had uncovered trailers, unsuitable to the wet conditions of the day before), or by air-tow. Fourteen aero-tows took place in the late afternoon, mostly on the hill-slope which enjoyed a favourable north-west wind. This event was exploited by Jiří Lenik, which it is important to mention, in a newly restored French Olympia (Nord 2000, overhauled by Jiří) to see how it performed off a winch launch. The longest flight for the day was slightly over two hours.

On Monday it finally looked like good gliding weather, but we were still experiencing strong winds, which only increased with altitude. The north-westerly wind remained stable, but at 1500 meters it blew up to 30 km/h, which was too much for historical gliders. We chose a racing task of 88.02 km in the shape of a star over 5 TPs around the airport. In the beginning, the weather was nice with strong thermals, however a hole appeared at the 2nd TP. This point was reached with some hardships to some and Tomáš Mezera in the Šohaj 3 landed at Žatec Airport.

Unfortunately, later in the afternoon the sky was rapidly decaying and it was no longer possible to continue with the race. Nobody reached the last TP. The longest calculated track was flown by the Bergfalke, with the crew from Aeroklub Náchod, who officially covered a distance of 72.6 km (5.1 km below the Bergfalke handicap). The racing task was therefore not valid for the minimum distance and in accordance with the rules, the race was recalculated according to the flight time as an endurance task. According to these parameters, Ulf Kern won in the Šohaj 2, which



A bit of a rarity to the event, the MG23 belonging to Reinhard Műller and Luňák belonging to Václav Černý. Photo: Vladimír Abrahám



As gorgeous a scene as any! The Rana grid is a sea of colour. Photo: Tereza Krčilová





RALLY REPORTS



An expectant Tomáš Meier and Petr Seibrt fix their gaze skyward in expectation in the Bergfalke. Photo: Martin Frič

landed after 3 hours and 26 minutes of flight time. Fortunately, no field out-land-ings occurred.

On Tuesday we woke up to a nice sunny day. From the gliding point of view, everything was promising with the forecast; cumulus clouds and thermals. There was a strong northwest wing at altitude, which affected the 102.4 km task. The 5th and final TP was Chomutov airfield, and this was only attempted by the bravest. By the start at 1:00 PM, it was clear that we could have set off one hour earlier, even if had been a much longer task. But finally, the 'mere' 100 km track was acceptable and whoever could, decided to have a go. Jiří Leník in the French Olympia, Edgar Kraus in the Spatz, and Josef Mezera in the Šohaj 3 were all forced to land due to a stable area of weather above Rana airfield on the way to the 4th TP.

But the weather was getting better and better, so those patient enough to remain fighting the difficult patch, were not to be disappointed at the conclusion of the race. Congratulations go especially to Zbyšek Bican with the two-seat Kmotr, overcoming all the constraints of wind etc. and completing the closed 100 km task, an excellent performance. Miroslav Mitrus flew the best time in the white Šohaj 2 (with a speed of 47.03 km/h), but unfortunately he violated the FAI rules at the 1st TP, so the crew from Aeroklub Náchod with the Bergfalke took over the leading position in the discipline.

Although Wednesday morning greeted us with a clear and blue sky, the first clumps of cloud were already forming in the distance and the weather forecast was for changea-



Vladimír Abrahám looks professionally relaxed with his lovely Ka 6! Photo: Tereza Krčilová

ble conditions. Dense clouds were coming in from the north-east, so dense that the sun was unable to penetrate it, so thermals were out of the question. The competition day was therefore cancelled. Then the rain came but despite the dampness, some of the participants went on a tour of the castle ruins of the Czech Central Mountains, as a part of exploring the competition turning points. It rained almost all though that night, but the social event with three guitars, a bass, and a whistle compensated for any discomfort by the weather.

On the Thursday morning there was moisture everywhere. The predictions were a bit confusing, which was due to the fact that we were in the middle of a high-altitude cyclone. Finally we decided for an endurance task which went well. The highest altitude was within 1000 meters, strong winds and weak climbs would not give the old-timers much of a chance on the racing task. Of course some of our competitors felt like fish 'in water' for this discipline, so fought the conditions accordingly. Meanwhile the hangar was almost full of gliders, but three of them were still flying over our heads; Šárka Lochová with a Ka 6CR, Jiří Leník in the French Olympia, and Ulf Kern in the Šohaj 2. Šárka, the only woman in the competition, who flew almost five hours. But the day's winners finished with a seven-hour long flight (VT 125: 7h23min, NORD: 6h59min). Unreal!

The high-altitude cyclone is not exactly the ideal of gliding weather, which on Friday was really unpredictable. It brought widespread low cloud and strong winds. We waited on the grid from 1:30 pm until 4:00 pm, when the sky opened a bit, but our sniffer-pilot in the ASW15 wasn't able to stay in the air. So we cancelled the task and whoever wanted could fly for pleasure.

On Saturday morning we woke up to a warm, sunny day, with more heat compared to normal; no dew and a storm in the forecasts. The cumulus clouds started form-



3rd place went to Jiří Leník; the oldest participant flying the oldest machine, the French Nord 2000. Photo: Tereza Krčilová

ing and we hoped that they would remain in the sky despite the promised cumulonimbus. There was a declared minimal racing task of 82.2 km over 5 TPs, all against the wind and not far from Raná airfield. During launching at 1:15 PM, the wind increased significantly. To the north of the airport the sky was free of cumulus clouds, as most of the energy was absorbed by cumulonimbus laying over the Krušné Mountains. Despite the unfavourable wind (40 km/hr at an altitude of 1500 m), there were four brave competitors out fighting again. Pilots from Náchod with the Bergfalke (43.56km /h), Šárka with the Ka 6CR (30.1km/h), Jiří with the Olympia (24.75 km/h) and Miroslav Mitrus in the white Šohaj (33.31km/h), so therefore the racing task was valid. The rest landed at Raná except for Vladimír Abrahám with the second Ka 6CR, which out-landed in the area of the 5th TP, fortunately without consequence. The wooden orchids (gliders) were quickly stowed in the hangar or their trailers as the forecast storms arrived later in the night.

I have a lot of positive memories about this year's Šohaj Cup. We flew four times, three racing tasks and one duration task. The weather was quite good, only the wind bothered us. The winning glider of Ulf Kern won by a big margin, mostly with points from the victory in the endurance discipline and from good positions scored on the other days. In second place was Šárka Lochová from Aeroklub Šumperk, the only woman in the competition and in third place was Jiří Leník, the oldest participant of this event, flying the oldest machine, from as far away as France.

...and the rest of us just enjoyed it, it was a wonderful wood-scented holiday!

Tomáš Mezera





Darting about a sea of glass at the 2020 Keepit Regatta, Australia



AUSTRALIA



Ready to take on the world! The Dart on the flight line at Lake Keepit. Photo: Paul Dickson

In the absense of more rally reports due to covid, we thought Paul's adventure at the 2020 Keepit Regatta in his classic Dart may at least keep the spirit alive!

hen my brother, Andrew, and I bought out Dart 17R two years ago, we always had the view that it was a 'high performance' vintage glider and it should be flown crosscountry. We have had several great crosscountry flights in the Dart since we have owned her but I thought it was time to see how she would do in a competition, so I entered to fly in the 2020 Keepit Regatta which is always run during the last week of February. I have flown the Keepit Regatta several times in the past and it is a very friendly and relaxed comp so I thought it would be the perfect opportunity to push the Dart to faster speeds.

As the only timber aircraft at the competition, it was a daunting entry list with lots of high-performance plastic, including several JS's, Duo Discus, ASG32's not to mention the other older fibreglass gliders. They might not have been quite as new but are still of much higher performance than the Dart. I guess that no one has flown a Dart in an Australian comp before, as the first issue for me was that there is no Australian handicap. After some discussion with the organiser and scorer, Casey Lewis, we settled on the US handicap. Casey was feeling sympathetic to the poor delusional fool with a wooden glider and gave me a little extra due to the low wing loading.

The Keepit airfield is now looking lush and green after the heavy rains that the region received in early February and it was nice not to have the dust that was present at the Women's Worlds in January. Lake Keepit is beginning to look like a lake again, however the downside of this was that there were a lot of very wet looking paddocks that still had standing water in them. Paddock selection for any out-landing would have to have to be very carefully considered!

After a poor soaring season in the Hunter Valley due to bushfire smoke, I arrived at the regatta a few days early to get in the groove of cross-country flying and had a couple of good flights along the Kaputar ranges, the best of which was 256km at 66km/h. It was just as well that I had a few days to fly as the practice day & first two days were overcast and non-events. Day one was cancelled and on day 2 Milan Sejka from Kingaroy was the only pilot to make it around the 2:15hr AAT. Most pilots gave up and either started their engines, out-landed or turned around and came home. I was no different and rather than risk an out-landing in a sodden paddock I did not attempt the task.

The next couple of days were affected by high level cloud and on Day 3 and 4 I



Out-landings were an adventure themselves in the wet NSW conditions as a bogged down Matthew Atkinson testifies. Photo: Kerry Kline



Dart out-landing near Boggabri. Photo: Paul Dickson



RALLY REPORTS





s; Tustra's Big Pan Paella! Photo: Justin Smith



Presentation dinner at Carrol Gap Farmhouse. Photo: Milan Sejka

A challenging Regatta in challenging conditions; the Dart in flight. Photo: Ivo Ivelin

found that the thermals were uneven and surging, so it was difficult to centre and get consistent climbs. With the top of climbs at only 4,000 to 4,500' AGL it does not leave much room to glide in a Dart. I found that I was having to take every climb to keep airborne. The limited gliding distance and slower speeds also didn't allow me to make the larger diversions that I would normally take to stay over higher ground, which is likely to be drier and provide better climbs.

At times I had to remind myself to be patient and just take the weaker climbs to stay high.

I ran out of luck on day 4 and out-landed (along with lots of others). I did however have the satisfaction of being low and finding a group of thermalling pelicans above a paddock containing two Duo's and a LS3, and getting a good climb away from them, just before another third Duo started its engine above the same paddock.

I don't think of myself as a vindictive person but thermalling above a paddock full of plastic gliders is SO satisfying!

My smugness didn't last long and I was soon in my own paddock only a glide away. It was a good paddock and I planned my approach so that I finished my ground roll right up against the farmhouse where there was firmer ground, so it was an easy retrieve. Once we got back to the club for dinner, we heard the horror stories of having to winch Matthew Atkinson's glider trailer through a creek to get to and from the paddock. Normally, glider retrieve stories are amplified with the addition of beer in the clubhouse, but they had the photos and mud-spattered clothing to prove their adventure.

As the week was progressing, the weather was improving and on day 5 I had my best comp flight in the Dart and managed 6th place for the day. On this day we had a 2:30hr AAT which took us towards the Pilliga and I finally had a day with good climbs to cloud base 6,000' AGL. Some good cloud streets were forming, and I flew fast in this section. The faster gliders had the luxury of being able to extend further into the turn circles where the climbs were good, but I soon had to turn for home for an uneventful crossing of the wetter ground and final glide to home. Even an extra couple of thousand feet above ground gives you more options to look for the best climbs and push on when they are not good enough.

Perhaps as karma for my smugness above a paddock full of plastic gliders, the next day was difficult after a different air mass had moved into the region and the day was blue, with 12-15kt winds and the previous fickle climbs to only 4,000' AGL.

We waited on the grid for some time and eventually our task time was reduced to 2 hrs. I found that this reduction in time only allowed me to just touch the circles and then move on, so I didn't have the benefit of diversions and in the blue I flew straight lines which was a mistake. At one point I was low over Flood Hill ag strip and it was a wedged tailed eagle that saved me this time and showed me where the climb was. It was a struggle most of the way home with the wind moving me further away in the weak climbs. I eventually got a good climb over the Kelvin Ranges to get final glide. It was depressing at this point to have Brad Edwards join me at the top of the thermal in his brand new ASG 32 and then disappear homeward at heaven knows what speed at a very flat angle as I eked everything out of the last climb and flew home at best glide. Brad was making his finals radio call when I had barely left the thermal.

I am ashamed to admit that on the last day of the regatta I quietly left the Dart tied down and hopped in the HVGC's Duo Discus with Andy Aveling from the UK in the back seat. It was a good day with a 3hr AAT over the Kaputar ranges but what a difference it makes when you have a few more points on the glide ratio and can pick only the best thermals and explore more sky before taking a needed climb. Andy and I managed some good climbs and fast runs under well aligned cloud streets which was good enough for us to get 2nd place for the day. But flights in plastic gliders don't count, do they?

The organisation and catering provided by the LKSC members was superb. Tustra had his huge pan in operation and cooked for us in the clubhouse. The delightful smells of his paella bubbling away was enough to draw everyone in without waiting to be told that dinner was ready. Tanya & Hannah Burgess also fed us for a French themed evening when they cooked us the most delicious beef bourguignon, sautéed green beans followed by tarte Tatin and profiteroles. It's surprising that with the extra wing loading that I wasn't flying fast enough to keep up with the plastic. Jan & Bob Dirks also hosted us at their Carroll Gap farmhouse for several evenings, including the presentation evening when we all sat on the veranda and enjoyed Jan's extravagant feast.

During the regatta, I did learn that compared to my other glider, an LS3, that the Dart requires a more cautious flying style, especially on the low days where the handicap does not make up for the ability of the modern gliders to stretch out and explore more sky for the better air and the best climbs. That being said, it is great fun and a challenge to go up against the plastic in a competition. I am happy with overall 9th place but most importantly I learnt that you can have as just as much fun in a timber glider.

Overall, it was a very enjoyable week of flying in the Dart. I will be back to next year's Keepit Regatta as I'm driven to one day beat the guns in their JS's.

Paul Dickson



David Underwood

A short history of Dunstable Aircraft Factories

Part 2

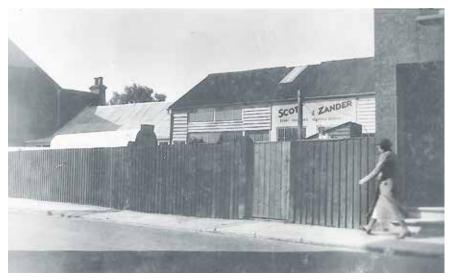
The Dunstable area has enjoyed a special place in the history of British gliding and aircraft. Primarily through the efforts of two German immigrants, they were responsible for both establishing a struggling industry, which was largely cut short by the events of WW2, and for various incarnations of companies that were to follow, in which Zander was directly involved in all three companies within the area. The following is a broadbrush history of an era now largely forgotten and little recorded.

Scott Light Aircraft

In 1935 a young man came to work for Zander and Weyl. His name was Walter Roy Scott, who built his first glider at the age of 13, followed by the construction of a small number of gliders, at Thetford, Norfolk. He was asked to go to Zander and Weyl by the Duke of Grafton, who had commissioned Zander and Weyl to build the Cambridge glider. Whist working there Scott had secured the construction rights for the Hutter 17 in England. Scott also began work on three Hutter 17 gliders in his spare time whilst at Zander and Weyl.



The original letter by Scott outlining the Zander and Scott's orders and business in 1937, including reference to Amy Johnson's Hutter 17 (note the company address is given as Lovers Walk and before their move to Mathew Street and is signed by both Scott and Zander).



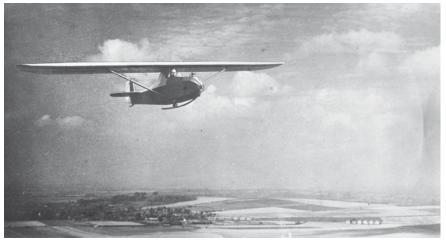
With a new business partner, the Scott and Zander factory opened its doors in 1937. In 1938 the company changed its name to Scott Aircraft and moved to smart modern buildings here on Mathew Street.

Sensing that Dart Aircraft were in a precarious financial state, in 1937 Eric Zander proposed to form a partnership with Scott, who was interested in building his own high-performance gliders. Both men left Dart Aircraft in August 1937 and formed Zander and Scott Ltd, locating the new venture at 32 Lovers Walk, Dunstable. Here they finished building the three Hutter 17's and parts for another one. One Hutter 17 glider was for Captain Ratray, and the famous English aviatrix, Amy Johnson.

Amy didn't think she should have to pay for the glider as she argued that her name would sell more gliders. However the glider was written off in a fatal crash when Captain Ratray was flying it on the 14th of May1938. Amy later used a Slingsby Kirby Kite as a demonstrator.

The company workshops then moved to Matthew Street, just around the corner where the company drawing office was already located on 27 Albion Street (both in Dunstable). A number of Zogling primary gliders where also built here, plus a 'Dart Totternhoe' glider.

In 1938 they changed the company name to 'Scott Light Aircraft Ltd'. Struggling with poor funding, they turned to Viscount St Davids for assistance, who became chairman of the Board of Directors. Mr R. C. G. Slazenger (of tennis fame) was director. This allowed them to then turn to building a high-performance glider, which they



Evocative image of one of the three Hutter 17's built by Zander and Scott



DUNSTABLE AIRCRAFT FACTORIES

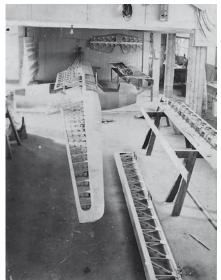


Zander & Scott, Primary No. 108; BGA 359 of London GC at Dunstable. On the left is the LGC instructor, Hugh Wheatcroft. Note the kingpost company name is recorded as 'Scott & Zander', which is in contrast to the recorded company name of 'Zander and Scott.'

called the Scott Viking. The first one was built for Mr R. P. Cooper, of Cooper, McDougall, and Robertson, manufacturers of insecticide, and was shipped to Argentina. In total they built four Viking 1's, and during 1939, they built the Viking 2, a two- seater glider that was completed only a week before war broke out. This glider was latter impressed into military service. During test flights it developed wing-flutter and both pilots bailed out, becoming the first people in the UK to escape from a glider, the event taking place on 12th October 1940. With the outbreak of war they tried to



Manual of Gliding printed for the RAF.



The prototype Scott Viking 1 under construction



First flight of the Scott Viking 1 on 6th November, 1938. This prototype was later shipped to Argentina where it was successfully flown for many years. Three more Viking 1's were built and remained in the UK, with at least two known to be impressed into war service. The third Viking, registered BGA 416, remained active with the Leicestershire Gliding Club at Husbands Bosworth until being sold to Holland. In 2015 the Gliding Heritage Centre at Lasham Airfield brought the glider back to the UK where it resides to this day.

secure sub-contract work for aircraft. The only work they could secure was making gas-mask cases. Soon after, the factory closed. Scott moved back to Dunstable in 1941 and started 'Scott Aero Precision Ltd', located in Brittern Street. However, after only six months, the company relocated to Maidenhead. Scott left Dunstable never to return. During the war he wrote a small booklet called 'Manual of Gliding' for the RAF and ATC.

He later retired to Dorset.

Zander joined the army in the Pioneer Corps, after a while he was seen by someone in the Air Ministry and given a job as an aircraft inspector. In 1942 he re-joined Scott to work with aircraft.

Gliders constructed	
Hutter 17: (plus parts for another, used for another glider that still survives).	3
Zogling:	8
Totternhoe:	1
Viking 1: (one survives with the GHC).	4
Viking 2:	1

Hawkridge Aircraft Company

In 1945 Eric Zander once again teamed up with another enthusiastic constructor, H. E. Bolton, who together formed the Hawkridge Aircraft Company. They had a small workshop at Bolton's home at Denham, Buckinghamshire. Later, around 1946, they moved into what had been the old Dart aircraft site at the Maltings, High Street North, Dunstable. They had a workforce of six men.

Here they built a few primary and intermediate gliders. At least one was made up with some Slingsby glider parts and two Grunau Baby gliders, which may have used some old German parts. They also carried out many repairs on gliders, including a Horten IV flying wing and reconstructed a Weihe which had been brought back from Germany in a sawn-up state by Philip Wills.



Author with a Hawkridge nacelle Dagling glider that is now currently under restoration.



DUNSTABLE AIRCRAFT FACTORIES



Hawkridge built the Grunau Baby 2b that was present at a VGC Rally in Parham 2008.



Prince Bira's Hawkridge Kittiwake as it was when brought by the late Mike Beach. The glider was subsequently returned to the original Slingsby Gull 3 configuration and is today on loan to the GHC by its owners, Brooklands museum. Photo: Mike Beach collection

The Weihe and the Horten were both later sold to the USA.

They also repaired the Slingsby Gull 3, which at one time had belonged to Prince Bira, who referred to it as the 'Kittiwake'. The Kittiwake had been broken in two, so during the repairs, they also decided to put a clear single -piece blown canopy on it, thus becoming the Hawkridge Kittiwake.

They also designed and built a glider called the 'Venture' another example of which was built in Australia (this one still survives in a museum). This was a two-seat, side-byside, training glider.

Their next design was the T.M.2., which was a small high-performance glider. Construction began, but it was later abandoned and remained unbuilt. Called the T.M.2 after the designers Fred Thompson and Henry Millicer, who was born in Poland; with Millicer, later moving to Australia to work on aircraft. Zander left the company, probably due to the lack of sales. In 1947 he moved to Argentina. In 1950 Bolton moved Hawkridge back to Denham, with the company being dissolved in March 1952. By this time they had been advertising for glider repairs, C of A's, and building trailers. So obviously work was hard to find.



with the Orange Gliding Club of New South Wales before going to the Narromine Aviation Museum.

Gliders constructed	
Dagling primary:	5
(one nacelle'd example s	urvives,
plus an A-frame of anoth	ner).
Grunau Baby:	2
(both survive).	
Kittiwake:	1
(this still survives, now restored back to	
its original Slingsby Gull 3 config).	
Venture:	1.
Т.М.2:	not completed.

Postscript

Eric Zander was a tall man with a good memory and was a good salesman. In Buenos Aires he met a widow who was a music teacher, who had been a 'WAAF' (member of the Women's Auxiliary Air Force) in England during WW2. Her husband had been in the RAF, and after the war, moved back to Argentina where she had been before the war after graduating in England. Her husband had died soon after moving back to Buenos Aires.

Zander had moved to Argentina to work in the gliding industry there. Zander, and his newfound partner (who was twenty years younger than him), then moved to Canada where they later married. He found work in the aviation industry there, with A. V. Roe. In 1959 the Zander's moved back to England and lived on the south coast. In 1973 Eric Zander passed away at the age of 79. Some years later Colin Borne of the Dunstable History Society found a 'Zander' in a south coast phone book. Thinking this may be a relative, possibly a son or daughter, he rang the number, only to learn it was none other than Zander's widow.

After speaking on the telephone a few times, he then went to meet her. She told him what she could, but also gave him some photos and other items. The photos are now with the Dunstable & District History Society. The other items, which turned out to be drawings, went to Les Moulster, who had worked at Hawkridge Aircraft Co. Moulster was very interested in aviation history and was responsible for bringing the Minimoa to Dunstable, which is now owned by Lofty Russell.

A few years before he passed away, he gave the drawings to me, along with Weyl's barograph.

Mr. Boulton later emigrated to America.

Sources: Wikipedia With special thanks to Richard Cawsey

The 2 seat Hawkridge Venture. Registered as G-ALMF and then as BGA 688, the Venture ended its career with the Lakes Gliding Club at Tebay, where it crashed on 22 July 1962. Another Venture was built in Australia by the Dubbo Gliding Club in 1953 from plans supplied by Hawkridge. This aircraft, registered VH-GDU, was flying



1948 London Olympic Games (in which the BGA was, at the time, in active discussion). This was also a factor as to why Elliotts of Newbury decided to put the Meise into production, and for a short while in British gliding circles, manufacturers sought to prepare themselves for gliding entering the games. Officials and post-war austerity put paid to these plans however.

The T.M.2. was an interesting single-seat design. Designed to meet the then 'Olympic Class' regulation, it is possible that the Hawkridge designers were keen to capitalise on the much vaunted hope in 1946 that gliding would make its appearance in the



KA 4 FLIGHT TEST

Jean-Sebastien Seytre

Getting to know the affable Ka 4 Rhönlerche II



A quirky delight to fly. Photo: Aurélien Bertrandie

that solo training with basic gliders was no longer desirable and had little future. Students should now learn to fly with an instructor in a two-seater glider with similar performance to single-seaters.

The manufacturer, Schleicher ¹, built the Ka 2 'Rhönschwalbe' (Rhön Swallow) in March 1953, but it was more of a refined performance glider than that of a training two-seater. Moreover, its construction, of wood with an ovoid section fuselage, made it complex and expensive to manufacture, so what was needed was a economical machine to equip the clubs for basic instruction.

Alexander Schleicher had also built the 'Rhönlerche' (Rhön Lark) in 1952, but in contrast to the Ka 2, it was just a two-seater extrapolation of the single-seater primaries for solo training. It could not meet the new requirements and only one was built.

Thus, at the request of Alexander Schleicher, the engineer Rudolf Kaiser², who was the father of the Ka 2, set to work to create a brand-new model. This was the Ka 4 'Rhönlerche II', a tandem two-seater with

a welded tubular-steel fuselage and covered in fabric, which was much simpler and cheaper than that of the Rhönschwalbe. In addition, this structure is more robust, which represents a considerable advantage for a machine designed to take the clumsy landings of early students. With a mass of no more than 220 kg, the assembly and handling remained relatively easy, despite the high wing. Even for its time, the Ka 4 was a small glider, with a wingspan of only 13 meters and a length of 7.3 meters (compared to 16 and 8.15 m for the Ka 2b).

The first flight took place on December 7, 1953, and of course, the performance was proportional to the size of the machine, with a low L/D ratio. This brave little school glider, although designed to help the rapid regrowth of glider pilots, was given the nickname of 'Rhönstein' (Rhön Stone). This sobriquet is, however, a little unfair for this humble glider. It was certainly capable of being a robust workhorse but lacked performance. Despite this, 338³ were built to the delight of the struggling post-war aeroclubs. It should be noted that at the same time the standard Doppelraab (i.e. from the IV to the VII). Utlising the same basictrainer remit, the Doppelrab was of similar

dimensions and equal performance; with a L/D of 18-20 (depending on the version), compared to a L/D of 19 for the Ka 4. Kaiser also produced a slightly improved version of the 'Rhönlerche II;' the Scheibe 4 'Specht' (Woodpecker). The Specht has improved accessibility, with the addition of a small door on the left side of the fuselage for the rear cockpit. The wingspan was increased to 13.5 meters, and the L/D rose to a giddy 20:1, despite being fitted with double wing-struts. A side-by-side, two-seater version, the 'Sperber' (Sparrow Hawk), was also born. Some 55 Specht's and 20 Sperber's were built, in addition to the 338 Rhönlerche II's, and many are still flying in Germany and elsewhere. The Ka 4 was replaced in the Schleicher range by the K-7 'Rhönadler' ⁵ (Rhön Eagle) from 1956. However, the Rhönlerche II was still built under licence until 1963.

Getting to know the glider

The Ka-4, D-4116, present at the annual 2017 Daedalus Rally is owned by Didier Fulchiron. Didier bought his machine in 1994 from a Swiss aero-club that had used it for basic training since 1967, demonstrating the longevity of the machine in the role for which it was designed. Moreo-



KA 4 FLIGHT TEST



Nicely proportioned, the Ka4 has a vintage feel. Photo: Jean-Sebastien Seytre



Although basic in form, the canopy nevertheless is quite a fiddly affair to renovate. Photo: Jean-Sebastien Seytre

ver, the Ka-4 was to be replaced within the Swiss club fleet by an ASK-21, thus jumping two generations of Schleicher school two-seaters (the K-7 and ASK-13).

From the first, the glider has a very nice 'vintage' feel, with its angular, but harmonious shape, its cruciform tail topped by a rounded fin, and its wing supported by 2 struts. Another unusual aspect of the glider is the aileron mass-balance on the underside of the aileron surface, thus making an additional modest contribution to the drag on the whole. They were added to the original design following failure of the surface with severe flutter during a test-flight in 1955 (at a speed of 230 km/h).

As for the colour scheme, 'Delta fortyone sixteen' is finished in a 2-tone livery consistent with the 50's and 60's with a crème highlighted by red extremities. The machine is superbly maintained; it was the subject of a general restoration with stripping and re-engineering in 2012-14. In addition Didier completely rebuilt the canopy in 2018. It was not an easy construction, as it consists of 3 panels, 2 side panels and a central curved panel around 2 metal tubes. This beautiful piece is certainly the most characteristic element of the machine; it follows the shape of the leading edges, with the Plexiglas being fixed to a hinged frame. The rear portion of this canopy is hinged and tilts upwards and backwards and is held open a simple car-style bonnet stay.

But above all, it is the small size of the Rhönlerche II that appeals the most. Moreover, since the leading edges of the wings frame the rear cockpit, an unwise observer could at first glance take the Ka-4 for a single-seater. With the canopy open upwards and this wing layout, access to the rear seat requires a bit of gymnastic agility! Even the front cockpit demands a degree of flexibility, especially with its high wing; the aircraft sits at quite a marked angle when the skid is on the ground, thus the cockpit sill is quite high. But above all, should you have long legs, be careful not to scrape the forward instrument panel with your knees when you slide your legs inside. Moreover, when settling into the seat itself, careful that you do not lean too far back, or your posterior may come to rest on the rear instrument panel....

Once seated however, it feels like sitting in a go-kart, but the little instrument panel reminds one that you are in an aircraft. The rear seat may offer a little more room, but its occupant has structural tubes that pass over his head. Basically, the size of the cockpit is proportional to the external measurements of the aircraft; dainty. The interior is a kind of scaled down version of that of the K-7. Once again, it is interesting to put this construction in the context of the time; the Doppelraab had only one stick which required the instructor to reach over the shoulders of the student and his rudder pedals were operated like piano pedals!

The front and rear instrument panels are simple and fitted with an airspeed indicator, altimeter, and a variometer (plus a clock in front); a GPS with moving map would not be authentic, or very useful. You can always slide a map between the tubes of the frame and the canvas. The closure of the canopy is facilitated by a handle on the front section; once it is shut a pawl is locked over the dashboard and fits into a frame hole.

In flight

With the pilots on board, the Ka-4 rests on its front skid. As soon as the tug gathers speed, you have to pitch fully back to get the skid off the ground and onto the wheel. You do not need to balance it on the wheel for long because the aircraft is in the air at about 50 km/h. Towing must be at a maximum of 110 km/h, at which speed the controls are already getting heavy. In this case, the pilot of the tug PA-25 'Pawnee' tows us very comfortably at 90 km/h indicated (certainly 100 km/h for him). After release we descend to around 500 meters, and in a few turns, Didier centres in a good 2.5 m/s thermal. Modest performance leaves little chance of staying up if you miss the first thermal however. Although light and with a thick profile, the Ka-4 does not thermal as well as some of its counterparts. This is due to the small wingspan, which on the other hand has the advantage of limiting the adverse yaw, despite the large ailerons which are almost 3 m in length over the outer part of the wing.

Once in the thermal, below 30 degrees of bank-angle in calm air, it is still possible to maintain 70 km/h. At 65 km/h, the handling of the glider becomes sluggish and staying in the areas of lift requires a lot of coordinated work at the controls. Although the Ka-4 is not comparable to a modern glider, the controls do not require too large or disproportionate movements between stick and rudder (at least in a speed range of about 70 to 110 km/h, where control forces are low). The use of the spring trim at the base of the controlstick is counter-intuitive, since it is necessary to tighten the screw to pitch up and unscrew to pitch down. The fin is quite small, so most of the rudder is hinged. It



KA 4 FLIGHT TEST



It can be a little cramped for taller pilots, but the view out the front window is superb! Photo: Jean-Sebastien Seytre

is very effective, despite the short fuselage, but it takes a little more footwork for smooth handling for turning and keeping the yaw-string centered. On the other hand, the intrinsic harmonisation of the controls can't be appreciated, as the pilot suffers from the ergonomics and lack of comfort of the machine ... at least as far as I'm concerned.

Although I am not too bothered by the instrument panel being in the way when operating the rudder, the narrow cockpit means that I have my left knee clasped on the tow-hook release, whilst the right knee is up against the canopy opening handle to ensure full movement in roll. As the control-stick is short, I must also be careful that it does not pass under one of my legs, which could lead to an unpleasant momentary blockage! But it must be recognised that I have no recent experience of gliding and is a mitigating factor in my clumsiness at the controls. Despite this undeniable margin of personal progression, I am glad I didn't have to endure learning the basics in such a machine, which makes even simple control inputs a difficult task for taller pilots like myself.

Visibility from the front seat is very good, despite the 2 long-curved canopy hoops. On the other hand, the person 'embedded' in the back seat can't see much; instructors on the Ka-4 had to be extremely careful that their students maintained a good lookout to ensure their safety when turning.

The Rhönlerche II seems to be a very good sailing machine, despite its small wing. On the other hand, at 80 km/h, the vario is al-

ready indicating -1.3 m/s, which is about 19:1; below that of the L/D claimed. With such a low L/D, its penetration is poor between thermals and finding myself at 90 km/h with -3 m/s, I have the feeling that pushing for more would be useless. The altitude decreases rapidly with the increase in speed, and at the VNE of 170 km/h, one would be standing squarely on the rudder pedals! It is a glider with which we prefer calm weather and winds of less than 30 km/h. Even so, this machine can do much more than stay in the local area of its departure airfield. In 2003, for example, a German glider pilot managed a 275-kilometre circuit flying a Rhönlerche II; which represents a flight worthy of great praise and speaks volumes about the pilot's skill. A number of Rhönlerche II's have been converted into 'Motorlerche's' by the addition of an engine in the nose and a conventional landing gear. I have no doubt

Dimensions and features

Length:	7.3m
Wingspan:	13m
Height:	1.5m
Area:	16.34 sqm
Profile:	Gottingen 533
from 15.7	7 to 12.5% thick
Empty mass:	220 kg
Maximum mass:	400 kg
Performance	
Vs	56 km/h
VNE	170 km/h
L/D	19 (at 79 km/h)
Sink rate of 1.0 n	n/s (at 62 km/h)

that such a machine remains fun to fly, but the qualities for gliding must tend towards those of a Piper Cub.

For landing, approach speed is around 70 km/h in calm air. The airbrake handle is on the left side, down low and is under my knee. They are simple spoilers with poor efficiency. Although the performance drops to around 8.5 when open, they are far from the performance obtained in more modern gliders, and paradoxically, there is a risk of ending up landing long. Fortunately, the Ka-4 slide-slips wonderfully well and lands very short.

The Rhönlerche II is an endearing glider that exudes the joys of gliding of yesteryear. If you are not too tall, its controls should pose no difficulty ⁶. The model is still relatively common and it can be an ideal machine to get into vintage gliding aviation.

Appendix

- Schleicher, a prolific glider builder which today produces, among others, the ASG-29 and 32 and the ASH-30 and 31, they are located in Poppenhausen in the Rhön (the region that saw the birthplace of German gliding). Hence the baptism names of some of his gliders, from the 'Rhönadler' of 1929 to the K-7 'Rhönadler' of 1956.
- Whose name gave birth to the series of glides "Ka," "K" and then "ASK."
- ³ 288 were built by Schleicher with a further 50 under license or amateur construction.
- ⁴ Egon Scheibe was another prolific glider manufacturer, now gone. Widely known for their series of TMG SF-25 and 28 motorgli-

ders. Seemingly strange, Kaiser shared his talent for a while between the builders of Schleicher and Scheibe. For example, the Ka-5 is a Scheibe product and not Schleicher; it is also in my opinion the single-seater that most resembles the two-seater K-7 and ASK-13.

- The K-7 is an extrapolation of the Ka-2b with a tube and fabric construction similar to that of the Ka-4. Kaiser had already completed this style exercise with its Ka-1 (wood fuselage) and Ka-3 (tubes and canvas) gliders.
- ⁶ Payload is limited to about 170 kg 180 kg depending on the empty weight.



Raul Blacksten

On the wings of an Albatross

Part 3: The Baby Albatross, Wartime Gliders, and more

This is dedicated to Jack, Chuck, Bill, & Richard Bowlus, Hawley's sons

Frank Kelsey's Baby Albatross (BA-100 s/n 104). The glider most associated with the name Bowlus. Photo: Jim Campion

S tan Hall had the surprise of his young life on Easter Sunday, 17 April 1938. It was during that year's glider contest at the Arvin-Sierra Gliderport, near Bakersfield, California that Hawley Bowlus unveiled his latest innovative design, the Baby Albatross.

Hawley had tapped Stan Corcoran, designer and builder of the Cinema sailplane, to be the first to fly the brand-new Baby at the contest, yet Corcoran was unable to do more than make two slides into the valley. The Baby was then offered to Hall with the admonition to keep the speed down around 40 mph. Corcoran had, Hawley said, flown too fast.

At first, Hall said, he never took his eyes off the ASI. When he found himself getting low, he began looking for a place to land and that is when Hall discovered his first ever thermal, wisely turned into it, and flew for an hour. Roughly 60 years later, Hall expressed the surprise that he still felt at Hawley's offer. After all, he asked, who was he? It is true that Hall had already designed, built, and flown his own glider, the Cherokee, but it was a nacelled primary. He was not, by his own admission, one of the top pilots at the meet.

The BA-100 Baby Albatross was just as in-



Hawley Bowlus holding the tail of the BA-100 Baby Albatross prototype #1. Photo: Bowlus family.



Stan Hall on the occasion of his 1938 Arvin flight in the #1 prototype Baby Albatross. Photo: Frank Kelsey





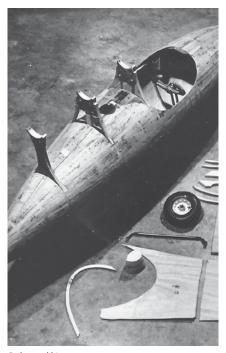
Harold Huber skinning his #3 scarfed pod prototype. He did not complete it until Dec. 1939 and thus received s/n 114. Photo: Jim Campion

novative as Hawley's earlier designs, and its influence on soaring was just as great. Like other Bowlus gliders, the Baby inspired many glider designers and pilots. It is the one that most American glider pilots know and secretly desire owning. In a sense, it was a step back for Hawley because the Baby was a 300 lb (136 kg), 44 ft 6 in span (13.6 m) low performance glider, with a 20:1 L/D.

Design work began in 1935-6 for a glider that could be easily homebuilt by the average pilot. The Baby was designed as a series of kits with the major parts, like the wing spars and pod, constructed at the factory. For most of the run, the tail boom was a five-inch aluminum tube, extruded by Alcoa. After kit 164, it was replaced with one rolled and riveted by Douglas Aircraft. As such, the homebuilder could have a first-class, if not state-of-the-art sailplane on a \$385¹ shoestring budget. It was an innovation in home building but the Baby was not the first kit airplane².

Hawley always had a gift for finding wellheeled backers. During the Baby production, Bowlus Sailplanes had the backing of some of the biggest names in the aviation industry. Donald Douglas, Richard du Pont, Reuben Fleet, Jack Frye, Charles Lindbergh, Robert Gross, Glenn Martin, Al Menasco, Richard Miller, Maj. C.C. Mosley, Jack Northrop, and Thomas Wolf³ all backed the company at one time or another. While Don Mitchell, a heretofore 19-year old Bowlus employee, became company President, Donald Douglas was Chairman of the Board. It has been speculated by Jeff Byard that had WW II not come along, Bowlus Sailplanes, and the Baby, would have had a bright future. After Hawley was again forced into bankruptcy (by the US Army), Jack Laister bought the type certificate and offered the kits as the Laister-Kaufmann Baby Albatross⁴. Harking back to Hawley's earlier two-place designs, the Dragonfly and the as yet unfinished duralumin glider, the Baby was a single-place pod-and-boom design. Although the kit planes were to have molded plywood pods, the first three prototype pods were scarfed⁵. In addition to the molded mahogany plywood pod, the kits had wooden flying surfaces and the aluminum tail boom was mounted to a pylon. A deperdussin wheel provided control. The name "Baby" was because the wings were strut-braced and simplified Gö 535 Grunau Baby wings.

Hawley's father, CD, hand carved the wooden plugs from which the negative concrete pod molds were cast, two molds, a left and a right. Hawley made his own plywood for the Baby by placing layers of mahogany, cotton, and birch veneer at angles into the concrete molds and then using an air bladder to hold the plies in the mold while the glue dried. The pod halves were shipped joined and the homebuilder completed it. The first of seven kits pro-



Baby pod kit. Photo: Jim Campion

spective homebuilders received, was the rudder. If they managed to complete the rudder, they could then order the next kit, and so on.

The Baby was a delight to fly while being a handful at the same time. With the low speed, high lift airfoil, it would go up in the proverbial rat fart but there had to be abundant lift along the route if the pilot decided to go cross-country. Yet because the pivot point location was not on the center of pressure, the pendulum elevators caused the glider to be extremely pitch sensitive. Also, as there was a minimal vertical stabilizer and no real fuselage, the pilot often had to make either "flipper" turns (rudder only) or cross-controlled turns.



Jeff Byard with s/n 134. When this picture was taken, it had a fiberglass pod. Photo: Raul Blacksten





The Bennett BTC-1 Executive Transport, an 8-passenger corporate plane and first composite aircraft. Source: Internet



BA-102 Two-place Baby. Photo: Dick Benbough

Jeff Byard, owner of parts of several Baby Albatrosses and flier of serial number 134, said in his book on the Baby⁶, "... in its day the Bowlus BA-100 Baby Albatross was a great little sailplane, one of the best. Besides being one of the prettiest old gliders that I have ever seen, in all my years of soaring, I can't remember ever having any more fun in any other glider. I wouldn't trade my Baby for the world."

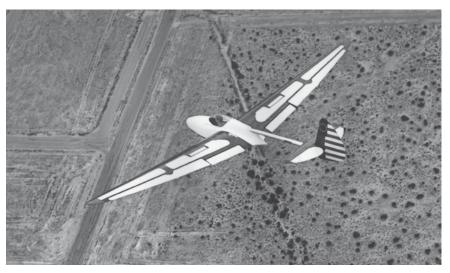
The same cannot be said for Woody Brown. Flying in the 1939 Southwest Soaring Contest, in Wichita Falls, Texas, Brown traded his Baby Albatross, known as "Thunderbird" to Harvey Stephens. Stephens had crashed his Ross-Stephens RS-1 Zanonia, and the trade allowed him to fly in that year's Nationals in Elmira, NY.

During WW II, nineteen-year old Dick Johnson took his Baby with him when he became an Army glider pilot instructor, at Twentynine Palms Air Academy. One day flying his Baby, it broke-up in a cloud. To the horror of those on the ground, they heard the glider break-up and saw debris falling, but they saw no parachute. Rushing to see if anything could be done, or to retrieve the body, they came across Johnson walking down the road carrying his 'chute.

Beginning with number 101, in all 53 Baby serial numbers have been located, but an unknown number of kits were actually produced. Number 190 is the last known kit to actually have been built. There is an unconfirmed rumor that some went in a shipment to South America. Today only two are airworthy, yet many more do still exist⁷.

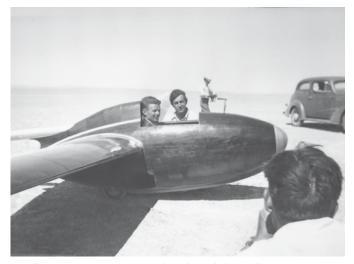
Concurrent with designing and building the Baby prototype, Hawley built the Bennett BTS-1 Executive Transport in his shop. Former Ryan Airlines test pilot Vance Breeze came to Hawley in 1936 to design and build a corporate aircraft for Texas oil man Frank Bennett. Another former Ryan employee and Spirit of St. Louis engineer, Art Mankey, performed the engineering. The design was fairly conventional but construction was innovative. The result was the world's first composite aircraft which was built with the patented Duraloid process⁸, using Bakelite impregnated plywood. The molded parts were so strong that in 1937, when Breeze accidently landed gear up, the only real damage was to the engines and props. A Texas company was set up to produce the BTS-1 but none were ever ordered. The prototype flew until 1941.

The attraction of a two-place glider was too much for Hawley to ignore. Therefore, in 1938, Hawley and Mitchell extended the Baby pod to allow a second pilot under the wing and the BA-102⁹ Two-Place Baby Albatross was born¹⁰. Three were built and two still exist. One reportedly was sent to India (possibly Ceylon)¹¹, but none fly. Like the Baby, the two-place had a Dep [Deperdussin- Ed] controls. Ted Nelson, a San Francisco Bay area glider pilot, could not get used to the controls in his (#3). He tried to steer the glider like with a joy stick, and crashed it. Returning it to Hawley, Nelson asked him to install a conventional stick. Only that was a bad idea as there was not enough room in the cramped cockpit for full roll control using a stick. Over succeeding years, Nelson's BA-102 only had 13 flights on it. Usually a new owner would take a flight or two and sell it. Ron Nelson (no relation to Ted) bought this glider and had former Bowlus employee Frank Kelsey get the glider airborne. It took nearly 20 years, but Kelsey, in turn, "fixed," what he considered to be all of its problems. The rechristened BTS-100 was



The Bowlus BS-100 Super Sailplane when Herman Stiglmeier owned it. It is still painted this way. Photo: Frank Kelsey







Douglas "Wrong Way" Corrigan and Hawley with the Bowlus Super at Arvin, in 1939. Photo: Frank Kelsey

Frank Kelsey and the crew who helped Kelsey (3rd from L) test fly his BS-100 Super Albatross in 1942. Photo: Frank Kelsey

covered with boat fiberglass. It looked beautiful, but it became very heavy. Restoration was completed in 1992 and in the tradition of the glider, Ron Nelson flew it a few times, before donating it to the National Soaring Museum.

Also in 1938, Hawley took the Baby pod, relocated the boom from the pylon and stuck it out the back of the enclosed cockpit. The result was the BS-100 Super Albatross. As with all of his earlier designs, Hawley used pendulum elevators attached to the sides of the tail boom. Yet instead of Baby Albatross wings, Hawley used the Gö 549 outboard section of the earlier Senior Albatross. Ruth Bowlus said that it was built for Jack O'Meara, but he was afraid of it, and then he died test flying the Harlow PJC-2 in 1941.

The Super turned out to be a real performer. At the 1940 Arvin contest, Woody Brown flew the Super with Johnny Robinson in the Zanonia. On one flight, both landed about 180 miles away, in Twentynine Palms. The Super was never flown much, but at the 1947 US Nationals, in Grand Prairie, Texas, Myron Wells flew it and again tied Robinson's longest distance.

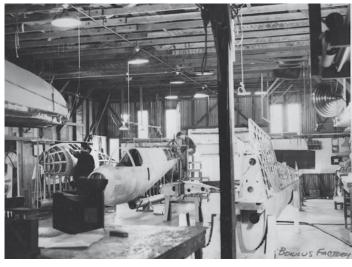
Frank Kelsey, liked the design so much that he built a Super for himself and test flew it in the desert at Soda Dry Lake in 1942. Only Kelsey being Kelsey, he "fixed" the Super. One thing he did was install a fixed horizontal stabilizer and conventional elevator mounted atop the tail boom. Hawley subsequently converted his own Super to Kelsey's modification¹².

With American involvement in the war looking more certain, Hawley shifted gears. When the Army put out an invitation to bid for new gliders in May 1941, Bowlus Sailplanes was one of the first four to respond.

The first to fly was the Bowlus XBM-5,¹³ which became the XTG-12, two-place training gliders. For test flying, the XBM-5 was taken out to the dry lakes. Later, the XTG-12 went to Twentynine Palms, where it was found to be unstable in pitch. Fortunately, Dr. Wolfgang Klemperer designed a new horizontal on the spot to solve the pitch problem. The contract to build three was canceled in August 1943. Alas, the XBM-5 may have died an ignoble death by going back to nature at a dry lake.

Allegedly at Richard du Pont's urging and with backing from a DuPont client railroad, GreatAmericanTransportationCompany,¹⁴ Hawley went in partnership with Los Angeles architect Albert Criz to form the General Airborne Transport Company (GATC). Their intention was to build a pseudo-flying wing cargo glider, the XCG-16.¹⁵

First, a half-scale prototype was built in a vacant dry cleaners storefront in San Fer-



The Bowlus workshop with the XTG-12 its jig & a wing on the left. The XBM-5 is in its jig center. Presumably that is the XBM-5 wing on right. Photo: Frank Kelsey

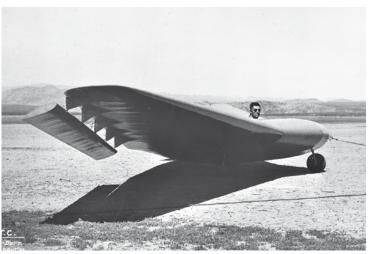


The XBM-5 #1 at Soda Dry Lake for its test flight. Photo: Frank Kelsey





The half-scale XCG-16 prototype. Photo: GATC



The Bowlus-Mitchell Flying Wing. After the tests of the half-scale XCG-16 prototype, it was modified by removing the tail booms and added inverted drag plates stability. Photo: GATC

nando. The pilots sat side-by-side, heads in the breeze. Not a true flying wing, it sported twin tail booms. When completed, this prototype was taken the desert to test fly. After the tests, as there was no further need of it, Hawley and Mitchell modified it. The tail booms were removed, inverted drag plates were added for stability, as well as wing-tip ailerons. They flew it several times in the summer of 1944. The Bowlus-Mitchell Flying Wing became the first of many succeeding Mitchell flying wings.

Next the MC-1, a full-size prototype, was built at the Bowlus ranch. Dual tail booms were attached to a large, 91 ft (28 m) flying wing section, and the pilots sat in a tandem cockpit. Escape hatches were fitted into the wing's upper surfaces. The leading edge opened like a clamshell, providing a loading ramp. The payload was 10,500 lbs (4570 kg) with a gross weight of 19,540 lbs (8800 kg). The MC-1 was identical to the later XCG-16 except that the latter had windows in the leading edge and on the MC-1, they were only painted. Disassembled, the MC-1 was trucked to Camarillo Army Air Field (AAF) for test flying. On one flight, the rope broke and the glider landed in a bean field.

On 11 September 1943, the MC-1 was aerotowed from Lockheed Airport, in Burbank to March AAF, in Riverside County, as the first leg of a trip that would end up in the Washington, DC area. The cross-country crew was supposed to include Hawley, his brother Fred as well as Bowlus employees Harry Perl and Howard "Howie" Morrison, Richard du Pont, and Army Air Forces Col. Ernest Gabel. C.C. "Curley" Chandler, who was on loan from Lockheed, rounded out the intended crew. Unfortunately, the night before, an argument broke out at Hawley's home between him and Col. Gabel. Gabel insisted that he would be pilot-in-command, Hawley said that only he would fly it. Gabel further warned that he had the authority as to whether the glider would be accepted and would reject it if he was not allowed to fly it. Hawley was not persuaded. Du Pont shuffled between the men, literally begging his friend to let Gabel fly the glider. When the MC-1 took off from Lockheed Airport, Hawley was PIC and Morrison was his co-pilot. Gabel and du Pont drove out to March Field, 85 or more miles away. Upon landing at March Field, Hawley and his brother Fred went to get a weather briefing. While waiting, crates of oranges were loaded into the cargo bays. They were to be gifts back East.

Gabel took advantage of Hawley's ab-



XCG-16 wind tunnel model. Photo: Jim Campion



The MC-1 being trailered to the Camarillo Army Air Force Base. Photo: GATX





The GATC MC-1 test flying over Camarillo, CA. The MC-1 was identical to the latter XCG-16 except that the latter had windows in the leading edge. Photo: GATX

The inquiry determined the cause of the crash was pilot error.

sence. Although only having seven hours in training gliders, he said that he could fly anything, and used his authority to fly the MC-1 as PIC. To add a degree of danger, there was no loadmaster. Gabel was warned not to fly into the wake of the Lockheed C-60 Loadstar towplane, but he did.

The glider pitched and the unsecured load of oranges shifted. The glider went into a flat spin. Gabel initially froze on the controls and Morrison could not overcome him. Morrison and Gabel eventually climbed out of the cockpit, laid on the wing, and died in the crash. Chandler hit his head on the spar and died in the crash. Perl and du Pont crawled out of the escape hatches. Perl pulled his rip cord immediately and survived. True to his training, du Pont waited three seconds and the 'chute streamed, coving his body on the ground. In November, three XCG-16s were contracted for by the Army. Yet only one was actually built before the contract was canceled a year later,¹⁶ throwing GATC into bankruptcy. Although the Army found the XCG-16 to be a superior glider, the war was winding down and new cargo gliders were no longer needed. On the 4 August 1944, the XCG-16 was hooked up to the B-17 Miss Barbara, with Hawley, his bother Fred, Paul Tuntland, and Harry Perl on board, and made a record setting cross-country flight (13 hours total flight time) from Oxnard AAF to Clinton County AAF, Ohio, the Glider Branch annex of Wright Field, where it was later destroyed by a tornado.

Two wartime gliders which are usually attributed to Hawley actually had no connection to him except they carried his name. In wisdom which, in hindsight defies logic, the Army ruled that no aircraft manufacturer could build gliders.¹⁷ Nevertheless, Donald Douglas was Chairman of Bowlus Sailplanes and he wanted to build gliders. The result were two disastrous wooden glider designs called the Bowlus XCG-7 and XCG-8. In reality, they were 100% Douglas Aircraft, designed by Douglas engineers and built in secrecy at Douglas' El Segundo, California plant. To say that they failed static testing spectacularly is an understatement.

Two-place Baby owner, Ted Nelson, founded a company in 1945 to make small engines and came to Hawley to design a glider in which to put the 25 horsepower Nelson H-44 engine. The result, in 1946, was the side-by-side Bowlus-Nelson BB-1 Bumblebee. The Bumblebee used a widened Baby Albatross pod in order

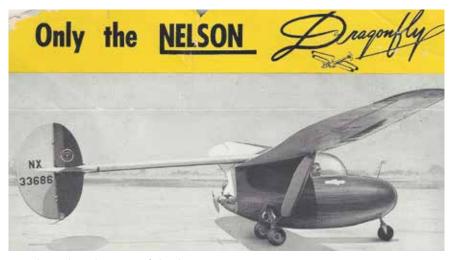


The Bumblebee at the NASM Udvar-Hazy Museum. Photo: NASM



The BB-1 Bumblebee engine installation. This was typical for the Dragonfly too. Photo: Dick Benbough





From the Bowlus-Nelson Dragonfly brochure.

to accommodate side-by-side pilots. Yet in 1947, they had to rename the Bowlus-Nelson production gliders, using the earlier Dragonfly name. Republic Aircraft had already trademarked all "bee" names.

The BB-1 Dragonfly type certificate was granted in 1947 with the 28 hp H-49 engine and a few BB-1s were built. They had a retractable tricycle landing gear and in the motorgliders, the pusher engine could be restarted in flight via a pull cord in the cockpit. The engine was installed under the boom where the widened Baby fuse-lage came to a point. Yet the H-49 engine was too heavy and so grossly underpowered that climb was abysmal. Therefore, only two were sold with engines and five without engines.¹⁹

Hawley's last active soaring involvement came at the 1947 US Nationals at Grand Prairie, Texas, where he officiated. The Bowlus Super again showed its colors during this meet when Myron Wells flew it the exact same distance as Robinson flew Zanonia. When the Nationals closed, Hawley closed his logbooks.

Following his retirement from flying, Hawley kept busy by building Bowlus-Robertson miniature trains, which ran at Los Angeles' Griffith Park Travel Town and around several of Hollywood's estates. Model and miniature trains had long been one of Hawley's hobbies and he had a track running around the ranch.

Later, with his son Jack and a few longtime employees, Hawley set up Bowlus Engineering in Lopez Canyon, just down the street from home. Here he invented the Torque-Flow clutch, which made possible miniature trains, go-carts, and many other things requiring an automatic clutch. They never lost their connections to the aviation industry and Bowlus Engineering built various prototypes, numerous wind tunnel models, and a gatling gun round counter. They also built the still secret deep dive submersible Hikino for the Navy. Even cast aluminum Ski-B-Skate skate boards were produced.¹⁹

Hawley took his last flight in August 1967, at the Crystalaire Gliderport in the high desert near Palmdale. Flying with instructor Don Slotten in a two-place Schweizer SGS 2-32, Slotten said that Hawley flew like he had never been away.

A week later, on 27 August, Hawley was launching his boat at the Long Beach Marina when he had a massive heart attack. His wife Ruth said that he was gone by the time he hit the deck.

In 1968, the State of California took the Bowlus ranch in order to build California Route 118, the Ronald Reagan Freeway. When construction began on the "Bowlus segment,"²⁰ the contractor contemplated the concrete Baby pod molds. Because of their size and weight, the decision was made to bury them. Today, the Baby Albatross molds remain in place, under the freeway at Paxton and Telfair Avenues. The first segment of the freeway opened to traffic in 1979.

On the 23rd of November 2019, the San Diego Air & Space Museum inducted William Hawley Bowlus into their International Air & Space Hall of Fame. His son Jack accepted the honor and introduced 30+ year former Bowlus employee John Caston, who was in the audience.

Hawley Bowlus was a unique and gifted individual. Mostly self-taught, he built or was involved in some of America's most innovative aircraft, both gliders and power. He became one of the foremost glider designers in the US. He was a multi-record holder. Yet many say he was not an easy man to get along with. Frank Kelsey had difficulty with him but Don Mitchell never had a bad word, and lived in the workshop office for many years.

Hawley's widow Ruth said he had the soul



Hawley and a Bowlus-Robertson miniature train at the ranch. Source: Popular Science, July 1949.



A Ski-B-Skate cast aluminum skateboard. Source: Internet



and ability of an artist. He read to his boys every night. Although he always seemed to land on his feet with impressive financial backing, like most artistic people, he was, she said, not a businessman. He went bankrupt three times, although for reasons which were ultimately beyond his control. Although the author grew up within 25 miles of Hawley, there are regrets that he never knew Hawley, who died when the author was 15 years old. Yet the later friendships with unofficial Bowlus biographer Dick Benbough, as well as with Ruth, their sons Jack and Chuck, and many of Hawley's grandchildren and in-laws, are cherished.

Thanks have to go out to fellow Hawley enthusiasts Gary Fogel and Jeff Byard, as well as glider history lover Marici Reid for their invaluable assistance with this series of articles.

Bowlus' life was finally recently recognised by the San Diego Air & Space Museum (SDASM) on the 23rd of November 2019 into their International Air & Space Hall of Fame. Photo: Raul Blacksten

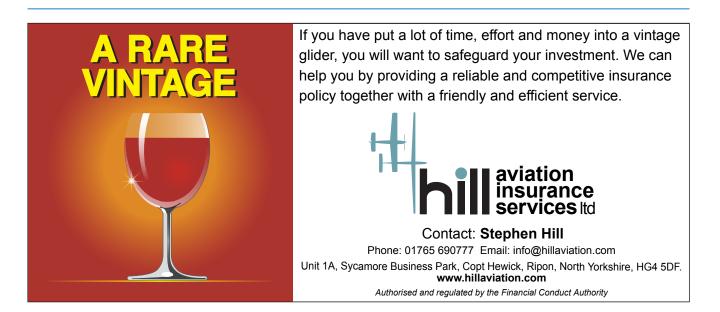


Notes

- A factory-built BA-100, ready to fly, was offered for \$750. Only s/n 123 was factory built.
- ² Edward Heath offered Parasol kits in 1927.
- ³ In order: Douglas Aircraft, DuPont Chemical, Consolidated Aircraft, Transcontinental & Western Airways (TWA), Lindbergh, Lockheed Aircraft, Menasco Aircraft Engines, Vultee Aircraft, Curtiss-Wright Institute, Northrop Aircraft, and Western Air Express (United Airlines).
- 4 It is not clear how many Laister kits were sold, but s/n 190 is one.
- ⁵ All three scarfed pod prototypes still exist, although one no longer has a scarfed pod. #1 is at the NASM Udvar-Hazy, #2 at the Seattle Museum of Flight, and #3 in a private collection in California.
- ⁶ Byard, Jeff, On the Wings of an Albatross, Hawley Bowlus and his BA-100 Baby Albatross, Jeff Byard Aeronautical Services/Amazon.com, Atascadero, California, 2014.

- 7 There are seven currently on display in museums.
- ⁸ Patented by Dr. Robert Nebesar.
- Alternately known as the BA-102, BA2S, and BTS-100.
- ¹⁰ Admittedly the author has wide shoulders, but when he tried out the rear cockpit of Nelson's re-identified BTS-100 Baby, the author did not have enough room to reach the door handle and thus could not latch, or even shut the door. Two of these gliders still exist, one at the National Soaring Museum (NSM) and one in a private collection.
- ¹¹ See the author's article "British Eagle, Part 2" in VGC News #142.
- ¹² Both still exist. Hawley's is at the Wings of History Museum, in San Martin, California. Kelsey's is at the NSM.
- 13 Experimental Bowlus Military #5.
- 14 Now known as GATX.

- ¹⁵ Vincent Justice Burnelli later sued for patent infringement, and lost. Burnelli's problem was that while there was some similarity, patents were suspended during the war, and the glider looked more like one of those of Hawley's friend Jack Northrop, which predated Burnelli's.
- ¹⁶ Felix du Pont, Richard's brother and successor as head of the glider program, canceled the contract.
- ¹⁷ Yet Ford built both the B-26 and CG-4.
- ¹⁸ As of 2011, four Dragonfly gliders were still registered. Two are at the NSM and one at the Canadian Museum of Flight. The Bumblebee is at the NASM Udvar-Hazy museum.
- ¹⁹ One of his nieces admitted that she owned a Bowlus Ski-B-Skate when she was a girl.
- 20 My term.





Frank-Dieter Lemke

100 Years: 1st Rhön Gliding Competition of 1920...

the successful and unsuccessful.

In 1920 the Association of German Model and Gliding Flight Clubs announced the first gliding competition on the Wasserkuppe. That was the beginning of an extraordinary technical development with many decisive implications for gliding.

The Allied ban on aviation by the Versailles Treaty after the First World War led to an upswing in gliding activities throughout Germany. It was during this time that two former war aviators, Erich C.W. Meyer and Wolfgang Klemperer joined the Dresden Aviation Engineering Association. The club had the largest number of members in Germany and took over the chairmanship of the Association of German Model and Gliding Flight Clubs in 1919.

n 1920 the eager Meyer, also known as 'Vollgas-Meyer' (Full throttle Meyer) and the more measured Klemperer (who acted as a good antidote to Meyer), asked the Reich Air Office whether the Allied flight ban included motorless flight. The encouraging answer was 'no.' Meyer wrote an essay series entitled; 'How you can practice gliding.' The magazine 'Flugsport,' edited by Oskar Ursinus, hit upon the idea of holding a gliding competition in 1920 based upon the activities of Meyer and Klemperer. However, the time available for the preparation, which was to coincide with the University vacation period, was already extremely short. This

Advertising poster for the first gliding competition on the Rhön Illustration: German Museum, Munich

was where Oskar Ursinus stepped in and dispelled the concerns of the two Dresdeners. Ursinus agreed to take over the management of the competition and secure its financing by collecting donations. After this decision, Meyer, Klemperer, and Ursinus made a 'call to arms to all those interested in gliding and aviation,' launching the first gliding competition on the Rhön. The declared goal was to coordinate the efforts of individuals and small groups all over Germany and to stimulate intensive debate and sharing of ideas. The rest of the German press did not want to know much about it at that time.

Oskar Ursinus, later lovingly called the



'Rhönvater' as the tireless pioneer for gliding, grappled alone with the many issues that cropped up during the preparations. Financial support came from Dr. Karl Kotzenberg, who practically sacrificed his fortune to help gliding over the difficult early years. Ursinus organised this first Rhön competition during a time of economic hardship for many people. Hunger and illness was common and every day was a struggle for survival. In June 1920, hunger riots shook several German cities - a difficult time for a meeting at the Wasserkuppe!

Three tents from army stocks were used to accommodate the aircraft on the southern



Oskar Ursinus in 1932 on the Wasserkuppe. By now Ursinus was a revered figure in the by then well-established gliding community. Photo: Akaflieg Stuttgart collection



The air camp in 1920 on the southern slope of the Wasserkuppe. That year, three large military tents were enough to house the planes and wooden barracks for various purposes. Photo: Akaflieg Darmstadt e.V.





A familiar sight even today for every glider pilot: "Rhönvater" Oskar Ursinus (left) grilling in 1920. Photo: German Glider Museum



Lunch together behind a windbreaking board wall in 1920 Photo: German Glider Museum

slope of the Wasserkuppe. There were also workshop and kitchen barracks. Not only was Ursinus looking for a cook, but also volunteer carpenters, general helpers, and blacksmiths for the repair workshop were lured with the promise of a relaxating stay in the great outdoors. Accommodation, mostly mass quarters in the tents with straw-filled propeller boxes as overnight camps, was free of charge.

The meeting started on July 15, 1920 and was scheduled to end on August 31, with the orgnisers reserving the right to extend it if needed. Ursinus' approach was visionary and one of true professionalism in promoting the sport as a serious future player in German aviation. A technical commission (TeKo) was also set up, which was responsible for the technical supervision of the aircraft and safety checks, which compreised initially of Jakob Goedecker, Hugo Kromer, and Oskar Ursinus.

As a result, the 1st Rhön competition attracted former war aviators who wanted to fly again, not to mention scientists, engineers, students, craftsmen, and enthusiastic young people. The common search for the best solutions not only led to close camaraderie, but also to an exchange of views that was unprecedented in aviation at the time.

Unrated Machines

In a report by Oskar Ursinus, Ursinus was far from enthusiastic about Ernst Freiherr von Lüttwitz and his glider. The deputy warehouse manager had surprisingly built a single-seat glider with a central kingpost and a seat from a bundle of roofing battens, fence wire, coarse nails, and packing paper in just four days! With this rather hasty, crude structure, Lüttwitz flew 60 m in twelve seconds, despite the ensuing crash-landing in which Lüttwitz was uninjured. Everyone laughed and had soon forgotten this first flight of the glider.

As the youngest participant, 14-yearold student Peter Riedel had come from Aschersleben to the Wasserkuppe. His PR II biplane school-glider arrived as a skeleton. Karl Kammermeyer and others helped with the completion of the machine. Fortunately, Ursinus supported Riedel's efforts against an objection by Prof. Dr. Wilhelm Hoff from Berlin-Adlershof, a newly added head of TeKo, and approved the layout of the PR II's spars, which were arranged similar to that of the wings of the Wright biplane. However, to temper Ursinus' sympathy for the boy, he prohibited free-flights until he had learnt to fly! Two helpers held the PR II with short ropes at both wing tips and ran with it, whilst flight instructors Theo Suchla or Erich Meyer ran ahead shouting instructions to the boy as to what to do. It proved to be an exhausting exercise for all involved! In 1974 Riedel rebuilt his school-glider from 1920 and demonstrated it with an auto-tow on the Wasserkuppe. Peter Riedel (1905-1998) remained loyal to gliding into old age. Erich Meyer went missing in 1942 as a war correspondent on a flight to Leningrad.

The former World War II pilot, Theo Suchla, also launched the braced monoplane 'Sen-



Participants in the first Rhön competition: Erich C.W. Meyer, called "Vollgas-Meyer" (right), and TeKo member Hugo Kromer, lecturer at the Kyffhäuser Technikum in Bad Frankenhausen (sitting on the wheel axle) Photo: German Glider Museum



The 45-cent special postage stamp from 2011, which shows 14-year-old Peter Riedel with his bondage glider PR II on his school flights in 1920. The PR II covered with wrapping paper had stick control and skids and was a glider for young people who were not allowed to weigh more than 60 kg. For his school flights, Riedel received 400 marks as a recognition and encouragement prize for applicants whose planes were only used for training flights. Photo: Frank-Dieter Lemke Collection





'Senator Zeise' glider with the pilot Theo Suchla. The member of the Halle Aviation Association died as a police lieutenant in the 1921 March fights. Zeise's glider consisted of bamboo, plywood and oiled silk as covering material. The tethered take-off took place on short ropes on the outer wings, and the pilot struggled to land safely on his feet after a short jump. The wonderfully crafted aircraft received a 700 mark prize from the Kyffhausen technical centre for the best and lightest construction of a closed fuselage with maximum strength and weather resistance, as well as 300 mark for the cleanest glider. Photo: German Glider Museum



The crash- damage of the "Senator Zeise". Theo Suchla was unharmed. Photo: German Glider Museum

ator Zeise,' which was built in Hamburg-Altona. Mounted on the rear edge of the dove-like wing surfaces were small (but unused) flapping wings similar to the form of dragonfly wings, which were used for generating propulsion. The seated Suchla took off and landed on his feet, however his attempts were cut short on the 5th of September when the glider was lifted by the wind and slumped downwards, crashing back down to earth on its right wing, completely destroying the glider. Suchla was not injured. The designer of the Senator, Engineer Alfred Zeise, died in 1922 during a flu epidemic aged only 60-years-old. Suchla, a Police Lieutenant, was to die a year earlier in Halle during a police operation against workers who went on a general strike against economic injustice.

The Flugtechnische Verein Stuttgart (Technical Aviation Association of Stuttgart) was far more successful than Alfred Zeise. As early as 1919, its secretary Wolf Hirth, asked members to build a simple glider. However the construction of the hangglider biplane was constantly interrupted by post-war turmoil and material supply problems. In mid-August 1920, Hirth drove to the Wasserkuppe and returned enthusiastically. He pushed for the completion of the semi-finished hang glider, which was finally brought to the Wasserkuppe on the 5th of September. Two days later, Paul Brenner, made some remarkable flights. The former 1st world-war pilot had never flown a hang glider but had previously taken advice from the successful hang-glider pilot, Willy Pelzner.

H. Braun from the Flugtechnische Verein Darmstadt (Technical Aviation Association of Darmstadt) made only one unsuccessful attempt to fly. Another hang glider design, it was covered with white parchment paper, but was this time a monoplane. With a higher center of gravity, it proved far too difficult to control compared to Pelzner's smaller bi-plane design.

Five other gliders did not get into the air at all, including the 100 kg monoplane by Robert Heinzmann, whose huge wing and outer forward swept V-shape portions of the long outer wing, was admired by everyone. The wood sculptor from Furtwangen had built the imaginative monoplane without any previous knowledge of flight mechanics and with great personal financial cost. After the competition, Heinzmann broke up his failed construction with a hammer and gave up. The visions of Heinzmann's brother, Gustav Heinzmann, remained in Peter Riedel's memory: "Yes, Peter, if only we could hover up there at a height of two thousand meters'... Poor dreamer, I thought. Very few of us believed in gliding high up and over long distances".

The top seven rated machines in the classification

The young lithographer, Konrad Seitz from Nuremberg, took 7th place. He managed a single three-second flight on his musclepowered flapper monoplane (with elastic wing ends). It was operated without the power springs, which were operated by the physical strength of the pilot.



The team of the Stuttgart Aviation Association, amongst others; Wolf Hirth (2nd from left), Paul Brenner (middle), Eduard Ulbert (2nd from right) with their hang glider on the Wasserkuppe in 1920 Photo: Hellmut Hirth Collection

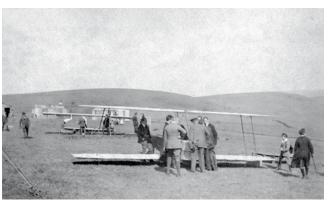


It was as long as it was high and wide; the triplane from Richter-Hauenstein from Berlin. With the high center of gravity, every landing without a rollover was a flying masterpiece. Richter received a 1000 mark award from the Federation of German Aviators. Photo: German Glider Museum





The young knight Eugen Edler von Loessl (1895-1920) was a former Daimler factory pilot. Photo: Frank-Dieter Lemke Collection



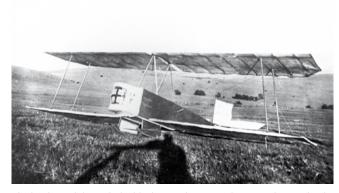
The team of the Stuttgart Aviation Association, amongst others; Wolf Hirth (2nd from left), Paul Brenner (middle), Eduard Ulbert (2nd from right) with their hang glider on the Wasserkuppe in 1920 Photo: Hellmut Hirth Collection

Friedrich Richter, one of the oldest participants, took 6th place. Together with Bruno Hauenstein, he built a triplane with a control stick and double skid undercarriage. But the high material prices forced the two Berliners to forego expensive fittings and bolts. The pine and fir wood parts had been joined by wrapping gluesoaked hemp cords, thus eliminating the need to drill holes and weaken the structure. The main fittings consisted of 1.5 mm band iron. Of the four flights completed, which each landing resulting in the craft remaining upright despite the high center of gravity and being top-heavy, one flight was to achieve a distance of 206 meters in 22.4 seconds in a 6 m/s wind. The last flight ended in the glider being damaged, in which Richter was not injured.

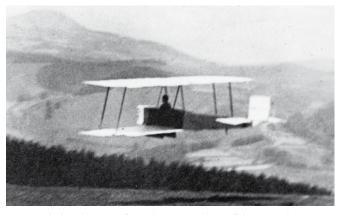
Bruno Poelke, who had emigrated from East Prussia and was a member of the Frankfurt Model Flying Club, came in at 5th place in the rankings. Three weeks after the start of the meeting he made the first official take-off due to bad weather having previously made flying impossible. On August 6, Poelke's bi-plane glider flew 41m in 9 seconds in a 10 -12 m/s wind; a short flight. Poelke needed a stronger wind because of the small wing area of his glider. He was the first to use a single, mediumsized skid to demonstrate the integrity of the layout for landing. Many had previously doubted its integrity. Poelke completed three flights.

Fourth place went to Darmstadt's Eugen von Loessl, whose enthusiasm came to a tragic end. Already in 1912 he had flown in the Darmstadt FSV X, with which Hans Gutermuth had flown 838 meters in 112 seconds on July 22, 1912; a world record! Hans Gutermuth was one of the most hopeful talents of early German aviation, who along with Berthold Fischer had first discovered the Wasserkuppe as a suitable site to conduct their flying activities in 1910. Gutermuth was a pilot with Jagdstaffel 5 in France and died on February 16, 1917. In an article in the spring of 1920, 'Von Segelfliegen' in the magazine 'Flugsport,' von Loessl gazed far into the future, but was hardly noticed at the time. Von Loessl mentioned the frequency of thermal winds over dark forests and other heat-radiating objects. Rising air currents, according to Loessl, would bring much more than first thought.

Eugen von Loessl came with a fuselage biplane, which along with his young wife Margarete (whom he had been married since November 22, 1919) he and Karl Kammermeyer had built. The 43kg light aircraft had a remarkably low wing load of only 6 kg/m² and had the sarcastic wording of "Vergnügten Flügelbruch" (Pleaserable broken wing) painted on the fuselage, which proved to be a bad omen indeed! In addition, the night before the last flight, a stranger had painted a swastika on the fuselage of Loessl's bi-plane. The black swastika, a popular symbol of luck and used by both Allied and German pilots in World War I, met with great criticism from the



The bi-plane glider with the black swastika. Note what turned out to be the macabre text on the side of the fuselage; Vergnügten Flügelbruch. Photo: DEHLA



Von Loessl's last departure from the western slope of the Wasserkuppe on August 9, 1920. Photo: DEHLA





The wreckage of Loessl's bi-plane. Photo: DEHLA



Von LoessI had brought a second plane with him: the Parasol monoplane, which was suggested by the student Herbert Pobel, but which had not yet been completed. This aircraft was made avialable by von LoessI's widow, Margarete, to the technical flyers in Darmstadt. She also donated funds for further projects. Photo: DEHLA

participants, so Karl Kammermeyer turned it into a black square (this was before the National Socialist German workers party adopted the symbol as their party badge. -Ed).

On August 9, Eugen von Loessl suffered a fate not unlike Otto Lilienthal twenty-four years earlier. Von Loessl started from the western slope of the Wasserkuppe and experianced strong flutter causing longitudinal pitching due to the gusts that could no longer be compensated. After 80 seconds of flight and at a height of 770 m, the left half of the pendulum elevator broke off at a height of 150 m and the glider overturned at 40 m above ground, whereupon von Loessl fell out of the cockpit. It later turned out that he had unbuckled himself in flight to slide forward to compensate for the tail heaviness of his glider. Had he remained strapped in, he might have survived the crash as the glider fell into the forest, which softened the impact. The

fledging post-war German civil aviation had found its first victim and at the same time founded a myth. From then on, the slogan that was to become widely adopted and influential was: 'Es wird weitergeflogen!' (The flying continues!)

After Eugen von Loessl's crash, Wilhelm Hoff, the head of the German Aviation Research Institute and professor at the Chair of Aviation at the Technical High-school/ university (TH) Berlin, came to the Wasserkuppe as head of TeKo and remained so until the end of the meeting.

Third place went to three unemployed Berlin mechanics: Ernst Schalk, Willy Drude, and Paul Schlak. Their small, sleek biplane with a skid, plywood landing gear and stick control was called the Drude biplane. However, the planned rolling starts were not possible because of the plywood wheels getting stuck in the soft grass of the Rhön. Drude's take-offs were therefore on runners, but he constantly had to mend the lower structures because they were damaged with every attempt to start. In total, he completed 13 flights from September 7.

Second place went to a hang-glider pilot whose skill and ability was incomparable; the 20-year-old Willy Pelzner from the Municipal Aviation Preschool in Nuremberg. With his amazingly lightly constructed hang-glider weighing only an incredible 12.5 kg it was covered with yellow oil paper. Pelzner first flew 100m distance and then up to 500m over the slopes of the Wasserkuppe. With its low center of gravity, the glider was easy to control, not only in weak but also in strong winds. Pelzner was to complete a recorded 16 flights in total, covering a combined distance of 2728m. The Pelzner slope on the Wasserkuppe still reminds us of those memorable days and Pelzner's modest achievements.



Here the Pelzner hang glider flies with tethered ropes at the wing ends. The pilot would not be the experienced Willy Pelzner. Pelzner won 1,000 marks for the third best flight duration, 1,000 marks for the third best flight route and a 100 mark encouragement prize for the aircraft, which is the first to cover a flight of 250 m. Photo: Hellmut Hirth Collection



Willy Pelzner.with his hang glider. Although he was to achieve moderate success with this glider, it still harked back to Lilienthal's day. Photo: Via Peter Ocker



One of Willy Pelzner's many hang glider types as a replica in the German Glider Museum on the Wasserkuppe. In total, Pelzner built 216 gliders and motor planes in 30 years. He did more than 12,000 foot launches - an unmatched achievement! Photo: Frank-Dieter Lemke

WASSERKUPP 1920 PERES PERES



FEATURE ARTICLE – 100 YEARS OF THE WASSERKUPPE



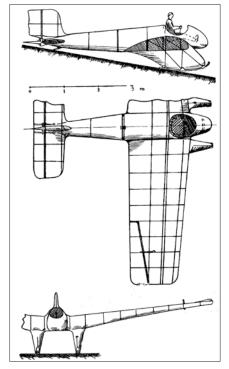
Departure of FVA-1 Schwatze Düvel with Wolfgang Klemperer. Photo: DEHLA



Schwatzer Düvel on the Wasserkuppe after the accident with Weil as the pilot on September 7, 1920. The fuselage, rudder and left wing were broken. Wolfgang Klemperer: "I never experienced what happened next. Weil was like lightning out of the rubble and disappeared in the direction of Gersfeld, where he got on the next train and drove for home." Photo: DEHLA

Victory of the Black Devil from Aachen

In May 1920 Wolfgang Klemperer (who as already outlined, was one of the initiators of the contest), had gone to Aachen as an assistant to the head of the Aerodynamic Institute, Professor Theodore von Kármán. To his surprise, he found a group of students there who were eager to build a glider. It was whilst at the Technical University that von Kármán gave his valuable support for their plans. Another factor that benefited the students was that von Kármán maintained good relationships with wealthy citizens of the city of Aachen, whom he persuaded to support the students' plans.



FVA-1 Schwatze Düvel in three-sided view. Frank-Dieter Lemke Collection

Prof. von Kármán transferred the technical management of the group to Klemperer. The construction of the FVA-1 Schwatze Düvel began. Known as the Black Devil, due to the color of the black fabric. The construction was financed by the Aachen silk trader, Katzenberg, who had also supplied the covering material.

With its aerodynamics, strength and lightweight construction, the FVA-1 weighed only 62 kg and set the benchmark in which all future direction of glider construction would move. The cantilevered low-wing concept with no external tensioning and the use of several spars was the brainchild of Professor Hugo Junkers. All components had been carefully clad and streamlined, even if the pilot's upper body protruded high from the cockpit. The skid frame with two rubber-sprung ash runners made butter-soft landings possible and was generally admired at the time. However, the runners proved to be susceptible to damage during sliding on landing.

Wolfgang Klemperer also caused a sensation with his launch method. The revolutionary rubber rope that he had brought with him, instead of the more common hemp rope that had previously been widely used as a starting aid, was to revolutionise gliding for many years to come.

After the extension of the competition by seven days, only in the afternoon of September 7 was to be regarded as a flight day, while the rest of the time the Wasserkuppe was shrouded in impenetrable fog. On this day, Klemperer managed the first soaring flight over the uphill slopes with a wind of 15-18 m/s when he climbed 10 m above the starting point. However, the flight attempt by Weil, a former pilot of Riesenflugzeuge (German for large bombers/aircraft of three or more engines), ended with damage to the glider. After takeoff, a gust of wind tipped the glider over due to the lack of a safe sufficient flying speed being obtained. Overall the FVA-1 achieved a total distance of 2805 m in five flights, amounting to some 5 minutes and 1 second flying time.

he flight tests in the Rhön continued after the official end of the competition. Some persistent souls even stayed on at the inhospitable Kuppe over the winter. At that time, the English magazine, 'The Aeroplane' summed it up: 'It is interesting to note that poor, battered, exhausted Germany knows how to keep the enthusiasm for conquering the air alive, while in our rich, well-fed country, we do not know how to maintain a simple aero club that can advance the progress of the air ... ' As early as late autumn 1920, the Association of German Model and Gliding Flight Clubs announced the next gliding and gliding competition in the Rhön for 1921. Gliding had begun inexorably conquering the world.

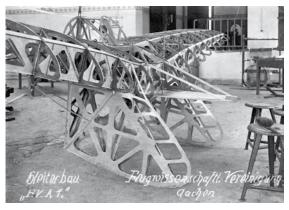
> Frank-Dieter Lemke (FC Strausberg / Akaflieg Dresden)

The winning entry in more detail

The FVA-1 was not only the winning design at the 1920 Rhön competition, but it is recognised as one of the early blueprints for future glider design with its attention to early streamlining and introducing a new bungee launching system that was to become the mainstay of cheap affordable launching for gliders for many years to come. It is then perhaps worth taking a historical look into the story of the FVA-1 and its journey to the Wasserkuppe.



FEATURE ARTICLE – 100 YEARS OF THE WASSERKUPPE



FVA 1 Schwatze Düvel of the Aviation Science Association under construction in the workshop of the Aerodynamic Institute of TH Aachen. With its aerodynamics, strength and lightweight wooden construction, the glider was an outstanding landmark in glider construction. The awards it achieved were also quite impressive, which included: a 5000 Mark prize from the former aircraft manufacturer Dr. Edmund Rumpler for the longest flight duration, a 3000 Mark Fokker prize for the longest flight route (overbearing the flight from Hans Gutermuth of 835 m), a 3000 Mark prize for flight performance economics and another 500 Mark prize. These were the most valuable prizes for an airplane at the first Rhön competition. Photo: DEHLA

In a letter to Peter Riedel on October 3, 1959, Peter Terkatz reported on the construction of FVA-1 and FVA-2:

The FVA-1 Schwatze Düvel, which was built without the help of a carpenter, was built by students and two mechanics from the institute. It was glued and nailed. The glue joints were clamped with the use of the nails. If too many nails were being used for a joint, the motto was 'STOP' as every nail reduced the buoyancy of the glider by increasing its weight. The only parts constructed by a master craftsman was the skids and the landing chassis, which were constructed in the carpentry shop of the university.

The construction of the FVA 2 Blue Mouse went much smoother. Carpenters were involved and the use of nails was eliminated.

The transport of the Black Devil

(Taken from a transcript by Peter Terkatz) The first Rhön competition on the Wasserkuppe in 1920 had already started, but work was continueing on the glider in Aachen. We had worked through the last night to prepare the Black Devil for transport. The loading in the morning also took some time and since the freight train was leaving as scheduled, I had to tie down the protective tarpaulin of the wagon as it fluttered in the wind as the train was already moving.

Beyond Cologne was the checkpoint of the British occupation authorities; a tricky place (by the way, Aachen was occupied by Belgians). I had inquired from the train operator about advice at the control zone and learned that the control officer, accompanied by the English military police, would check the papers and would withhold any suspicious or unauthorised exports (no doubt enforcing new Treaty rules-Ed). In the consignment note, the glider was referred to as a 'glider'; this at least could have raised suspicions! So I went all over the train, even into the service section of the train driver, who was not there, to look for the control officer. So I took the freight papers and lay down in my car to wait. In the meantime, it was dark and light rain was falling. There were constant footsteps and voices next to my car. But nothing happened. The train started to move and I was very happy when we reached unoccupied Germany. There I returned the waybill; the train driver laughed and said that although it was the right thing to do, I shouldn't have told him.

Perhaps, however, I owe it to this to have got the glider through in this way, also because the English and the Americans did not handle occupation rights as strictly as the French and Belgians.

Peter Terkatz

Wolfgang Klemperer (1893-1965)

For Wolfgang Klemperer, gliding was only a short but very successful episode in his creative life. Born on January 18, 1893 in Dresden, as an Austrian citizen with Jewish parents from Prague (which was then part of the Austrian Empire-Ed). He soon found his way into aviation by joining the K.u.K. Luftfahrtruppen (Austro-Hungarian Aviation Troops) where he received the impulse for his versatile life's work in all areas of aviation. In 1916, Klemperer attended the Aviation Officer School in Wiener Neustadt as an observer, completing 43 flights into enemy territory on the brutal and



Wolfgang Klemperer, the winner of the first Rhön competition. Photo: DEHLA

bloody Isonzo front. He was then transferred to the Aviation Arsenal in Vienna, where he made numerous inventions, including a bombsight device. Towards the end of the First World War, he completed pilot training in Aspern and then studied mechanical engineering at the Dresden Technical University.

In 1920 he began his time as an assistant to Prof. Theodore von Kármán at the TH Aachen and was a successful designer and glider pilot at the Akaflieg Aachen.

After that he worked until 1924 as head of the experimental department at Luftschiffbau Zeppelin GmbH in Friedrichshafen. With a doctorate in engineering, whilst at Aachen he completed a thesis on the airships role in air forces.

From 1924 to 1936 he secured a job at the Goodyear Zeppelin Corporation in Akron (Ohio). This was followed by 25 years at the Douglas Aircraft Company in Santa Monica, where he developed a pressurised cabin for commercial aircraft. He later became head of the Guided Missiles Research Section and the Product Development Department. He also worked for the U.S. Air Force, taught at the California Institute of Technology (CalTech) in Pasadena and at other schools.

Despite his sparse free time, he never forgot about gliding however. Wolfgang Klemperer participated in many projects, including the Sierra-Wave project.

Wolfgang Klemperer died on March 25, 1965 aged 72-years-old in California, USA.







France

Correspondent: Benoît Auger Contact: France@vgc-news.com



A treasure trove within and looking in remarkably good condition. Photo: Philippe Claudot

Restorations move forward and a new (classic) glider is discovered!

Like lots of countries, in France we had been in lockdown since March 17th through to May 11th. Since then we can again enjoy our vintage flying. Flying in my Milan, I had a nice flight together with Didier Pataille in his M200, as we flew around Amiens with an impressive 170km on May 30th, despite the 30km/h wind. It was really nice to fly in formation. As previously reported, sadly we have had to cancel our vintage events, so we will have no vintage rally this year.

Another incredible story is the news of Paul Lazaro and his friend, Philippe Claudot, who have discovered the location of a Siren C30s Edelweiss (Serial number 2, F-CCUB). The Edelweiss first flew in 1962 and was designed by the French designer, Dr. J. Cayla (who also designed the Breguet 901 and 905 Fauvette). The Edelweiss was Vee-Tail layout of a plywood/foam core construction and took part in the 1963 World Championships at Junin in Argentina (finishing 2nd and 17th) and won the Standard Class at the 1965 World Championships in South Cerney, England.

The previous owner passed away last year and had purchased the glider back in 1988 and never flew it. Paul and his friend found the Edelweiss stored in a dry hangar in her original trailer, complete with it's original French team markings which it carried when it competed in the World Championships at South Cerney, coming



Seeing the light of day after 32 years of hibernation. Alexandre Lemoine (son of previous owner who passed away last year) and on the on right is Eric Alexandre (Philippe Claudot's friend who helped) look rather pleased with thier efforts to liberate the lost Edelweiss from its long hibernation. Note the French Team markings on the trailer; itself a period piece of French history. Photo: Philippe Claudot

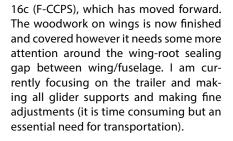


An exciting glimpse of the beauty within the trailer inside the hangar in which it has spent the last 32 years. Photo: Philippe Claudot

7th in the hands of the French pilot, Lacheny. The Edelweiss has lain idle for the past 32 years however it will be given a deep inspection to ascertain if it can be made airworthy again.

PIK 16c and Caudron 801 progress

During this difficult period we had more time available for restoration of our PIK





The Pik's wings are now covered. Photo: Benoît Auger



Trailer fittings are both time consuming and essential! Photo: Benoît Auger





We also have Olivier Balaya who is working on his 1952 Caudron 801 N°10. Both wings are ready to be covered after a lot of woodwork, with no fewer than 16 ribs having been partially eaten by a hungry dormouse, who obviously had a good appetite! Olivier is now working on the fuselage metal components and is inspecting and painting these in readiness for refitting to the glider.

Benoît Auger



Dormice and decades of neglect in equal measure as the Caudron wings receive the expert workmanship of Olivier. Photo: Olivier Balaya



Work is now beginning on the fuselage. Photo: Olivier Balaya



Germany

Peter Ocker Contact: Germany@vqc-news.com

Winches and gliders alike, they are all our history...

Another Weihe:

The South-German based Weihe syndicate with Matthias Schleinzer and Andreas Geiger (who fly the former white, Gerd Hermjacob, Weihe) are still working on the former Swedish Weihe they bought from Barry Briggs in the UK (BKC). This glider should have by now left the paint shop and was planned to be present at the Achmer meeting. Work is continuing and we hope to see pictures of this former Swedish Weihe soon. It has received an original German wartime canopy (on permanent loan from Peter Ocker's collection), that replaced a more Spitfire-like, bubble-canopy that the Weihe had in during its time in Britain.

The Greif 1-project:

Jürgen Dreyer reports that his 'Greif 1,' that the tubular boom that supports the tail-plane is now finished and is being picked up from Hamburg from the skilful hands of an expert. With a deal to exchange some spare parts, they will carry out work on the fuselage and do some work on the cockpit's interior (also sheetmetal work), progress with the wings continue. The ribs behind the spar are ready, the nose-ribs in front of the spar are now 70% complete. Building a new spar will be a major project.



Habicht 8m:

Along with the Habicht that was built at Achmer, there is an 8m Habicht under way! Due to some 'Secret-Service' information, we understand that flight-testing is about to start soon and we hope to get some (maybe exclusive) pictures in the next issue of VGC news. The crew of this stunning Habicht project was invited to join our Rally at Achmer to see our activities and international friendship and hope to expand upon this later on.

A Röder-Winch has arrived at Segelflugmuseum:

After the successful completion of a barnfind Meise for static display at the Olympia-Museum at Cologne (see VGC news 156), the famous workshop crew has now to (re-)turn to metal craftsmanship again. They had already gained valuable experience with the restoration of the very first Basten B4 (later know as Pilatus B4) and the fuselage of the Greif 1 (that is on exhibition).

Recently the opportunity finally arose for the Deutsches Segelflugmuseum mit Modellflug to secure a vintage Röderwinch, after one was offered to them recently. The artefact still needs some work

An old Röder-Winch arrives at the Wasserkuppe

but is a good base in which to work from. Most of these winches were later modified from their original trailer-based origin onto trucks, but this one still sits on its original chassis.

New models at the Segelflugmuseum:

Some stunning models have been added to the collection of the museum by members of the VGC. While the Zahn-family kindly donated their impressive 1:2 scale model of the Moazagotl, a DFS 'Seeadler' by Vincent Cockett has also found its way to the Wasserkuppe. Together with another scale model, the 'Weltensegler,'



Work begins in bring the winch back to its former glory...a new skill-set for our engineers





(donated by Manfred Krieg from Erfurt), the museum will be able to display to visitors some more important gliders, of which, no originals exist anymore.

> Peter Ocker All Photo's: Peter Ocker



The Zahn-Family's impressive 1:2 scale model of the Moazagotl



Vincent Cockett's stunning Seeadler has recently been added to the collection

Switzerland



Swiss Correspondent Daniel Steffen Contact: pr@vintagegliderclub.org

Ka2 lands at Schänis and Hals und Beinbruch Spalinger!

Schleicher Ka 2 HB-587

On the 19th March 1983, eight people got together and founded the Oldtimer Club Schänis (OCS). This included Peter Bregg, Hans Bucher, Willy Fahrni, Richi Geiser, Dario Nelzi, Iwan Pestalozzi, Ernst Räber and Josef Strobel. The goal of the club was to preserve and fly vintage gliders. The home-base airfield, was and still is Schänis, which is located close to the Swiss Alps between two lakes (Zürichsee and Wahlensee).

The first glider to be restored by the OCS was the Karpf Baby, HB-494, the second being the Moswey III, HB-374. Both gliders are still airworthy and in the hands of the OCS. Further club gliders that have been restored are: K 6 CR, HB-703 and the Ka 2, HB-724.

Recently the OSC expanded the fleet with a second Ka 2. This Ka 2B Rhönschwalbe, HB-587, was constructed by Alexander Flugzeugbau at Poppenhausen in 1957. The Zürich Gliding Club had been the owner of this two- seater for 52 years. In 2009 they sold it to a group of pilots at Berne who wanted to start a local vintage gliding club.

With the uncertain future of gliding at the international airport at Bern-Belp soon slowed progress and eventually the group gave up their activities and the Ka 2B went to the OSC. There is only one vintage glider



Logo of the Oldtimer Club Schänis depicting a GB (possibly the Karpf Baby HB-494). Photo: Daniel Steffen

remaining at Bern-Belp at the moment, a restored Ka 4 Rhönlerche II, HB-664, which is in hands of the Berne Gliding Club.

By the way, the airfield at Bern-Belp (in Swiss-German called 'Möösli,' which means swampy land (not a perfect terrain at all for an airfield), was the home base of the Swiss gliding legend, Hans Nietlispach (1922 – 2007), who was the Swiss gliding champion 17 times and a participant of 12 World Gliding Championships. Hans Nietlisbach wrote two interesting books with the simple title; 'Segelflug.'

1st Rhön competition - from the Swiss perspective

Peter Ocker asked all VGC correspondents to look for old articles in national magazines concerning the 1st Rhön competition of 1920. As the Swiss correspondent, I looked through all the 1920 issues of the magazine 'LA SUISSE AERIENNE.' This was the official organ of the Swiss Aero Club. Surprisingly the 1st Rhön competition was not mentioned at all. We do know however that the Swiss gliding pioneer, Jakob Spalinger, was an entry of the 1st Rhön Meeting in 1920.

Jakob Spalinger (1898 – 1988) was born at Winterthur, which is an industrial city 20 kilometres east of Zürich. Spalinger constructed his first primitive glider at the



The Ka-2B at Bern-Belp, where the glider was stationed before it went to Schänis. Photo: Kurt Stapfer

age of only 12 years and achieved several hops with it. He later attended the college of Technology at Winterthur and became engineer of the federal office for military airfields at Dübendorf.

In the autumn of 1913, Spalinger started to construct the ribs of his first real aircraft, the Spalinger S-1. It is not known if Spalinger originally designed the S-1 to be powered by a motor, however his college knowledge enabled him to calculate and engineer the structure of his glider. He finished the S-1 in the spring of 1918. The first flights took place at Kämatten, on a small hill not far away from Dübendorf airfield on the 19th of February, 1919. The flight distances rose from 18 to 60 metres.



The Spalinger S-1 during construction. Photo: IG Albatros archives





Spalinger damaged the S-1 on landing on the 18th flight on the 18th July 1919. In September 1919 he flew 150 metres. The next failed landing followed on the 24th flight. Spalinger read the call of Oskar Ursinus for the Rhön contest in the German magazine 'Luftsport' on 24th of March, 1920. Spalinger informed Ursinus about his experience in gliding. Ursinus interpreted this letter as his registration and asked for an entry fee of 50 Marks (which Spalinger paid). The S-1 was ready, but Spalinger could not find the required five helpers. Moreover the transport costs were very expensive.

Spalinger received the invitation on 26th May 1920 and saw that as category 2b gliders, auxiliary engines were allowed. He started immediately with the construction of a motorised glider. A scale drawing of 1:40 by Spalinger, is subtitled: 'Gleitflugzeug mit Hilfsmotor Rhön 1920,' has survived. This glider looked much more advanced than the S-1, with several colleagues helping Spalinger. The fuselage, tail unit, and some parts of the wings were already finished, when Spalinger jumped from a jacked-up plane to the ground. He unfortunately broke his leg, thus ending up in hospital instead of the 1st Rhön contest! (There was considerable confusion at the time as to whether Spalinger would have been able to bring the motor glider to Germany with new Treaty rules coming into force just before the event was due to start, forbidding the import of aircraft engines-Ed).



The Spalinger S-1 appears to be a biplane without an engine. Photo: IG Albatros archives

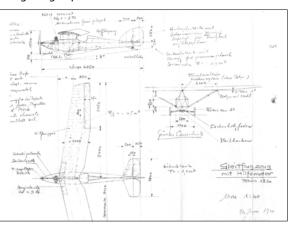
On the 3rd of October, 1920, Spalinger became a member of the AGIS (Akademische Gesellschaft für das Flugwesen) and with 67 flights, qualified to fly powered aircraft (Albatros BII and Wild). Spalinger's passion remained gliding however and he founded a gliding department in the AGIS.



The Spalinger S-1 which inadvertently became an entrant into the 1st Rhön contest! Photo: IG Albatros archive

Jakob Spalinger continued his experiments and became one of the gliding pioneers of Switzerland. He designed more than 30 different types of gliders. The most popular type was the Spalinger S-18 (designed in 1935/36).

Daniel Steffen



Jakob Spalinger planned to construct and fly this powered glider at the 1st Rhön contest. Photo: IG Albatros archive



Correspondent: Bruce Stephenson Contact: UK@vgc-news.com

UK

Grasshopper lands at Saltby

I wanted to fly vintage gliders before I'd even been in a glider. I blame Philip Wills. As a young teenager I bought a copy of 'On being a bird' for 50p in a second-hand bookshop and was instantly hooked. It took another 10 years to realise my dream, initially with the purchase of a Kirby Cadet Mk2 and a share in a T21, shortly followed by the purchase of a T31. All these flew Portsmouth Naval Gliding Club at Lee on Solent. Fast forward a few more years and



Brian Griffith's lovely Skylark 2 that he donated to the group when he retired from flying. Photo: David Gibbs

I am now flying from Buckminster Gliding Club at Saltby, having also gained a Slingsby Prefect along the way. Our illustrious Editor Bruce, having realised that he had found an ally in the world of wooden gliders suggested that we form a Vintage Glider Group as a way of encouraging interest in the flying and restoration of vintage gliders at Saltby and also to spread the operating costs out a little. Unfortunately, like all great plans, the demands of our full-time jobs and various other projects meant it took a little longer than planned to get the idea off the ground, but we are now up and running!

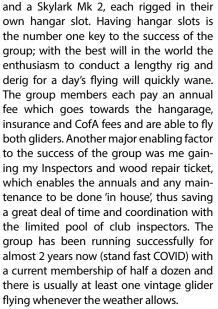
The core of the Vintage Group is a T31







Amongst David's growing collection is this lovely Slingsby T7 Kirby Cadet with David at the controls, ready for another 'Cadet' cross-country adventure! Photo: David Gibbs



Now that the group is established and the members have gained valuable experience in the quirks of vintage glider operations, it is time to look to increasing the scope of the group. It is planned to bring the Kirby Cadet Mk 2 and Prefect online to allow the members to experience the joys of open-cockpit



The mainstay of the Saltby Vintage fleet, the grin generator, the mighty T-31! Photo: Dave Unwin



We need a bigger house! Bruce Stephenson's building projects continue, with a new garage for that Beetle now underway as an indignant Gull impatiently awaits some renovation work to the office area. Anyone want to buy a boat? Photo: Bruce Stephenson

single seater flying and as a slightly longerterm project a Slingsby T38 Grasshopper has just been acquired. This was originally used by Uppingham School CCF and was then purchased by members of the Air Cadet Volunteer Gliding School at RAF Henlow and bought on the BGA register. It is in reasonably good condition and we hope that the return to flight project will be fairly painless.

Although not part of the Vintage Group fleet, I have also taken on responsibility for the long-time Saltby resident Lunak glider. This used to fly regularly until the original syndicate dispersed and stagnated. By using a similar financial model to the Vintage Group operation I hope that this too can be returned to the skies above Saltby very soon. David-John Gibbs

Postscript:

Like all good intentioned things in life, some years ago I was embarking on a new house-build project. Expecting it take only a couple of years, three at the very most, here I am five years later still going! (Albeit, there was a major renovation to a Bungalow in there somewhere during that time as well). Well now I am on the home straight towards completion and am currently beavering away, not only on your magazine, but a new car garage to clear out my recently renovated glider workshop! So I have high hopes of FINALLY being able to make a start on those stalled glider projects that have suffered over recent years, starting with the Gull that is long overdue my attention. This will be closely followed by the completion of the currently halfrestored EoN Baby, of which I feel so guilty of not having completed it yet (so my humble apologies to Reg Wooler and Bowland members!)

Like all things in life however, family and careers (not to mention the demands of a certain magazine) have a habit of getting in the way of hobbies but somehow the passion, despite the ups and downs, keeps me going....

In the meantime I would like to pay tribute to David Gibbs for keeping the Vintage dream alive at Saltby, whose enthusiasm has revived the dream that I found so hard to maintain. Thanks David, you're a true mate!

Bruce Stephenson

New workshop despite COVID's best efforts

It has been quite an odd season so far due to the ongoing pandemic, however in the last few weeks life has starting to take early steps towards the return to normality. With very little flying taking place at Lasham until recently, so we have been focusing our efforts on constructing the GHC workshop. When I wrote last time, we had prepared the ground and were awaiting the foundations to the poured. So much has happened since then...



The Welsh contractors certainly didn't let corona dampen their spirits! A complete shell of probably one of the most important buildings at the GHC. What's next Mr Pullen? Photo: Paul Haliday











One big Meccano set...the steelwork arrives on site. Photo: Paul Haliday

In mid-April the foundations were laid and then at the end of the month the steelwork arrived from the factory in South Wales. The contractors wasted no time and began to erect the frame of the building straight away. Within a week the roof started to be put on, whilst below Gary, Richard, and the rest of the team, started building the retaining wall. Work continued very quickly and within a couple of days the job was done. This job had to be completed before the builders began to clad the walls, as we would have got in their way had we still been building the retaining walls.

Next job for the GHC team was to construct the drainage system. A soak away was dug to the south of the building and a French-drain was dug around the building's perimeter. Because the workshop sits higher than the log cabin site below, and because it has a greater capacity to capture rainfall quickly than the ground it occupies, the drainage system needed to be connected to the log cabin site's drainage, otherwise those staying below would need to purchase a boat!

The contractors had clad the building and their final job was to fit the gutters, this was completed by the end of May.

The next major stage of construction has involved the re-formation of the legendary GHC concrete floor laying team. The floor is to be laid in four pours, at this stage we have completed two pours and are planning our third for the beginning of next week. The preparation this time is a little different. Unlike the hangars, the workshop will be a working building. It has to be built to a higher standard requiring heating, ventilation and a good deal of insulation. The entire building, including the roof, is insulated. This is also the case with the floor, a layer of polystyrene being inserted between the floor membrane and the reinforcing rebar that the concrete envelopes when it is poured. Unlike our previous buildings the workshop has internal walls, so gaps have to be left in the

The 'covid-concrete' team commence battle! Photo: Paul Haliday

polystyrene so that the concrete will go all the way down to the ground and bear the weight of the walls.

In little more than six weeks the site of the workshop has been transformed from being a flat area to one that has a recognisable building. We hope to have completed the build by the winter and already there is talk of what projects will be the first to be undertaken in the new facility. So far, I've heard talk of the restoration of the Spalinger H21, but also of the TG-4... we'll just have to wait and see.

Of course, lockdown had curtailed our flying activities and this has been very much reflected by the content of my news bulletin.

However I'm glad to report, with the resumption of flying at Lasham the GHC has also been looking at returning members of our fleet to the skies. After being fitted with the electronics to allow flying at Lasham under the new Farnborough restrictions, the Beast (YS-53) flew again the other week with Gary at the helm. Graham Leech's Skylark 2 has also made its first flights after about 15 years. Gary gave it a test flight over the weekend and I had the pleasure of a ³/₄ hour soaring flight in her last Monday. You may also remember from last time I mentioned a very handy bloke called Darren Kershaw who has taken over my role as GHC webmaster. He's now in the process of qualifying as a BGA inspector, is there anything he cannot do?

Finally, Bill Bullimore has completed his rebuild of his Skylark 4. It was weighed over the weekend and is expected to fly later this week if the thunderstorms we are being threatened with, allow. Bill has done a great job and we are all very impressed with the quality of the result of his Skylark 4 rebuild.

Bit of an odd news update this one, as it involved discussing more about building the workshop than gliding, but I hope that as COVID restrictions ease I can talk more about our glider related activities in future news updates.

I hope that you all continue to keep safe and well and I look forward to giving you more updates on our activities, both ground, and more prevalently, glider related in the future.

Best wishes from the Gliding Heritage Centre.

Paul Haliday



Bill Bullimore's Skylark 4 looking like new again and on the flight-line for its first post-repair flight. Bill's workmanship has opened an eye or two, certainly a contender for the new 'Lasham sweat-shop glider repair' production line? Photo: Bill Bullimore





USA



Correspondent: Lee Cowie Contact: USA@vgc-news.com



The Hall of Fame medallion.

Bowlus inducted into Hall of Fame

Wm. Hawley Bowlus was the second American to break Orville Wright's 1911 glider duration record (the first being Ralph Barnaby flying a Prüfling), but was the first to do so in an American designed and built glider. In 1930, he was acknowledged as America's first National Glider Champion on account of a series of record setting flights, culminating in a world record 9-hour flight above San Diego's Point Loma. Before that, he designed, built, and flew airplanes for San Diego's Ryan Airlines from 1924 to '28, and was the shop foreman when the Ryan NYP Spirit of St. Louis was built. Over the years,



Left to right: Jack Bowlus, Raul Blacksten, and San Diego gliding historian, Gary Fogel, proudly show off the Bowlus' official Hall of Fame portrait.

he continued to build innovative gliders and sailplanes in Los Angeles' San Fernando Valley, as well as prototype aircraft, a (still classified) submersible for the Navy, wind tunnel models, and even a skateboard. When Helms Bakery founded the US National Soaring Hall of Fame in 1954, Bowlus was one of the four inducted that year, and later into the Curtiss OX-5 Hall of Fame.

While so many other San Diego aviation pioneers had been officially recognised by the San Diego Air & Space Museum (SDASM), Bowlus was not. Nevertheless, that long overdue honor was rectified on the 23rd of November 2019, when SDASM inducted Hawley Bowlus into their International Air & Space Hall of Fame.

The Induction took place at a Legends of Flight dinner, held among a Consolidated PBY Catalina, a Ford Tri-motor, a MiG-17, a F-4J Phantom, a Bell AH-1E Cobra, and others on display within the Edwin D. Mc-Kellar Pavilion of Flight central atrium of the former 1935 Balboa Park Pacific Ex-



Left to right: Sgt. Maj. N. Hawley Bowlus (grandson) with his uncle and aunt, Jack and Marian Bowlus.

position's Ford Motor building, which is now the SDASM building. Just inside the door between the McKellar Pavilion and the museum proper are three Bowlus designed or built aircraft that are permanently displayed (Ryan B-5 Brougham, a Bowlus Baby Albatross and a Bowlus SP-1 replica. Elsewhere is a Ryan M-1 and a replica of the Spirit of St. Louis).

An excellent and brief video was shown outlining Bowlus' life and career. A presentation was then made to Jack Bowlus, his sole surviving son, who gave a very nice address. During his acceptance speech, Jack introduced John Caston, Bowlus' longtime and only surviving employee. About 16 members of the extended Bowlus family (a son, grandchildren, great grandchildren, and spouses) attended, some coming from as far as Alaska and Ft. Bragg, NC.

Other inductees included Jeff Bezos (founder of Amazon and Blue Origin), Dr. Vance Coffman (Chairman of Lockheed-Martin), Joan Sullivan Garret (MedAir founder), the late Robert Gilland, Jr. (SR-71 test pilot), the late Larry Gordon (Apollo 12), Lt. Col. David Hamilton (last WW II Pathfinder), and Dr. Robert Liebeck ('father' of the 'blended wing').

Raul Blacksten

A new date for the Chilhowee Oktoberfest

There are new dates for the Fall Vintage and Classic Gathering at Chilhowee Gliderport at Benton, TN. October 16 – 18 (Friday -Sunday). Why not stay the rest of the week? Relax and fly during some of the prettiest and best ridge/soaring conditions of the year.

This year vintage enthusiasts are also invited to join in with Chilhowee's popular and well-attended annual Oktoberfest meet. Lots of new friends and planes will be there for flying and partying. This is a bigger event than usual and the fun factor should off the meter.



Hosts, Sarah and Jason Arnold invite everyone, regardless of the type of glider one chooses to fly. Check their website at: **Chilhowee.com** or telephone: **423-338-2000**.



MODEL NEWS

Peter Ocker

Rare vintage models discovered

Static glider models have always been a pleasure to some of us, whether they be hanging on the ceiling of the office, or being placed on a shelf, or on the office desk. Nowadays, they are rather expensive, but maybe they have always been expensive. Let's have a closer look at 2 historic models that have appeared out of oblivion.

Let's start with two models from the mid-1930's, the iconic Rhönsperber:

The Rhönsperber became quite popular and was the first glider that Hans Jacobs designed for Schweyer company in Mannheim. Initially a timber sawmill and importer for foreign timber, they started building gliders in the early 1930's.

From that source, several years later, Otto Grau (well known for his fantastic flying replicas of the Gö1 Wolf and the Rhönsperber), was attending yet another airshow, when a visitor approached him and gave him a vintage model of a Rhönsperber. He thanked the kind visitor and hung it up in his caravan. It was obvious that the swastika on the tailplane was removed, as after the war (as it is now), a 'banned symbol' here in Germany.

Some years ago, Peter Ocker was successful on eBay in finding a sistermodel glider of the Rhönsperber, but in completely different colours. This one seems to have resided for some time in a cigar-smoker's home. Not only was it dusty, but the smoke residue and the dust had combined to form a really sticky mess... so some cleaning was needed!



Far from toys; two small bits of German gliding history!

Peter has had some previous experienceof cleaning a vintage wooden model of a Heinkel He 70. With some mild soap, and only limited amount of water, the Rhönsperber changed colour – from brown to a light grey. Unfortunately, the tail-plane was found not to be original, possibly because of the swastika that was once presumably was there, so was replaced it with a new tail-plane? This new tail was not only much too big, and not of the correct shape, cleaning revealed that the paint on the new 'tail-plane' was adapted to the colour of the rest of the model, which was also clearly stained, giving it a smoky-dusty colour! What a shame, as now Peter has a two-tone aircraft. He does not intend to restore it further, as the story of the 2 colours is historically amusing enough to remain preserved.



Years of dust slowly revealed the original colours hiding under a skin of smoke and dust. Unfortunately the tail has been replaced on one and is unrealistically large!

Both models appear to be from the same source; maybe built by young apprentices at the Schweyer Company at the time? The models measure 60 cm in wingspan and 24 cm in length, so have an approx. scale of 1:25.

War-time Habicht's

In 1942, the Wolf Hirth company (which adopted the 3-letter abbreviation of WHN as they were situated at Nabern), made similar models of the Habicht that were built by the apprentices as a skills-test to prove their dexterity at a certain stage of their training. Stefan Blumenthal owns both models pictured here. One originally hung above his father's office desk (he was a director of the WHN), whilst the other model came from Frieder Marc, who was an apprentice at WHN and also served in the Luftwaffe during the war.

Both models are similar and Stefan reports that it was Wolf Hirth himself who painted them. Whoever drew the fine lines of the tail-plane, a mistake has crept in on one of the Habicht's, as the elevator trim-tab is on the wrong side.

Nevertheless, these Habicht's really impressively display the original colours true to the WHN Habicht's built during the war. The dark blue is a very pleasing colour; hopefully further new Habicht's that are being built at the moment will be painted in this colour?

These models measure 54 cm in wingspan and 26 cm in fuselage length, so have the same scale of 1:25. In addition to these



MODEL NEWS

two models, Hellmut Hirth also owns two further Habicht models. One is the same scale as Stefan's Habicht models above, whilst the other Habicht, is much bigger. Hellmut reports that both models date back to around March 1950 at a time when all flying was banned in Germany and models were the only way to remember gliders from more glorious days.

By the way, and funnily enough, the small Habicht owned by Hellmut also has the same mistake in the fine lines on the tail-plane as Stefan's.



The superb workmanship of the Habicht models is immediately apparent.

With such an attractive colour scheme, maybe these humble models will one day inspire a similar livery on a full-sized replica?



Chris Williams

What a find!

More COVID projects

recent rare bout of slope-friendly weather allowed for the flying of quite a few models that had yet to taste the delights of hill flying. Among them were my two recent creations, the ¼ scale Type 13 Petrel, and the near ¼ scale Zugvogel Illa. The Zugvogel turned out to be very light, at around 9 lbs in 'old money,' and seems to be a perfect blend of practicality and realism. The top and

bottom brakes are super-efficient and a lot of landing practice revealed that they were best retracted during the penultimate moments to ensure a smooth sky/earth transition. There were no surprises with the Petrel, as my pal Motley's version has been flying for some time, but there was a chance to practice some formation flying, the like of which we are unlikely to see in full-size versions any time soon. In the workshop, the business of scaling down continues with a near ¹/₄ scale version of my Gull 3 replica plan. This has been modified to more represent the Blue Gull, as seen in the VGC hangar at Lasham...

It seems unlikely that any scale soaring events are going to take place in our neck of the woods this year, but we live in hope...





LETTERS TO THE EDITOR

Beating the Corona-Virus Blues

Expectantly, I filled in my registration for the VGC meeting at Lingen and Achmer and even thought back in February that it might be possible for me to join both events. But now everything has changed and it is comforting when fate surrounds us, that there is little reason to complain. It is such a shame that this year's meeting will be cancelled for the first time since 1973

But this shall not be a reason to fall into depression, or to dwell, therefore we have devised a fun pastime which meets the handicraft traditions of VGC members and is not something virtual.

Based on very popular children's game here at Germany, we have chosen picturepairs of VGC-gliders and stuck them on cards of 6,0 x 6,0 cm and marked each back with the VGC logo. You are then ready to play the game, which relies on the player recognising the location of one picture pair.

The rules of the game are very simple. The player whose turn it is turns over two cards so everyone can see them. If the cards have matching pictures, then the player keeps these two cards and turns over two new ones. This continues until the player turns over two cards that do not match. If the pictures on the cards do not match, they are turned face-down again and the next player continues with the game. The game continues until there are no cards left, the winner being the person who has collected the most pairs.

You could choose to design your own cards, which of course you have to decide (we thought 80 cards are enough for a game evening with four persons). Certainly you all will have lots of pictures of several events, and those that want a more professional approach, could maybe ask Alex Gilles for further help with beautiful some motives!

It is a family game that appeals to all generations, just like the VGC meetings I have attended to date. Of course you will have



to accept that the retention of young people is much more effective compared to elder people and it may come to that end that older VGC members (different to their flying competence) will be behind to their grandchildren! Furthermore it brings a good mood when it's raining.... Have fun during creating and playing and see you all soon-stay healthy!

Markus Klemmer

VGC News writes:

Members can now download a VGC based template for you to print off to make your own cards. We would recommend that you use a heavyweight paper/light card of typically 250-300 gms and follow the cut-out lines on the reverse side of the printed sheets. We have supplied you

the artwork for up to 40 different cards which you can download, print, and make, with the minimum of effort and cost. The images have been taken from various VGC Int. Rallies over recent years and are part of Alexander Gilles' growing collection of gliding photos, which perfectly capture

the essence of the VGC. It is surly value for money in whiling away those evenings with your favourite VGC friends at your favourite VGC rallies!

You can find the templates to download at: www.vintagegliderclub.org



LETTERS TO THE EDITOR

An Incredible Feat of Airmanship

Every now and then a gliding related story comes along that simply grabs one's attention and this one is no different. Thanks to our very own Raul Blacksten who writes: "Crazy Kiwis. Everyone knows that you can't soar a bomber...or they used to!"

On the 9th September 1944, Flight Lieutenant Fred Thomas captained NZ 4522 and was on a mission to bomb and strafe the Japanese held position of Kerevat airstrip, near Rabaul, in what is now East New Britain province. His crew was F/O Geoff Shanks, W/O George Millar, and F/Sgt Archie Gilles. The mission originated from Torokina, Bougainville Island, where the squadron was based.

They set out on the raid early in the morning and passed through heavy rain and thunderstorms on the way to the target at Kerevat. On arrival near the target, Fred sought permission from the leader to attack and received the all clear for him to go in. He commenced a shallow dive from 2300 feet. The bombs were released at 1200 feet and he then pulled out in a steep turn to port.

After feeling the bombs explode, he put the nose down and with the front and turret guns, they strafed an object they had seen previously at the north end of the strip. Although the 6 bombs should have dropped, two had not, so a second run was necessary. On the second run, after the two remaining



Flight Lieutenant Fred Thomas was aged 26 at the time of his close shave.

bombs were released, the starboard engine cut out. As the Japanese were not using tracers at the time, it was unclear whether the situation was caused by anti-aircraft fire at the time of the attack.

Flying on one engine, Fred knew he could not return to his base in Bougainville or reach a base over the mountains in New Ireland. He decided to head for friendly territory on Willaumez Peninsula, Talasea.

It was believed the chances of a successful ditching were about 1 in 5. The fear of being taken prisoner in enemy territory and its consequences were on everyone's mind. In preparing to ditch, the door was jettisoned. Later, the turret guns and ammunition were thrown overboard, along with other items. With this desperate situation, and losing altitude, Fred opted to try to ride the thermal updrafts under cumulus clouds. This proved a successful strategy going from 100 feet above sea level to climb to 900 feet



NZ 4522 still lies in the jungle at the old Talasea airstrip, a small landing strip built by the Australian army during WW2.

on the first occasion and reaching 800 feet on the second attempt. They continued on, fuel now running low.

Almost 2 hours after being hit over Kerevat, they approached the Talasea strip on top of a 320 foot ridge. After determining the strip was serviceable, they landed on the strip which was only 600 yards long and 45 yards wide. Soft ground was a contributing factor in slowing the landing run. The crew were unhurt in the crash and later flown back to Piva North Airfield. Since the runway was too short for the Ventura to take off again, useable components were removed and the aircraft was abandoned.

On inspection, they found a 20 mm shell had severed the fuel line to the starboard engine. It was something of a miracle there was no fire.

Fred Thomas was promoted to Squadron Leader and immediately awarded the Distinguished Flying Cross for saving his crew.

Text: Cecilie Benjamin Source: Internet

BOOK NOOK

Workshop Practice

The Vintage Sailplane Association

s a reminder to those of you who are looking to restore your pride and joy, then you shouldn't be without Workshop Practice!

A labour of love over several years work by VSA volunteers, Simine Short and Neal Pfeiffer, this iconic manual has been now translated into English and is based upon the original works of Hans Jacobs and Herbert Lück. It's the essential bible to all aspects of wood and fabric construction, including repairs and techniques used when glider construction was solely of wood or steel tube. Full of practical, proven advice, Workshop Practice was widely acknowledged as the industry standard. Not only that, its a window into those lost skills and especially of interest to those wishing to recreate original features, such as cablesplicing etc.

Now in its 2^{nd} print in English, it is priced at only $45 \in plus$ postage; stocks are limited.

So why not order your copy today at: www.eqip.de





FOR SALE

For Sale

SLINGSBY DART XVII - G-DBSL



The current owners (a trio well past the first flush of late middle age), reluctantly offer a unique opportunity for you to own this historic Slingsby Dart 17, in which Nick Goodhart achieved 7th place in the Open Class World Championships at South Cerney, in 1965.

Currently based at Tibenham, the aircraft comes with basic instrument panel and recently fitted 8.33 radio.

Twin-axle wooden trailer (barn stored throughout winter), fully roadworthy, which tows well.

2511 Hours and 1337 launches at last C of A.

£ 7,000 or reasonable near offer.

Contact Graham Ashworth, ngcpnts@btinternet.com 01366347420

07810438916 (mobile unlikely to connect if GA at home!)

For Sale

LOM 57 'Libelle'

Dies ist eine seltene Gelegenheit, eine einzigartige, noch zugelassene LOM 57 "Libelle" aus der ehemaligen DDR zu kaufen.

Das Flugzeug wird zusammen mit einem Anhänger, einer Schleppstange und diversen Ersatzteilen verkauft. Hierzu gehören neuwertige Handlochdeckel, zwei neuwertige Kufen und ein Ersatzhaubenrohling.

Zuladung ca. 80 kg, Gesamtflugzeit: ca. 1000 h, Starts: ca. 1000, Werknummer: 15

Umfangreiche Lebenslaufakte



Der Anhänger ist für alle einsitzigen Segelflugzeuge bis zu einer Spannweite von 17 m geeignet.

Zur Zeit steht die Libelle in Sachsen als einziges flugfähiges denkmalgeschütztes Flugzeug in diesem Bundesland.

Der Denkmalschutz wird in der Regel auch beim Verkauf in ein anderes Bundesland durch das neue zuständige Denkmalamt übernommen.

Komplettpreis: 20,000 Euro

Kontakt: Sandro Rutz salto.h101@gmx.de

LOM 57'Libelle'

This is a rare opportunity to purchase a unique LOM 57 'Libelle' from the GDR that is still registered

Included are a tow bar, a trailer and various spare parts, e.g. a good as new inspection panel, a spare canopy as replacement, and two good-as-new skids.

Payload approx. 80 kg, Total flight time: approx. 1000 h

Number of starts: approx. 1000, Serial number: 15

Extensive curriculum vitae file

The trailer is capable for all single-seat gliders up to a wingspan of 17 m.

Currently the 'Libelle' is located in Saxony as is the only registered airplane which is declared as a historical monument in Saxony. The monument protection is usually taken over by the new responsible historic monument protection authority, even if the aircraft is sold to another federal state.

Price: 20,000 Euro

Contact: Sandro Rutz salto.h101@gmx.de

Remember it is free for members to advertise in VGC News!

So if you have any gliders or gliding equipment you wish to sell, or locate, why not advertise them here? For nonmembers, fees apply. Contact the editor at editor@vgc-news.com



Various types of coverages are available for Vintage Glider Club UK members. For competitive premiums matched with experience and reliability, pIe ase contact Graham Roberts, David Bacon or Darren Bourner

Direct Line - 020 7977 5698 Fax - 020 7702 9276 email: cspaviation@cspinsurance.com www.cspinsurance.com



SALES



TRADITIONAL LOGO







We can supply a very wide range of styles, sizes and colours. both for men and women. Please ask!

Tee shirts, white with large printed VGC traditional logo	Price £
Tee shirt	8.00

Clothes with embroidered VGC new style logo	Price £
Waterproof Dover jacket	34.00
Polar fleece jacket	30.00
Gilet (bodywarmer)	20.00
Polo shirt either for men or women	16.00
Sweatshirt	15.00
Tee shirts either for men or women	8.00
Wool hat	8.00
Tee shirts for children	6.00
Coveralls (by special order only, not stocked)	40.00

VGC stickers - traditional logo	Price £
300 mm diameter	7.00
250 mm diameter	6.00
80 mm diameter	2.00

Slingsby Sailplanes stickers	Price £
300 mm wingspan (for trailers)	4.00
160 mm wingspan (for gliders)	2.00

Other items	Price £
VGC teddy bears	11.00
VGC coffee mugs	8.00
VGC enamel brooch	2.00

Books	Price £
VGC Yearbook	40.00
Helmut Hirth - 20000 leagues in the sea of air	18.00

Information DVD's	Price £
Slingsby T21	14.00
Slingsby T31	14.00
EoN Olympia	14.00

For the latest postage or shipping costs please contact: sales@vintagegliderclub.org

Payments by Credit Card via the VGC Website is possible in most currencies, or for UK residents, by Sterling cheque. Go to the VGC Website and at the bottom left of the Home page, you can pay by clicking on the PayPal 'Donate' button.



Wo immer noch der Rhöngeist weht ...

Photo: Alexander Gilles