



Price (UK) £3.95
Free to members

VGC News

No. 100 Summer 2000





<http://www.vintagegliderclub.org.uk>

DIARY DATES IN 2000

Location & Date

7th Czech & Slovak National Glider Rally
Tabor Airfield, Czech Republic
15 to 23 July

Contact

Josef Mezera, Nalepy 2233,
CZ 44001, Louny, Czech Republic.
potk.josef@post.cz

Rendezvous Meeting

Kent GC, Challock, Kent, UK.
22 July to 27 July

Julie Garside, 29 Quested Way,
Harrietsham, Maidstone, Kent ME17 1JJ
+44(1)622 858106 or
email.j.garside@btinternet.com

28th International VGC Rally

Norfolk GC Tibenham, Norfolk, UK
28 July to 6 August

Vintage Glide 2000
c/o N. Aldridge
55 Norwich Rd
Tacolneston, Norfolk, UK.
NK16 1BY or register on-line at
www.ngcglide.freemove.co.uk

7th International Oldtimer Bayreuther Airgames

Gundelfingen, Germany
5 to 15 August

Wolfgang Schäffler
Westprussenstrasse 11
89423 Gundelfingen/Donau
Germany Tel/Fax 09073 2503

Old-timer Rally in Poland

Gliwice (Silesia) 16-29 August

Wojciech Wojcik
<http://www.vgc.pirn.net.pl>

Slingsby Week, YGC, Sutton Bank

26 Aug to 3 Sept

Beryl or Jenny on 01845 597237
See details on www.ygc.co.uk

Annual Dinner & Prize Giving.

9 Sept, 7.30pm, Lasham

Michael Powell, 01493 752232/750625
Fax 01493 750965

Elliotts of Newbury Rally

Lasham, 9-10 Sept.

Ray Whittaker
01252 614684

**Advertising rates are
£35 per 1/4 page for commercial adverts
and £25 per 1/4 page for others**

NOTICE TO ALL MEMBERS:

The Rally Secretary is Graham Saw. Please forward details of any vintage glider rallies you may be planning to: G. Saw, 16 Prince Andrew Close, Maidenhead, Berks SL6 8QH. Tel: +44 (0)1628 776173

We welcome contributions and photos but we cannot be held responsible for the loss of unsolicited material. To help ensure their return, material should be clearly identified and accompanied by a stamped, addressed envelope. The statements and opinions expressed in each and every issue of the Vintage Gliding Club News are not necessarily the considered views of the Officers of the Club. The views expressed by the Editor, contributors, letter writers and advertisers are their own and do not necessarily reflect the views of the Club. The VGC accepts no responsibility for the results of following contributors' advice, nor does it necessarily endorse the services or products offered by advertisers.

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 artifacts connected with gliding; to co-operate 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.

Officers of the Vintage Glider Club

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Vice President: Hans Dijkstra, Melis Blecklaan 61 4634 VX Woensdrecht, Netherlands

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Ian Dunkley – Member without portfolio.

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VGC News

No. 100 Summer 2000

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<http://www.vintagegliderclub.org.uk>

CHAIRMAN'S REPORT

Congratulations on our one hundredth issue of VGC News! Our latest milestone must prove that there is enough information on vintage gliders to fill four thousand pages to date and still anticipate thousands more pages yet! When the Club was formed in 1973, did the founder members ever envisage that it would grow into the international network that it is today? I often reflect that any VGC member can now visit virtually any country and definitely any continent, and find other like minded VGC members and friends. This network has helped and assisted our members frequently and I get to hear of many such events.

The International Rally is upon us again. How time flies, it seems like only yesterday we were saying goodbye to our friends in Avenot. As for 'big airfields and unlimited heavens' I don't think anyone will be disappointed with Norfolk. I just hope the weather is good and we 'Brits' are able to provide excellent hospitality to our guests. During Tibenham the International Council will meet to discuss progress on future rallies, the Czech Republic (Zbraslavice) in 2001 and an offer for a Rally at Achmer/Osnabrück in Germany the following year.

Recently the executive committee has been pursuing the possibility of a self-regulating insurance scheme for VGC members. The aim is to keep costs down whilst providing basic third party cover for members' gliders as well as providing a source of income for the Club.

Another issue brought up for discussion recently is that of recognition of members for services to the club. Throughout the Club's existence we have always given prizes for good workmanship and restorations, however the committee would like to extend this and present a major award for member services to the club. It is hoped this award will be presented for the first time this year. Nominations for such an award are welcome. We look forward to seeing you all at the AGM and in the meantime enjoy yourselves and take care during the 2000 season.

David Shrimpton

**Copy date for next issue is
October 5 (see page 2)**

PRESIDENT'S CORNER

The President wishes to congratulate the Avenoft group and the Gliding Club of South Tondern for organising our last International Rally so beautifully. It was a very narrow strip to hold a large rally on, but in spite of this, it went off well and there were no serious accidents. The President congratulates not only the organisation but all our members for flying so well. Of course, from such a narrow strip, winch launching as well as aerotowing at the same time, was a forlorn hope. Winch launching was carried out from the Danish airfield at Tønder on the other side of the frontier. We wish to thank the Danes, Gerd Allerdissen (for the magnificent show at the Avenoft club), Adelbert Schulz, the CFI who never ceased to work and work, the magnificent Ingrid Zibell who successfully undertook to solve the bureaucracy with the best humour and many others who deserve our praise. Then there was the Südtondern Club's Youth Section which worked with great dedication and were always quiet, well mannered and good tempered. We were sorry that the winching in Denmark did not always go without a hitch but we were glad of the efforts of Heinz Bauer and others to make the best of it.

The President welcomes you all to Tibenham for our 28th International Rally. There will be at least six winch cables to ensure frequent launching and sufficient towplanes will be provided to ensure correct launch speeds for our different gliders. He hopes that we will not be put in the shade by the tremendous achievements of last year's Rally organisation but he is sure we will all have a good time.

The President wishes to thank the Kent Gliding Club for inviting us to share their airfield for the Rendez Vous meeting and he takes this opportunity to welcome all participants to this event. This brings back happy memories of the fine Rendez Vous Rally at the Achmer club in 1999. The hospitality, organisation and the flying were excellent and we hope we can give back something of which they gave us last year.

A slight warning

This pertains to those of our members who intend to bring their gliders in to Britain via the East Coast ports. Twenty years ago the components of two Kranich 2s were sent from Peterborough to Germany on an open trailer and a lorry. One Kranich fuselage never arrived at its destination and also missing were one set of Kranich canopies, two nose cones and one tailplane and elevator. Why anyone would need a Kranich fuselage on its own is a mystery. Some years later a German wartime Fw189 twin boom reconnaissance aircraft came in from the wilds of the Soviet Union. Someone removed the fin and rudder from one of the booms. In spite of the reward promised these parts were never recovered; perhaps someone is collecting wartime souvenirs? The aircraft has since been sent to Prague to be rebuilt by the firm that built it.

We are sure that none of our members are in actual danger of losing components from their closed trailers or even from open trailers but we have to admit that some aircraft will come into the category of "wartime built German aircraft". The surviving parts of the two Kranichs have been made into one glider by the Achmer club. At the time of writing in late May it is being fabric covered and it is expected to fly later this year.

Chris Wills

Club News

Welcome to new members, please join us at our rallies and make yourselves known.

1922 Nigel Dickenson UK
1923 Norman Neil UK
1924 J J M L Huijnen Netherlands
1925 John Robinson UK
1926 Eric Lowe UK
1927 Andrew Griffiths UK
1928 Pierre Courier France
1929 Nick Harrison UK
1930 James Mills UK
1931 Anthony Sadler UK
1932 Siefried Gruender Germany
1933 Arno Anders Germany
1934 James Lin Taiwan ROC
1935 Kim Smith UK
1936 Sven Paessler Germany
1937 Joseph Walsh Ireland
1938 John Healey UK
1939 John Turner UK
1940 Peter Wilby UK
1941 Colin Smith UK
1942 Bruce Stephenson UK
1943 Martin Ewer UK
1944 Michael Gurnay UK
1945 James Tod UK
1946 Peter Hamlett UK
1947 Knud Anderson Denmark
1948 Peter Lengruesser Germany
1949 Markku Valkama Finland
1950 Fergus Denman Ireland
1951 Keith Williams UK
1952 John Halford UK
1953 Michael Cooper UK
1954 Royal Vervier Aviation Belgium

From Laurie Woodage -The Indespension Trailer Manual

If you own, maintain, build or tow gliders then you should have access to a copy of the Indespension Trailer Manual. It contains a wealth of technical information and is great value at only 3 British Pounds including Post and Packing. It has been produced for the UK but contains guidance on towing in Europe. I obtained my copy from an Indespension stockist in Norwich (01603 741666) but any Indespension dealer should be able to get it.

Copy Date. In an effort to ensure that the next News goes out to all members in early December and to minimise the time the Editor is kept at his phone and computer, any material submitted after 5 October will be rigorously held over until the next issue, at the Editor's discretion. Please enclose a stamped, addressed envelope for the return of any photos, discs, etc.

Meet Your Committee

Membership Secretary Geoff Moore has posed some questions to the committee members and the answers give a good portrait of the individuals:



President for life Chris Wills

What do you like about the Vintage Glider Club? We are discovering what has hitherto been hidden; we are forging new international relationships.

What is your favourite glider? Mg 19a, Kranich II, Rhönbusard.

What other interests do you have? Art

Where do you usually fly? Mainly at our Rallies

What kind of flying experience do you have? Gold C & 2 Diamonds – 1800hrs

When was your first flight? 1951

Secretary Michael Powell

(photo above right, with tug)

What do you like about the Vintage Glider Club? The opportunity to fly other vintage gliders and visit other airfields, help in restoration work, relaxed and enjoyable attitude to gliding. Vintage people seem to be generally nice folk.

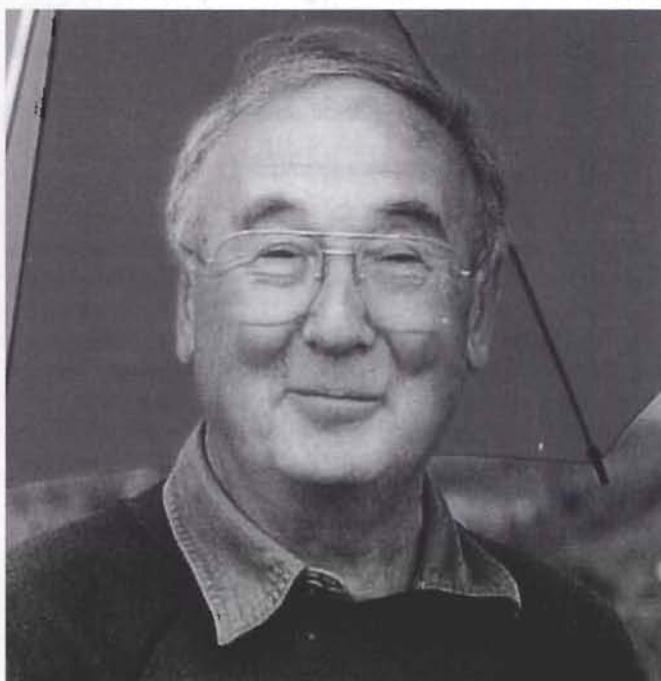
What is your favourite glider? T21B

What other interests do you have? Jenny, Sailing (Albacore dinghy), Drums, Model aircraft, General aviation flying, BGA Inspector.

Where do you usually fly? Norfolk (Tibbenham)

What kind of flying experience do you have? 250 hours gliding, 110 power

When was your first flight? 23-5-84



Membership Secretary Geoff Moore

What do you like about the Vintage Glider Club? Club is unique with the opportunity to make friends in all countries together with the friendliness of everybody.

What is your favourite glider? I like all old gliders but my Mü 13 is my heart throb as a slow floater and superior climber.

What other interests do you have? Messing about & riding old bikes and motor bikes, walking, travelling abroad, voluntary work incl fundraising for charities, building & flying model aircraft, environmental issues, gardening.

Where do you usually fly? Dunstable (London GC)

What kind of flying experience do you have? 1300 hours

When was your first flight? 1969



VGC Sales Colin Anson

What is your favourite glider? T31, Petrel, Weihe.

What do you like about the Vintage Glider Club? Nostalgia, camaraderie International & local togetherness at Rallies. Character & individuality of old gliders & pilots, their friends & families. Absence of competition and antagonisms.

What other interests do you have? Wine, women & music (other than song) & flying other peoples' gliders

What kind of flying experience do you have? 1040 hours, Silver

When was your first flight? 1973



Laurie Woodage Co-opted for microfilming.

What is your favourite glider? Scud III

Likes about club, The opportunity to fly interesting gliders in the company of interesting people in interesting places.

What other interests do you have? Glider restoration, Travel, Reading non-fiction. Club, London GC, Dunstable.

When was your first flight? Started gliding October 1980, 600 hours, Gold C, BGA Inspector.



Peter Chamberlain Co-opted for database compiling.

What is your favourite glider? Slingsby T21B and Kirby Kite 1.

What do you like about the Vintage Glider Club? Informality combined with the unbridled enthusiasm on an International level.

What other interests do you have? All revolve around aviation. I hold a PPL so powered aircraft are equally as important as gliding (especially big engined biplanes (anybody want to sell me a Stearman? Club, The Upward Bound Trust.

When was your first flight? Have been gliding for 22 years and VGC Member since 1993.

Annual General Meeting
Thursday 3 August at
Tibbenham

Annual Dinner & Prizegiving
Saturday 9 September
7.30 for 8.00pm at Lasham
Tickets £15 each from Hon Sec
Michael Powell

FROM THE MEMBERSHIP SECRETARY

We are extremely pleased with the way members have responded to the call for renewal of subscriptions this year. In spite of the early teething problems with the computer which I encountered everybody should be in possession of a membership card, but if not, kindly advise me. My E-Mail address is geoffmoore@cwcom.net or telephone/fax 01442 873258 where any enquiries should be directed and will be dealt with promptly. Those with a computer can check out their current details on the VGC Website and correct any mistakes immediately which are updated onwards to me. Normally the cards would be posted out with the first magazine issue of the year which is cheaper for the Club, otherwise they are sent out under separate postings for late renewals. Any person not paid up for the current year when magazine number 100 is released will not receive one direct from the printer.

You will notice a further change for the better on the white address label which will show the month and year when your subscription expires.

Up to the end of April we welcomed 41 new members joining the Vintage Glider Club this year from at home and around the world including our first member from Taiwan. Please let us know of your gliding or modelling news Mr James Lin and of course anybody else. Your news is our news for your magazine so why not send it to our Editor Graham Ferrier.

I will be at the 28th International Rally at Tibenham, hot thermals with our sponsor Colemans Mustard are expected, so if you have not done so already contact the Norfolk Gliding Club to enter and I will meet you there at the end of July for a great week to enjoy with the family or friends.

Geoff Moore.

FROM THE TREASURER

Magazine space costs money and your subscriptions pay for it, so I shall be brief. If you have a VGC member friend who has not received this issue the odds are that he is one of the small minority who has not paid his subscription for the year 2000 and to re-join he is now liable to pay the usual £5 joining fee in addition. I will waive this for any former member/late payer who re-joins within the month of August because we value everybody as a member and do not want to see you go.

Just occasionally there is a hitch in the system, as happened earlier this year when about six members received their magazine whose address carrier said they had paid to 1999 when, in fact, they had paid for 2000. The reason was simple, a list had gone astray after leaving me, and our worthy printer consequently did not have the latest information. This is also almost inevitable if a payment is made just as the list has been sent to the printer; the remedy is obvious. If anyone has doubts about his payment a telephone call to me will get him an almost immediate answer with the information he seeks. Finally, can I say thank you to all our members, you have made my task a pleasant one.

From Robin Willgoss

Change of website.

The VGC website, which many of you have visited and from which we have had many new members, was generously donated by my employer, Tally, but now we feel it is appropriate to launch out on our own dedicated site but still master-minded by me. The new site can be found at www.vintagegliderclub.org.uk. The members' section has been revised with new features:

Voice Mail and FAX by means of a telephone line that lets you record a message or send us a FAX 24 hours a day. This could be ideal if anyone wishes to send a message to the VGC Committee or a message can be forwarded to other members by email if you do not have email yourself.

Simplified Message Centre/Chat Room, ideal for swapping stories, asking questions or letting people know you have something for sale.

Members/Glider database, we have online forms for notifying changes to your address/email etc and registering glider details. The members database has been grouped by country and has a search engine. The glider database is now grouped by manufacturer, Contractor's number, Registration etc. Email pictures of your glider in JPEG, BMP, TIFF formats to join those already in the database.

Feedback Forms. These now cover Membership detail changes and a glider registration form. This information goes directly to Geoff Moore and Peter Chamberlain. Whenever your details change use these forms.

If there are any other ideas please let me know.

Robin Willgoss, webmaster@vintagegliderclub.org.uk

FROM THE EDITOR

A Celebration of Vintage Gliding. Chris Wills and I have selected four pages of pictures which are representative of the VGC, its history, its restorations and replicas and, above all, the work of the members.

The **Annual Prize Presentation** was discussed at a recent committee meeting and it was decided to resurrect the small sub committee composed of Chris Wills, Graham Saw, Jan Forster and David Shrimpton to adjudicate on the submissions for prizes. If you would like to make a claim on a restoration or performance prize please write, giving all details, to Rally Secretary Graham Saw before September 1st so that the group can meet and decide the prize winners before the annual dinner when they will be announced and presented. Gliders entered for the restoration award will be inspected during the International Rally at Tibenham.

The **Annual General Meeting** will be held during the International Rally at Tibenham at 7.30 pm on Thursday 3 August. Please read the notice included with this issue.

The **Annual Dinner & Prizegiving** will be held on Saturday 9th September at Lasham during the Elliots of Newbury Rally. Tickets are £15 each obtainable from Hon Sec Michael Powell.

Glider prices. It has been suggested that some awkwardness has been caused when members contact the advertisers of gliders for sale and are surprised at the asking price. If you are thinking of selling your glider through the classified adverts page would you please include a starting price for negotiations to avoid any misunderstandings.

Some more interesting websites:

Our new site: www.vintagegliderclub.org.uk

Paper planes: www.khs.com

Flying wings: www.nurflugel.com

Change of address.

Jörg Ziller, our membership secretary in Germany for many years, has moved to: Preziosastr 19, D-81927 München, Germany. The German account address and his email address remain unchanged. Jörg hopes to visit Tibenham with or without his Meise.

ERRATUM

Mike Beach

In the last issue we reported that a correspondent wrote saying that 'the spelling of the name of that white haired, white bearded star of glider restoration is Beech.' However, the star himself has assured us that it is Beach. Could I ask that correspondents please check their facts before upsetting people?

Also on Page 9. Entry List for the VGC National Rally. May 22-31. RAF Bicester, Entry No. 36. should read: Don Knight and NOT Don Beach, who brought the Slingsby CADET BGA 1143 as Mike Beach was ill. (We did once have a member Don Beech, who part owned a Weihe in East Anglia). Don Knight actually owns the 1931 FALCON I replica at RAF Halton.

FILMS, AND OUR GLIDERS FOR THE USE OF! - (FINANCIAL OPPORTUNITIES?)

The film of the Colditz Cock has more than demonstrated that our gliders could be paid for by film companies. The Colditz Cock has now been taken to the Imperial War Museum at Lambeth for static display, by John Lee who built its wings. The Cock was specially built for the film by Southdown Aero Services and John Lee. (We have no idea what money passed hands and we don't want to know but it used to be said at Personal Plane Services that one film such as *The Magnificent Men and their Flying Machines*, *Blue Max* or *Aces High* would more than keep the firm out of financial difficulties for a year.) In the Austrian made film *Treacherous Sands*, an attempt was made to recreate the 1938 Egyptian Gliding Club, which was founded by the Hungarian Count Almási, using the OSC Wasserkuppe's SG.38. The type used should have been a Zögling, examples of which are owned by our members in Denmark and Hungary. (Laszlo Revi in Hungary desperately needs money to finish his beautifully built Zögling) Laszlo also has the M.22's drawings. One of these was also used by the Egyptian Gliding Club. It was named after the Hungarian mythical bird Turul. If only we could have known in time, the Turul could have been built again for the film, which might have financed it. If our members in Hungary could have got the M.22 Turul flying again, the VGC would have been really proud.

Another sailplane used by the Egyptian Gliding Club was a Göppingen 1 Wolf. Otto Grau, who has recently built one, would have had the holiday of his life!! These are missed opportunities but more may present themselves in future. We must insist that if our gliders are used in films, their owners should be with them, for film companies, as we discovered at PPS, were more intent on producing the film, than on looking after the aircraft, although they probably paid for their repairs afterwards!

Future Rallies

VINTAGE GLIDE 2000 AT TIBENHAM, ENGLAND. THE 28th INTERNATIONAL VINTAGE GLIDER CLUB RALLY.

What will certainly be the largest gathering of airworthy vintage gliders ever, anywhere in the world gets off the ground at Tibenham airfield on 28 July. By the end of May over 240 people with over 100 gliders had been registered so the total has already exceeded the 100 gliders expected when planning for the event got under way and the total is now expected to go to about 120 gliders. Vintage and classic powered aircraft will also be visiting the airfield during the week-long rally adding to the interest and calling for a degree of 'air traffic control' not normally required at vintage glider rallies!

Tibenham airfield is the home of the Norfolk Gliding club who own one of the largest private airfields in the UK. During WWII the airfield was a USAF base used by Liberator bombers of the 445th Bombardment Group. There are three hard runways as well as plenty of grass and the main runway (03/21) is a mile long!

To ensure that as many gliders as possible get airborne with minimum waiting time the organizers are providing 3 two-drum winches (two on-line and one standby) and five tugs. There will be separate winch and aerotow runways and a combined launch-rate of at least 35 gliders an hour is expected. Airfield organization is geared to maintain this high launch-rate throughout the rally and a system of pre-paid 'launch-vouchers' will operate to keep delays to a minimum.

The Rally will be formally opened on Saturday 29 July by Wing Commander Ken Wallis and other dignitaries will include the President of the International Vintage Glider Club, the Chairman of South Norfolk District Council, the Chairman (and retired Chairman) of the British Gliding Association, the Chairman of the Royal Air Force Gliding and Soaring Association and the Commanding Officer of Royal Air Force, Lakenheath.

Sponsors to date include **Skylaunch Winches Limited** who are providing a winch, **Calor Limited** who are providing all the LPG required for winches, cooking, showers etc, **Colmans Mustard Limited** who are sponsoring the main marquee, **Scheibe** who are providing a demonstrator Super-Falke and the **Stratton Motor Co** who are providing a Renault car for airfield transport.

There is a full program of supporting events including the traditional National and International evening entertainments and a Jazz barbeque on the Friday. Trips to nearby attractions may include Duxford aircraft museum, Bressingham gardens and the Norfolk Broads.

The VGC Annual General Meeting will be held at 7.30pm on Thursday 3 August.

Accommodation is available in the form of caravans and tents on the airfield and there are plenty of local bed and breakfast establishments.

Late registrations may be made direct to Martin Aldridge on: (+44) 01508 489506 or e-mail at: webmaster@ngcglide.freemove.co.uk Further information is at Norfolk Glider Club's web-page www.ngcglide.freemove.co.uk

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email ecc.con@which.net

"A TUTOR CHALLENGE"

The "Camphill Vintage & Classic Glider Rally", called this year "Camphill 2000" for blatant marketing reasons, is well known for daft ideas, and above all fun. If you do not believe us come to the Rally from 24th June to 1st July, but I digress. One of the daftest ideas, but one I whole heartedly support, has come from Keith Nurcombe, who is well known for doing daft things in Tutors, like taking them cross country, but has now surpassed himself. I quote from his Press Release, sent only to me as far as I can tell, and for no better reason than I want him to take the blame, if not the credit, for the outcome. "After receiving a challenge from Keith Nurcombe in the Hus. Bos. Bar last night, Norman James has vowed to C of A "Das-tardly", his trusty Tutor, and to bring it to the Camphill Rally to inaugurate the first UK National Tutor Racing Championships.

These Championships are declared open to any and all Tutor owners, who are all invited, nay, challenged, to attend and compete. As a truly one-class event, this event must surely merit ranking with the Standard Class Nationals in importance and we hope that it may well attain world recognition".

So there it is, a challenge, which I hope you will bring to the attention of all Tutor, and of course, as a parallel Class, T31's owners, who feel unable to either fly on their own or pay 100% of the launch fee. Camphill's own T31 will be debarred from taking part, not on grounds of fairness or anything silly, but through lack of C of A, struts, fabric, and those little covers which protect the pupils backside from the instructors boots.

Camphill, after a noisy, but unusually un-acrimonious and unduly short discussion, perhaps because only one person was involved, have agreed to host this event in perpetuity, or at least as long as it makes a profit. They have also increased their marketing and event budget, by which I mean prizes, to ensure that event has the prestige that anyone who flies Tutors deserves. Which, of course, means we are being as mean as usual but this time with an excuse. We have however spared no expense in making arrangements for social and psychiatric help being available on site for the whole week, but then we do that anyway.

Your help, in bringing this vital information and challenge, to the attention of anyone in your club with the requisite aircraft, mind set, or for that matter, with any vintage or classic glider, would be much appreciated. Further details on the rally, or I should say Camphill 2000, can be obtained from Ian Dunkley at DLGC, Camphill, Great Hucklow, Buxton SK17 8RQ, (ian_dunkley@pgen.net), do not forget the under score between "ian & dunkley" or from Keith Nucombe, who is not going to get away with just coming up with the idea, keith.xlm@talk21.com.

Ian Dunkley

SLINGSBY WEEK - SUTTON BANK - August 26th to September 3rd 2000

Slingsby Sailplanes and the Yorkshire Gliding Club at Sutton Bank have an association that goes back to the Thirties. Early test flights of most of Fred's gliders took place on the ridge there - probably every type that was produced by Slings has been flown from the site at some time or other. The tradition continues and the syndicate T21 can be seen riding the ridge in stately fashion on many days when the wind is in the West.

For many years the club has held a Slingsby Week at the end of August. The original idea was to bring together a selection of Slingsby gliders to fly close to their birthplace at Kirkbymoorside and allow pilots with mutual interests to swap ideas and flying experiences. Fairly soon a number of VGC members realised that this was a great opportunity to fly other venerable machines from the site and good numbers of vintage gliders have appeared and flown at Sutton Bank over the years.

Last year participants had a good week - flights included wave climbs in old gliders up to oxygen level (about 10000ft for vintage pilots!). A Slingsby Dinner was held (to which everyone was invited) and there were opportunities for many social and flying activities.

At the end of the week Geoff Moore, who has regularly attended the event, suggested that it would be good to give Slingsby Week more publicity to encourage more owner/pilots to join in. Hence this article.



Subscribe to this glossy magazine which appears six times a year and usually includes an article on vintage gliding and other topics particularly interesting to mountain fliers. Annual subscription 90,000 lire (46 Euros) Write to Centro Studi Volo a Vela Alpino, Aeroporto Paolo Contri, Calcinate del Pesce, 21100 Varese, Italia.

To illustrate the renowned generosity of Yorkshiremen, owner/pilots of Slingsby machines were provided with free reciprocal membership last year and that offer will apply this year as well. In a further fit of goodwill the club now offers VGC members bringing other gliders the chance to fly them on as many days as they wish for just one daily membership fee. Does this dispel the image of mean, dour Yorkshiremen for ever? Probably not! It still costs money to drink in the bar.

If you own a Slingsby glider this week is a must. If you own and fly other vintage gliders come and join in. If you are just interested in spending a few days with friends in the VGC and maybe fancy flying one of the YGC gliders come along as well. There are 3 tugs available plus a good winch. There are lots of good B & B's in the area and there may be accommodation on site for those who book early. The clubhouse offers all home comforts and reasonably priced meals and snacks are available. There is lots to do in the area when not flying. An air museum at Elvington is worth a visit, also the WW2 museum at nearby Malton. The famous North Yorks Steam Railway operates at Pickering and the area abounds with country pubs offering good beer and meals.

Interested? See more details of the YGC on the website – www.ygc.co.uk. Phone Beryl or Jenny on 01845 597237 for further information or to book for all or part of the week which runs for 9 days starting on August 26th Bank Holiday weekend. Hope to see you then.

Phil Lazenby, YGC committee member

IVGCR2001 (INTERNATIONAL VINTAGE GLIDER CLUB RALLY 2001)

This is the call sign of next year's International Rally which will be hosted by the Aeroklub Zbraslavice and the Plachtarsky Old-Timer Club in the Czech Republic at a date to be finalised. (Plachtarsky is the Czech word for glider.) We are told by Dr Milan Kamenik, who is the Chairman of the Aeroklub, that they are aiming to provide an even better organisation than in 1993 with improved provisions for flying as well as on the ground.

There will be 5 tow planes, 2 winches, 2 restaurants for breakfast, lunch and dinner, a campsite of almost unlimited capacity, new showers and toilets, accomodation for 26 persons in the new aeroklub building as well as in private houses or hotels, a briefing room, pre-flight room, small workshop, phone, fax and email, tennis court and swimming pool with filtered water, organised trips to Prague and other places, the club's gliders for hire and anything else they can do to make this a freindly, cordial gathering of people with the same wish to fly old gliders. They do not want to create an immoderate media event but there may be a little publicity and perhaps some sponsorship.

The entry fee is 30 DM for pilots only, Aerotow to 600m for example 38DM, winch launch to 250-300m is 7DM. The camping fees for a tent or caravan is 9 Dm per night incl electricity.

Hangar charges for a rigged glider are 8DM per night but trailer parking is free, of course.

Avgas 78 Oct is available for anyone arriving by power plane, the price at time of writing being 1,8 DM/litre.

In 2002 it is possible that the rally will be hosted by the club at Achmer/Osnabrück in Germany where we held an excellent Rendezvous in 1999.



W.Hirth as he would have been when in Japan.

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Features

WOLFRAM HIRTH IN JAPAN

Translated by Marici Phillips (with permission of Bungee Cord, Spring 2000)

Translator's notes: Two books have been recently published in Japan on vintage gliders and soaring history, unfortunately for us written in Japanese. I came upon them through a string of fortunate circumstances, and until I had looked through the pages of these volumes I was utterly ignorant of any early glider activity in the Far East. Today, soaring in Japan is a quiet sport, perhaps like here in the States, but with limited opportunities for the kind of outstanding soaring we enjoy at places like the western deserts and the Appalachians. While colleges still sponsor soaring teams, aviation in general is rather inaccessible to the average person. But it was not always this subdued. The glider movement in Japan at its height produced a wide range of designs from primaries to high-performance gull-winged beauties, in numbers that are hard to believe: 5000 of just one type of primary glider! And I have counted upwards of 100 different types of gliders, from primaries to high-performance soaring ships, to troop carriers for military use. The following is a story from one of these books, about an event that deeply impacted the nascent glider movement in Japan; after a small but avid group of designers and pilots had formed, but before they had reached the height of their talents. I was surprised to learn that Wolf Hirth had actually travelled to Japan at their request to assist the development of soaring. You will see the name Sato mentioned often. Professor Hiroshi Sato of Kyushu Imperial College (Kyushu Teikoku Daigaku) – was one of the leaders of the glider community in Japan, and designed a line of gliders which included the Kyutei Kyushu Teikoku series which you will see mentioned here.

In brackets, I have also included Hirth's own comments about this experience, as taken from the book "Wolf Hirth Erzählt"—Marici Phillips

In 1930, gliding began in Japan with the 5-second flight of a primary glider, a Zögling copy which was constructed from photographs and 3-views. By slow, steady steps it progressed so that by 1935 the duration record stood at over 4 hours, although the word 'glider' was still novel and not yet generally known. It is said that the Japanese gliders of that time were imitations of German gliders. *Isobe, Ukai, Yamazaki, Sato,* and others all had German forerunners on which they were based, seen in magazines received from Germany. The photographs, three-views and construction drawings found in these magazines were the templates for the Japanese gliders, which were produced without the benefit of ever having seen real German gliders or meeting with German engineers. The Japanese wanted to invite someone from Germany, wanted to actually see a German-made glider, its construction and controls ... these long-held hopes and desires grew and spread within the Japanese gliding community. In a letter dated August 13, 1934, a certain Fritz Stamer, flight instructor at the Wasserkuppe, is put forth as a candidate. It is possible that they even solicited Professor Georgii, whose reputation towered over the Wasserkuppe like the old imperial castle of Rhön. The proposal boiled down to a problem of

money – and there was no way that the Japanese civilian soaring community could come up with enough of it. The cost of bringing Hirth to Japan would have been enormous. Fortunately the Japanese Army stepped in as a major sponsor, and financial concerns disappeared. In early 1935, the Japanese military embassy stationed in Germany was consulted for their advice in choosing a candidate. The embassy recommended Wolf Hirth. They had set their mark on Germany's, and the world's, premier glider man. Major Kondo of the Japanese Army (later a general), who thought gliders would be useful for promoting aviation, straightaway endorsed the choice, but Hirth was involved mostly with sport aviation for which the Army had no use. Thus civilian organizations such as the *Osaka Mainichi* Newspaper were sought for their backing. In May of 1935, an invitation to Hirth was formalized.

A brief biography of Wolf Hirth: He was born in Stuttgart on February 28, 1900. He was 35 years old at the time of this story. Until his death in flight of heart failure on July 25, 1958, he devoted his life to soaring. He first flew a glider at the age of 16. From 1922, he was involved with the glider meets at Rhön. At the age of 26, he was in a motorcycle accident that resulted in the amputation of his left leg above the knee, after which he used an artificial leg. Between 1928 and 1935, he won numerous championships, set several records, and developed aerotowing techniques. He started the Göppingen Industrie, where all the Göppingen gliders, Grunau gliders, and others were designed and manufactured.

Hirth had already been to five countries to give glider instruction: America, England, Belgium, Brazil, and Argentina. Because of his international experience, he was well equipped to provide guidance and training appropriate to Japan's own circumstances. It must have been unbelievable for the Japanese glider community to have such a personage accept their invitation. This excerpt is from a letter Hirth addressed to the Japanese people: "Coming to Japan with my friends, being able to stay for a while and walk together the road we have chosen, makes my heart glad. The following conversation is how we decided to go to Japan: One day, a certain colonel from the aviation ministry asked me, 'Would you like to go to Switzerland, or would you rather go to Japan?' I answered without a blink of hesitation, 'Send me to Japan.' The reason I had been hoping to go to Japan was because it was a country I admired."

Hirth immediately set to work on his preparations. Hirth first chose his staff that would be travelling with him. Two young men were chosen to be Hirth's subordinates. The first was Karl Baur, 24, flight instructor and airplane pilot with about 400 hours, who at the Rhön competition flew for 7 hours and was the 1,550m altitude record holder. He had been teaching in gliders since 1932. The second was Hans Stolz, 24, assistant and technician. He lacked a formal education, but had been an automobile repairman for 3 1/2 years and had a natural talent for gliders. Since 1934, he worked for Hirth operating winch and auto launches, executing in excess of 5000 launches.

Then the flying equipment was selected: one each of Göppingen 1 Wolf, Göppingen 3 Minimoa and Klemm L-25 towplane (65hp) were sent from Hamburg by boat, then carefully reloaded at Marseilles, France, onto the Japanese ship *Fukumi Maru*. In addition, plans for a Grunau 9 Primary and an automobile winch for construction in Japan were sent separately.

The three men boarded a steam train on September 17 in Berlin. They travelled via Moscow and Siberia to faraway

Asia, arriving in southern Japan on September 30. They arrived in Tokyo on the morning of October 2. It had been raining in Tokyo the previous night. One wonders how the view of Tokyo in the drizzling autumn rain appeared to these foreign visitors. The awaited celebrity appeared in a brown greatcoat, a cane to assist his artificial leg, and greeted the welcoming crowd who lined the street. In spite of his disability, he walked the Nihombashi district and the Airplane Hall (present-day Aviation Hall) in Tamuramachi and gave a wreath of flowers at the shrine of the guardian spirit of aviators, then retired after his long journey to his hotel in the Akasaka district in Tokyo.

["The buildings have sliding paper doors and curious straw mats spread on the floor.

It is the custom to remove one's shoes at the entry and step up to enter the house – I can't help but worry that my socks might be dirty or have holes in them. Doll-like geishas in beautiful kimonos render gracious service... "Eating with chopsticks proved quite difficult. One would, thinking that you had hold of something at last, drop it during the transit between the plate and the mouth and soil the clothes... They all marvelled at my skill at using chopsticks, but to tell the truth, on the train after my two companions retired, I practiced with those chopsticks with all my might. *Sake* was very novel. We gradually came to fancy it, and the more we drank the better our Japanese became.....

"Here, one can always see the ocean. Thatched houses, innumerable small islands, farm fields, rice paddies, and forests of telegraph poles, but where can one land an airplane?"]

Hirth's busy schedule started on the 4th of October. He travelled to Ueda in Nagano Prefecture and reviewed a training course at an Army airfield on the banks of the Chikuma river. He visited the *Asahi* Newspaper Company's Sugahiro practice field, and returned to Tokyo on the 5th. On the 7th, he gave a lecture at the Airplane Hall lecture room, which holds 300 people; but there were 500 more people who were not able to be seated inside. The lecture lasted an hour and 20 minutes, but since it required translating from German to Japanese, the actual lecture was about 40 minutes worth of material, whose content was nevertheless quite rich for the listeners: soaring theory, thermalling technique, German advancements, and prospects for Japanese soaring.

[On October 10th, we held our first class at Tokorozawa. Most of the attendees were accomplished *motorflieger*s. Suzuki, Yamamoto, Honda, Furubayashi ... remembering strange Asian names and faces was not easy.]

On October 14th, the assembly and rigging of the *Wolf* was finished and test flown at Tokorozawa, in preparation for the flight demonstrations to come. The entire ship was painted pink.

["I embarked on my first flight in Japan. This was a flight which I cannot write enough about, it was so marvelous. At 600m we entered clouds, then rose out of them at 1800m, and climbed to 3300m in the brilliant sunlight. Suddenly I saw Kyojin mountain from above the clouds to the southwest. Spectacular curving lines were painted on its smooth flanks all the way up to its peak, which was crowned with radiant white clouds. This is why the Japanese people so enthusiastically honored and loved their sacred Mount Fuji! Up to now I had seen all sorts of aerial views around the world but none were so beautiful as this one]

On the 18th, the Klemm towed the *Wolf* the 150km distance from Tokorozawa back to the Army airfield in Ueda in

Nagano Prefecture. The aircraft flew 2000m up in the fine autumn sky, looking down upon Asama mountain southwest of Ueda. The glider released from the Klemm, Hirth looped and spun the glider and showed off some aerobatics, then landed at Ueda. This particular strip had been established in 1931 on Ueda's flood plain, measuring 1100m x 400m along a northwest-southeast line. Nominally called an airport, it was more an emergency landing field along the Chikuma river. It was littered with rounded river stones, big and small. Hirth, inspecting the field said "I like the lay of the mountains to the north... but I think aerotow will be difficult."

[One sunny afternoon, I and Teruhiko Ukai, who was familiar with the terrain, got in the Klemm and departed for a training session in glider aerotowing. I instructed the glider pilot Furubayashi, who was flying the *Wolf*, to soar until I got back, and I flew off toward the south. People were busy reaping in the yellow autumn rice fields. Here and there farmers stopped to stare up at our airplane. The Klemm's 60 HP motor ran well. Looking over Lake Suwa's beautiful scenery, I gradually headed back; I had given the controls to Ukai, and he didn't disappoint me. By the time we had landed back at Ueda the towns were lit up for the evening. Furubayashi in the *Wolf* had continued flying on the slope of the mountain after dark. Departing on my wonderful long flight, I had completely forgotten the instructions I had given my student. He, true to my instructions, had continued soaring until my return. We immediately called him in to land with a signal flare. I was condemning myself for being such a careless teacher when faithful Furubayashi, satisfied after his long flight, got out of the glider with a big smile.]

The three Germans held a training session at a nearby hotel for one week, from October 19th to the 25th. Although the names of the attendees have been lost, it is said that all of Japan's top instructors assembled there.



A Minimoa, a glider that so impressed the Japanese.

["One day during class, hearing the shouts of people outside, I ran out to see the volcano Mount Asama erupting smoke to a height of 8000m. Baur and I got in the Klemm to photograph this awesome performance of nature. Eerie yellow smoke rose from the crater. It was a ghostly beauty. "we flew directly above the terrible roaring big crater. There were

masses of poisonous smoke, incandescent lava, and a rain of volcanic ash. A bit higher there was a good updraft, so we circled gently up over the volcano's edge. I held my breath and looked into the deep crater. In the quiet updraft, I exhaled and cut the gas to the engine. Just when Baur and I got the feeling that we had gotten too brave in our circling, there was a huge explosion from the volcano. One wing of the airplane was blown upward, and I thought we were done for. We were falling directly into the crater. I immediately pushed the throttle in. We were very lucky. My suicidal photograph of this volcanic eruption was very unusual, and a world famous magazine published it."]

Although Hirth's technique of "circling ascent" upon thermals was probably not demonstrated to his students at Ueda, he must have wanted to teach it. Earlier that year, Hirth had flown from 200m to 1000m in thermal lift in a *Grunau Baby*, in revolutions of 11-12 second duration, rising 1.5 to 3 meters every revolution. In spite of the thrilling aerobatics that he performed at the series of airshows in Japan, aerobatics were not a big theme with Hirth: "Aerobatics are just for show. The true essence of gliding is flying with the use of thermals. You don't need to be good at loops."

On October 26th, Hirth organized an airshow at Tokorozawa. Army aviation personnel, as well as townspeople from Tokorozawa City assembled there, amounting to several tens of thousands of spectators. The sky was overcast. First, Hirth in the *Wolf* was towed to 1000m and released. Although it was raining, the cloud ceiling was high and the spirit of elation in the excellent aerobatics was not lost upon the crowd. Then, the *Minimoo* made its first appearance. The glide ratio of 26:1 was stupendous. Its beautiful gull wing and its side profile were unique, with elliptical fuselage cross-sections. Its transparent canopy completely enclosed the cockpit. The main spar was cantilevered, so that there were no struts. The *Minimoo* far outdistanced the standard in the Japan of that day. The glider people there were seen to stare at it in amazement. Hirth designated a Göppingen agent in Tokyo while he was there. Some of the distinct features of the *Minimoo* were presented in that company's catalogue. The rudder pedals are interesting especially mounted, hung from above. To increase best glide speed on long-distance flights, 50kg water tanks were installed at the roots of the wings. It had pendulum elevators, and although it isn't in the catalog, one more distinctive feature: the control stick slanted down from the right and above the pilot's head, emerging from the front of the right spar root. This control arrangement was found only on prototype ships to accommodate Hirth's disability and never gained acceptance. It wasn't long before the *Minimoo* brought to Japan was converted to the conventional control stick arrangement.

On the 31st, Baur and Stolz returned to teaching at Ueda Army Airfield. This was a special glider training session for the Army, with 20 hand-selected trainees, each one a skilled pilot. One of the students was to become an important figure in the development of military gliders in the latter part of the war. Such things were heard in the lectures: "Gliding can be ranked first among sports, but one can also consider its utility. For example, it can be turned to military use in a bombing role. Nor is the transport of military personnel out of the question, taking advantage of darkness. One can imagine the development of such practical uses depending on one's circumstances. Because of your present circumstances, I believe that instead of concentrating on duration flights, you ought to concentrate your energies on becoming skilled at cross-country soaring."

On November 19th, the group travelled to Osaka. On the 20th, in sunny weather at Tatetsu airport, they entertained the people of Osaka with spectacular stunts. The *Wolf* and *Minimoo* were parked next to the Japanese Kyutei 5 and Kyutei 7. It must have been a grand spectacle. In the bright light of day, the differences in the construction and finish of the German and Japanese gliders were striking. (However Hirth examined the Kyutei 7 and remarked, "Ah! That looks like my own *Grunau Baby*!" A nervous sweat ran down the back of Sato's neck.) Tadao Shizuru, Japan's most famous glider pilot and Hirth's student, then flew the Kyutei 7 in a brilliant aerobatic display. Even Hirth applauded Shizuru's talent. It was the first aerobatic demonstration by a Japanese. Sato, while admiring the series of loops, rolls, spins and other manoeuvres, felt a great confidence in his breast.

From the 21st to the 25th Hirth travelled from Osaka to Kyushu Island in the south, giving addresses and visiting various soaring clubs and sites. He visited Maeda Manufacturing and Ito Aircraft Company, both glider manufacturing facilities, with Sato at his side. One wonders what Hirth's thoughts were about these facilities. Later, Sato would visit the Göppingen facility in Germany, and witness the sharp contrast in the conditions. The Germans were well advanced. On November 30th at Haneda airport thousands of Tokyo citizens were treated to the next of Hirth's airshows. The Army brass were in attendance as well. Baer in the newly Japanese-built *Grunau 9*, autotowed by Schuttholz, opened the show. Next, Hirth in the *Wolf* towed to 300m by winch, elegantly and without a sound danced in the sky above Haneda, then, like a great gull, the beautiful *Minimoo* made its appearance. Bauer in the Klemm towed the *Minimoo* to a good altitude, then it possessed the sky for the next 20 odd minutes while the crowd craned their necks to see the show above; then it landed back at its departure point. Ending the show, Hirth once again flew the *Wolf* in a looping, spinning routine which defined the essence of aerobatics. The crowd rendered Hirth a lengthy ovation.

On December 4th, the Klemm and *Wolf* in a "sky train" aerotowed from Haneda to Nagoya. With Mount Fuji on their right, the gliders released over Matsubara and treated the spectators to an aerobatic display, then landed at Sunahama while the towplane refueled. The sky train took off again and arrived at 3pm at Kohata ga-hara airport outside Nagoya at that time in the middle of agricultural fields. Significantly, it was commonly referred to as a glider port rather than as an airport. At that time it was a sort of glider mecca for the central parts of Japan, but even in the late 1950's, it was overgrown and out of use. The pilots enjoyed a reception that night in Nagoya, then the next day flew the rest of the 420km to Tatetsu airport in Osaka without incident.

On December 8th, 20,000 spectators gathered at Tatetsu airport for Hirth's final airshow. Hirth flew with Shizuru and Takehisa who had become his favorite pupils. It was like a recital, with Germany and Japan as teacher and student. Baur in the Klemm towed Hirth off in the *Wolf* and alongside them, Matsushita in a Nihon 13 airplane towed Shizuru in the Kyutei 7 in the climax of the show. Spectator and participant alike were moved with the feeling that they were at the close of an historic event.

On December 16, Hirth headed back to Germany. He and his assistants boarded the Japanese ship *Asama Maru* at the port of Kobe. Sounding its steam whistle, the ship hoisted its anchor and turned to the open sea. ... The aircraft that arrived with Hirth were left in Japan. The *Wolf*, *Minimoo*, *Grunau 9*,

and Klemm L-25: these four aircraft were flown for quite some time, mainly overseas in the Japanese-held territories of Korea, Taiwan, and Manchuria. The *Wolf* became the Japanese glider pilot's object of desire. Copies of it were seen all over Japan, for example the Hikari 3-1.

Along the banks of the Edo River in Chiba prefecture, at Sekiyado Gliderport, is a memorial to Hirth. The monument was originally considered for placement at Tokorozawa, Tatetsu or Ueda, but all these sites have lost all connection to gliding. The front of the monument shows Hirth's face as he appeared as a smiling 35-year-old. Below is the inscription: "In Remembrance of Wolf Hirth: Wolf Hirth was the teacher of soaring in our country. He is also a pioneer of German soaring. He arrived on October 2, 1935 and for two and a half months travelled to every part of Japan teaching soaring theory, teaching practical skills, leaving a deep effect on our country's glidermen and contributing to the expansion of the sport. Fifty years after his visit, in remembrance of his legacy, this monument is dedicated to passing this history to future generations." Spring 1988, Hiroshi Sato.

"[I heard that a "Wolf Hirth Gliding Club" was formed in Osaka. In truth I thought a dedication to me was not appropriate. I objected on the grounds that a memorial should be dedicated only to a deceased party. Laughing, nodding and with many 'ah sodesuka,' they seemed to understand my point of view. Nevertheless they went and formed a 'Hirth Memorial Club.' They explained that it was so they would never forget my visit to Japan"]

* These names all refer to early Japanese gliders, previously referenced in the book.

Ms. Phillips wishes to thank Kawakami-san, the book's author, for the use of this material. Questions have been raised as to the accuracy of, at least, this chapter from the book. It has been printed here without altering the information as presented in the book.

Kawakami, Hiroyuki. *Nihon no Glider 1930-1945 (Japan's Gliders, Model Art Publishing, 3-3-11 Iidabashi, Chiyoda Japan.*

HUTTER 17 BGA 490

A Brief History

The Hütter 17 is a light-weight glider designed in 1934 by the Austrian Ulrich Hütter whilst an engineering student at the Technical College in Vienna. The figure 17 referred to the predicted glide angle of this diminutive (wingspan 31 ft 10 in.) open cockpit glider designed originally for slope soaring in the Austrian Alps. It was believed that the rapid control response of a smaller machine with a relatively high wing loading would compensate favourably in turbulent Alpine conditions for the poorer overall performance that such a small machine would enjoy when compared to the larger wingspan sailplanes that were currently being designed in Germany.

The prototype was first flown in September 1934 and plans were published in 1935, being designed for amateur construction. The cost of the plans in the UK was approximately £2. 10s.

The British rights for producing the Hütter 17 were obtained by W. Roy Scott in 1938, who started building three examples in a shed at the rear of his home, at 32, Lover's Walk, Dunstable, whilst working for the nearby Dart Aircraft Co. (formerly Zander & Weyl). Subsequently when the Dart Aircraft firm ran out of money, Scott joined up with Paul

Zander as Scott & Zander with a workshop in Albion Street, Dunstable. Here the work on the three Hütters continued. Three sets of metal fittings and three sets of all the wooden parts were made from German Pine which was said to be stronger than the best silver spruce.

BGA 331, the first of the three Hütters, was sold when completed to a syndicate including Amy Johnson. This glider unfortunately crashed on 14.5.38 at Oxford during a winch launch, and the pilot Capt. Rattray was killed. The second Hütter 17, BGA 352, was sold to Alan Coleman (later Sir Alan Coleman of Coleman's Mustard) which was painted his trademark yellow and flew for some years after the war until it finally crashed at Ballykelly on 14.10.62. The third Hütter 17, subsequently BGA 490, was originally intended for Roy Scott's own use, funded by the sale of the first two examples as was common practice, but unfortunately the onset of the Second World War meant that priorities changed. The metal fittings and the wooden parts for this glider were all sold to Donald Campbell in Dumbarton, Scotland (a glider repairer and restorer, subsequently known as "The Glider Doctor"). Nothing more was achieved however until the end of the War, when this third Hütter was finally completed by Mr Campbell with an empty weight of 231 lbs.

The first winch test hop was made on 19.10.47 at Balado with subsequent tests and circuits a week later. The first longer duration soaring tests took place at the Midland Gliding Club on the Long Mynd in December 1947, and a C of A was finally issued on 13th August 1948. Only one month later, after some 12 hours flying time, the glider hit a hedge broadside on while landing and suffered extensive damage. The starboard wing had broken in two. The tailplane and elevator were damaged as well as the fuselage, which sustained damage to the nose section on the port side extending back to the main bulkhead as well as damage to the strut fittings etc. The wing, tailplane and elevator were repaired by Donald Campbell in his own workshop, and were completed 19.11.48. The fuselage was meanwhile repaired at the Hawkrig Aircraft Co Ltd. in Dunstable, and work was finished 21.1.49. The restored aircraft was then test flown again by Mr Campbell on the 15 & 23 February 1949 before the decision was made to install "Sky-type" dive brakes. This modification took place over a two year period to official drawings (Aviation & Engineering Projects Ltd).



The Hütter at Aston Down before its restoration in 1979, showing the Fin strake, enclosed canopy, airbrakes and wheel. (Can anyone recognise the gentleman standing in front of the glider?)

The work was completed by June 1951, but the weight had risen by 25 lbs from 231 to 256 lbs as a result of the crash repairs and the fitting of the dive brakes. During the modifications the main spars had been re-inforced, and an increase in the all up weight from 415 to 450 lbs was authorised. The dive brakes were extensively flight tested between June and August 1951.

A further 37 hours of flying were then enjoyed over the next ten years under the ownership of Donald Campbell. During this time a wheel was added, as well as an enclosed canopy and an extended metal fin strake in 1954. In July 1962 a full 10 year plus inspection of the glider was carried out with removal and replacement of all fabric and a complete internal structure check performed by Mr Campbell. The total flying time was now 50 hours. The aircraft was then sold on 19th June 1965 to Mr P. Kent of Overton, Hampshire and before it was flown again it was subjected to a major overhaul by Ralph Jones of Southern Sailplanes, then at Thruxton Airfield, in November 1965. All the fabric was once more removed, part of the mainplane leading edge D box was opened up and all metal fittings inspected and treated. Following this major inspection, the aircraft was re-covered and the flying surfaces were coloured synthetic White, whilst the fuselage was sprayed two-tone – topside Scheme “Z” synthetic White and bottom Scheme “Z” cellulose Flame. The aircraft now weighed 273 lbs (42 lbs above its original weight).

Only a handful of flights were made at the end of 1965. In the last (hangar) flight, it was recorded that the airbrakes were jammed closed because of moisture. No further flights were made for the next two years. The Hütter was then sold again, and in March 1968 another major C of A was performed with removal of fabric from the mainplanes to correct bad warping of the trailing edges which had developed as a result of over-doping. The glider was then aerotowed by Ralph Jones to Compton Abbas for delivery to its new owner Mr P. Cottrell. During the next six months BGA 490 was flown for a total of 15 hours (Total flying time now approximately 67 hours.) In the following year, however, the aircraft was not flown, and in early 1970, the glider once more changed ownership (from, it is thought, Mr Tony Ewens-Freke to Mr H. Banks). A thorough C of A was undertaken and the aircraft temporarily stored whilst the trailer was rebuilt.

BGA 490 did not fly again until the following year, 1971, when, after flights totalling a couple of hours, a heavy landing revealed glue and structural failure due to water collecting in the bottom of the fuselage around the cockpit area. This was repaired and in the following year, 1972, another two hours of flying time was added. A major C of A inspection at Stroud, Gloucestershire in November 1973 described the glider as being in very sound order. A total of just over 70 hours had been flown in the 25 years since 1948 and the current weight was now 266 lbs.

No further entries were recorded in the log book for the next five years but in 1978, the Hütter 17, BGA 490, was bought from Aston Down aerodrome by Ken Fripp. Ken was director, manager and owner of Southdown Aero Services, based at Lasham and his love affair with the Hütter 17 was described in an article he wrote for *Sailplane & Gliding* in Dec./79/ Jan./80 after he had completely restored BGA 490. Ken Fripp had decided before he retired to fulfil a dream which he had had since first reading about the Hütter 17 in an article in the July 1935 issue of *S&G*. Armed with the Hütter 17 drawings, he had begun to make a few metal fittings, fuselage frames and wing ribs, when BGA 490 came up for sale at

Aston Down. He went to see it and wrote ‘I remember my heart sinking as the ram-shackled trailer was opened and I could hear the ominous dripping of water over the casein-glued structure. Opening up the fabric at various strategic places confirmed that glue failure was present in a fairly advanced stage...’ However he bought the glider, and ‘the first thing when we got back to Lasham was to burn the awful trailer which had been responsible for her near demise and to build a new one.’



The Hütter after Ken Fripp's restoration to the original 1935 drawings.

Ken Fripp decided to remove all the modifications including the ‘Sky’-type dive brakes, the enclosed canopy, the wheel and the heavy metal fin strake which had made her grossly overweight, and by restoring her to the 1935 drawing standard see what the designer had originally tried to achieve. After 823 hours of thorough and very extensive restoration, the Hütter was re-covered in Aerolene Ultralite fabric and new spruce wing struts were constructed. Finally, resplendent in her new cream and brown colour scheme with clear varnished wings, she was ready to fly once more. The glider now weighed only 230 lbs, virtually identical to her original weight when first built in 1947. BGA 490 was successfully test flown by Derek Piggott on 5th June 1979. Over the next few years some twenty-five hours were added by ten or so different pilots in addition to Ken Fripp himself, and the glider was brought by Ken Fripp to the 1980 International Vintage Gliding Club Rally at Sutton Bank. In August 1985, just over a year before Ken Fripp died, BGA 490 was bought by Jeremy Menzies from Keevil, Wiltshire who later sold it on to David Wright in Thirsk, where it was carefully stored indoors.

In November 1992 with the assistance of the late Mike Birch, who led the Vintage Glider group based at Booker airfield near High Wycombe, Graham Saw and Nick Newton bought the Hütter, and with a total of only 97 hours flying time since 1947, and still in pristine condition following the major rebuild by Ken Fripp, BGA 490 received a new C of A and once more took to the skies.

Over the next 7 years, some 75 hours flying time has been added, (rather more than during the first 25 years!). The Hütter has been taken to three annual International Vintage Gliding Club meetings and their respective ‘Rendezvous meetings’. She has also visited several other vintage meetings both around the UK and abroad, including Germany, France, the Czech Republic, and last year Denmark on a cross-country flight over the German border!

In October 1997 a highlight was two flights made at Booker airfield in the presence of Roy Scott and VGC President, Chris Wills, to celebrate the 50th anniversary of her first flight at Balado with Donald Campbell so many years ago. In the tradition of Ken Fripp, who was happy to allow other pilots to experience the joys of flying the Hütter for the sheer fun of flying an unusual vintage glider, some thirty different pilots have also had the opportunity during this time to share the same delightful experience notching up an average flight time of almost 30 minutes from both aerotow and winch launches. The Hütter has recently enjoyed the longest flights of her life climbing from the winch to over 6,000 feet and staying up nearly three hours using thermals over flat countryside – a far cry from the Austrian Alps and not bad for a diminutive open cockpit glider with a glide angle of only 17 to 1! Nick Newton January 2000

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A BRIEF HISTORY OF THE PROTOTYPE KADETT GLIDER AS BUILT BY SLINGSBY SAILPLANES IN 1935-36 RELATED BY HAROLD HOLDSWORTH in November 1994 (just before the death of John Sproule.)

The history, data, performance and "what might have been" of that machine has been disputed at length; the designer, Mr. John S. Sproule, and I are still friends but still cannot agree, neither can convince the other.

The basic idea was to build a machine for the stage of glider training between the open primary and the far more advanced machines like the German Professor or English Cloucraft Phantom but nobody succeeded!! The nearest was the German Falke but it was far too expensive and had too limited a view during a banked turn. Eventually, after World War II when the use of winch and aeroplane towing had become routine and relatively safe, dual instruction in two seat machines became the norm.

The Prototype Kadett was built at great speed in late 1935 at Slingsby's on the next bench to the one occupied by myself as a guest rebuilding a Hols der Teufel which we in the Yorkshire Club had built ourselves during 1932-1933.

When the Kadett was ready for test flight, Fred Slingsby was confined to bed with severe influenza or history might have been different. The first two circuit flights, launched by winch, were carried out by its designer, John S. Sproule at the Yorkshire Gliding Club in calm smooth winter air, very late 1935, exact date unknown. John reported that the machine felt

"queer" in the air, as if it was about to stall, so no further flying was attempted, but the Kadett returned to the works at Kirbymoorside where the works diagnosis was tailplane trimming needed, which was speedily carried out. Test flying was then carried out at Major Shaw's private landing ground at Welburn, where I was invited to take part, partly for flying but basically to be winch driver on Fred Slingsby's private winch, an American straight eight cylinder Auburn car converted with drum and rollers which, unfortunately, had wire spoked wheels which made accurate positioning of the drum very difficult. In fact it was slightly OFF centre which made the winch tow a series of tugs and not very pleasant. I was also to instruct Slingsby's driver, a Mr. Pittaway, on the basics of winch driving. Set up the winch with back to wind, pull out cable steadily to avoid tangle On the given signals, engage top gear, tighten cable gently and then full power and adjust speed as the glider climbs and the cable builds up on the drum. The latter part and adjusting for wind speed and different glider stalling speed was lost on Pittaway, he simply tightened the cable and then kept his foot hard down, but still, it was none of my business.

I have a log entry for my two winch circuits at Welburn, the first cable slipped off, duration 30 seconds; second flight height 400 ft. duration one minute. The machine did not have any instruments at all but appeared to be a bit faster than the Falcon 1. I did not attempt any stalling tests; in the flat calm Winter air of 4.1.36 the controls were barely needed but something surprised me, when about to flare out for landing, the Kadett changed direction without any movement of the controls. A more experienced pilot would have taken notice, but I did not and learned the hard way.

A little later, the Kadett was taken to the Yorkshire Gliding Club to await suitable soaring weather which arrived mid week when a small party which included myself as winch driver, Pittaway ditto under supervision, Major Shaw himself, his private pilot Mr. MacMurdo, possibly a Works boy but certainly NOT either Slingsby or Sproule. The original plan was for MacMurdo to fly the Kadett with me on the winch, but at the last minute, Major Shaw wanted me to fly with Pittaway on the winch, an invitation I could hardly refuse, so I was duly launched into a strong soaring wind where the Kadett gained height fast but with me struggling with lateral control.

What was taking place was "reversing ailerons", the wings as a whole were weak in torsion in spite of the lift struts. When aileron was applied, the wings outboard of the struts moved under the pressure and so became a huge aileron itself making the Kadett bank even more the wrong way – an alarming situation. The big trouble was that it was NOT predictable; gentle stick and it might bank in the direction required or it might just be the opposite, full aileron and it would have been almost sure to have done that, but that was not possible wearing flying clothes, as part of a bulkhead was in the way.

With hindsight, perhaps it was a good thing, the WINGS MAY have failed. I seriously considered landing in the bottom where there would be less turbulence but that would have been very inconvenient as there was no car present equipped for towing. After 20 minutes and the wind dropping a little, I flew a very wide circuit on rudder alone and landed safely on the landing ground; if I had failed to reach it, it would not have mattered as the area then was quite open. After an explanation, MacMurdo was launched and was soon back on the landing ground where he explained to Major Shaw what was wrong. MacMurdo was a skilled professional B licence aeroplane pilot who was aware of reversing ailerons and knew about the

problem; he should have been employed from the start.

Back at the Works, the fuselage bulkhead was modified, the wing fabric stripped off and the diagonal bracing increased and strengthened. Then the Kadett was sold to the Midland Gliding Club at the Long Mynd which soon sold it to the Yorkshire Gliding Club at Sutton Bank where it was far from popular.

Production machines were quite different with new wings with a new deeper wing section and all new diagonals plus thicker ply on the fuselage, also, most important only a few had been made when the rear deck was altered from straight to curved which vastly altered the behaviour in the air for the better. In certain conditions, the tail area would vibrate to an alarming degree, giving the impression that the tail struts had failed, but there was worse to come!! The entire cockpit would then vibrate in harmony and more than one pilot literally dived for the ground in panic, breaking the machine.

The last person to do that collided or dropped the Kadett across a stone wall doing considerable damage. I would have written the machine off then, but it was repaired at Slingsby's to my disgust. Incidentally, the pilot was positive that the tail struts HAD broken in the air until I pointed out the paint marks on the wall and the way that the wooden struts had broken. Further, I assured him that the mishap was not his fault and he would not be called upon to pay for the damage. I would take up the matter with Slingsby personally who was most reluctant to fly the machine himself; I doubt if he ever did.

The end of the prototype Kadett was spectacular in the extreme and could have been really nasty. At that time, during a Summer Camp, the entire landing ground was enclosed by a substantial fence of wooden posts and heavy plain wire, pulled up, when installed, by a truck, bar tight.

In marginal weather conditions, a visiting pilot misjudged things and approached from the escarpment fast and downwind and just failed to clear the fence. The top strand cut through just behind the pilot and then sliced the fuselage in two lengthwise like a grocer cutting cheese; on impact with the ground, the triangular tailplane imbedded itself in a wing, ruining the spars as well as itself!! Slingsby cut the fence in that area, and I made sure that was the end of the prototype Kadett and it was never re-built. Around that period, the YGC obtained a one off Kadett as they had a number of very tall pilots. I can recall six who were 6ft. 6ins. in height or even more!! The fuselage was simply lengthened to accommodate them and the plywood increased in thickness to 2mm outside the cockpit and 1mm inside.

That machine vibrated even more than the prototype and a faster machine would have broken up. In spite of that, Lieutenant, now Major General Hancock flew it for over 5 hours and still recalls it.

The Kadett for the ATC, known as Cadet TX Mark 1, was heavier still and the method of forming the fuselage rear deck was different. Later, surplus wings were used on the Slingsby Grasshopper. Historically, confusion has been caused by Mr. Norman Ellison referring to the prototype Kadett in his book "British Gliders", as a soarable Nacelled Primary; that description fitted the last mark of nacelled Dagling of 1938 and not the first Kadett.

The wings for the Kadett and Tutor were designed to be interchangeable but it rarely happened; once delivered, a Tutor stayed like that. I was privileged(?) to carry out an acceptance flight in an early Tutor for the YGC. My views were overruled, but the Tutors in production must have been modified for the ATC. The one I flew had a most abrupt stall when on the approach to land; when nearly down, it would literally fall

on its nose, as if the wings had been chopped off!! I was nearly caught out with it, the next two experienced pilots were caught but uninjured, but in each case the fuselage went back to Slingsbys for a new nose, when, after the second time, I feel some modifications must have taken place; the ATC would not have accepted a machine like that.

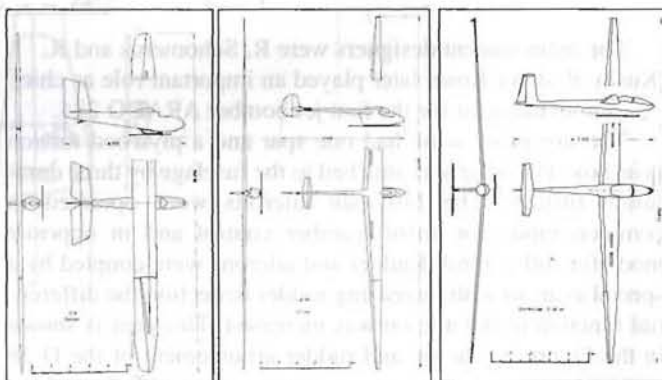
P.S. re skid. On further reflection, the heavy top strand of the fence would have slid along the metal shod landing skid which was curved and then cut the fuselage in half, lengthwise, but the result the same – a complete write-off. A near thing indeed, with the machine a bit lower, the pilot would have been decapitated like the Australian, Fred Hoinille

THE AKAFLIEG DARMSTADT D 28 „WINDSPIEL“.

Professor Ewald, who is a distinguished aerodynamicist, has researched the archives of the Akaflieg at Darmstadt to unearth the history of the design, build and flying of this diminutive sailplane. The other very small glider of the thirties is the Hütter 17 which has a considerably simpler construction, and it must be admitted, lower performance. In this issue they may be compared. Ed

The Akaflieg Darmstadt is a student association at the Darmstadt University of Technology. This association was founded in 1920 with the target of aeroplane research and development and flying their own designs. Only students are active members, as soon as they finish their studies, they become „old boys“ of the Akaflieg and hand over the active work to new and younger students.

At least three times in the history of soaring the Akaflieg Darmstadt heavily influenced the sailplane development with revolutionary designs. The first step was the design of the D 9 „Konsul“ in 1923, which introduced the cantilever wing with large span (18,2 m) and large aspect ratio (15,8). The second step was the D 30 „Cirrus“ in 1938, which outperformed all other sailplanes at that time with the incredible (in 1938!) aspect ratio of 33,6 and an L/D of 37,6. The third step was the design of the D 36 „Circe“ in 1964, which became something like a grandfather of modern open class sailplanes. The student design team behind the D 36 became even more important for modern sailplane development, the main designers were Klaus Holighaus, Gerd Waibel, Wolf Lemke and Heiko Fries.



D 9 „Konsul“ D 30 „Cirrus“ D 36 „Circe“

In 1932 the Akaflieg started the development of the D 28, the subject of this article. The aim was to get good performance even in poor weather conditions by building a relatively small plane to the lowest possible weight. In this respect the D 28 is unique still to this day; the empty weight was 54 kg (119 lb.) with a wing span of 12 m.

The main technical data:

Span	12,0	m
Wing Area	11,4	m ²
Wing Aspect Ratio	12,6	
Wing Profile	Göttingen 535 modified	
Empty Weight	54	kg
Wing	27	kg
Fuselage	17	kg
Empennage	6	kg
Instruments	4	kg
Payload	75	kg
Maximum Weight	129	kg
Wing Loading	11,3	kg/m ²
L/D (Measured at DFS)	23,5	at 60,5 km/h
by Hans Zacher and R. Kreyser)		
Minimum Sink	0,66 m/s	at 52,0 km/h
Minimum Airspeed	43	km/h

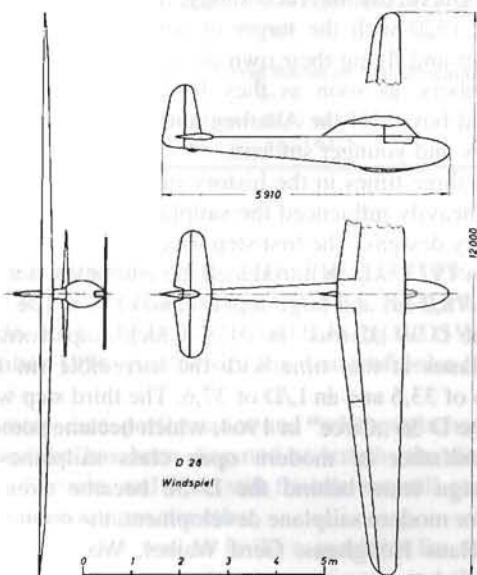


Figure 1 : D 28 „Windspiel“

The main student designers were R. Schomerus and R. Kosin. Rüdiger Kosin later played an important role as chief aerodynamicist for the first jet bomber ARADO 234.

The one-piece wing had one spar and a plywood torsion nose box. The wing was attached to the fuselage by three duralumin fittings. The full-span ailerons were operated in common mode for airfoil camber control and in opposite mode for roll control. Rudder and ailerons were coupled by a special gear, so with increasing rudder deflection the differential function of the aileron was increased. This gear is shown in the Figure 2. The fin and rudder arrangement of the D 28 was „semi-damped“. The fin moved together with the rudder, but only with 1/3 of the rudder deflection.

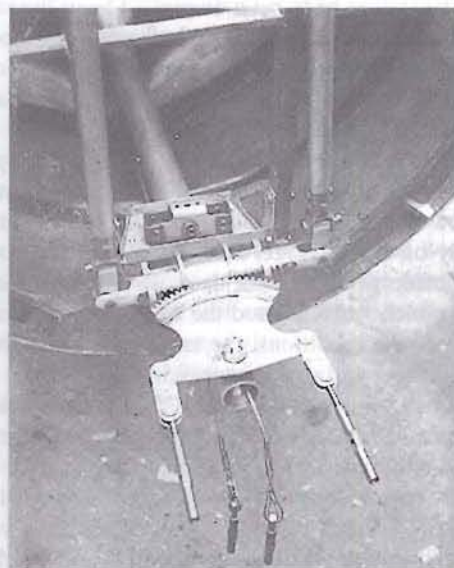


Figure 2 : Rudder/Aileron Coupling Gear

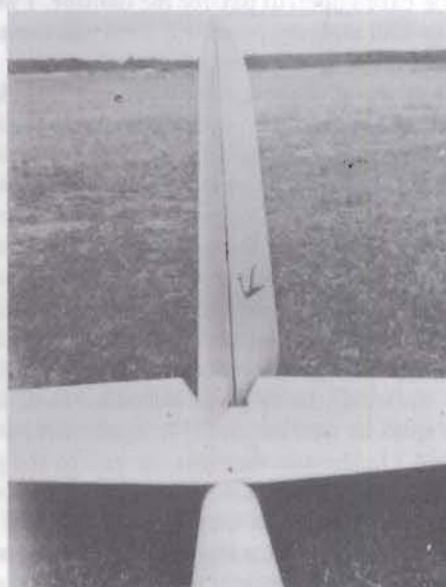
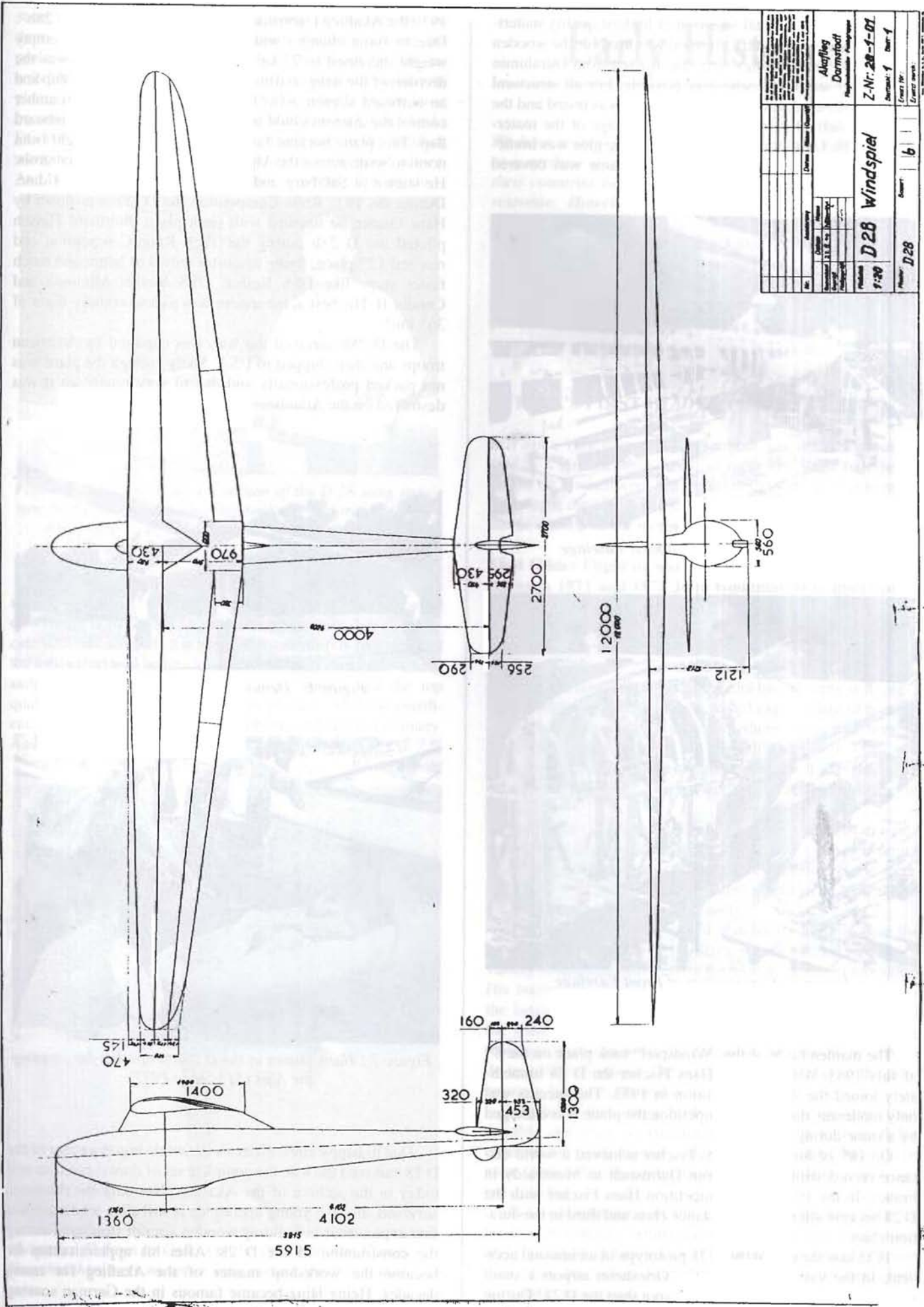


Figure 3: Semi-damped Fin and Rudder

These special details were unique; they were never used on other airplanes except the Darmstadt D 30, which also had the semi-damped fin and rudder arrangement. Personal comment of Hans Zacher: „The manoeuvrability of the D 28 at the low speed of 60 km/h was really exceptional due to the semi-damped rudder and the variable differential function of the aileron. The L/D of 23,5 was remarkable compared to the DFS Meise with 15 m span, a design which occurred five years later. I liked to fly the D 28 and moved it lively around the three axes“.

The front fuselage was a conventional wood structure; the rear fuselage was a plywood tube over frames without stringers.

The small weight was achieved by extremely careful design and construction and exceptional skill in the workshop. The D 28 was completely designed to the pre-war German sailplane airworthiness specifications BFS and was even certified for simple aerobatics. The following measures contributed to the low weight:



Aircraft Darmstadt Reg. No. 1-01		Aircraft Darmstadt Reg. No. 1-01	
Model 1-01		Model 1-01	
Name Windspiel		Name Windspiel	
Number D28		Number D28	
Sheet 1		Sheet 1	
Date 1-01		Date 1-01	
Author 1-01		Author 1-01	
Designer 1-01		Designer 1-01	
Engineer 1-01		Engineer 1-01	
Constructor 1-01		Constructor 1-01	
Inspector 1-01		Inspector 1-01	
Tester 1-01		Tester 1-01	
Approver 1-01		Approver 1-01	

Careful and individual selection of highest quality materials. Spruce and high quality plywood was used for the wooden structure. All metal fittings were constructed from Duralumin and the nuts and bolts wherever possible. For all structural parts the individual strength of the material was tested and the parts were individually designed for full usage of the material's strength. During glueing the overflowing glue was immediately removed to save weight! The airframe was covered with a special lightweight silk.

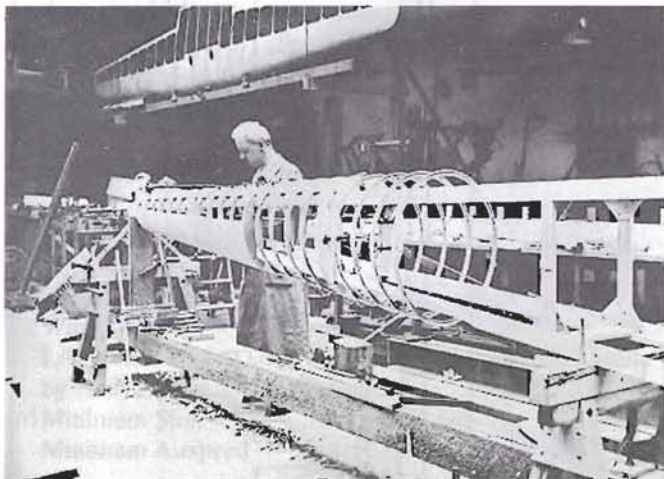


Figure 4 : Construction of Rear Fuselage

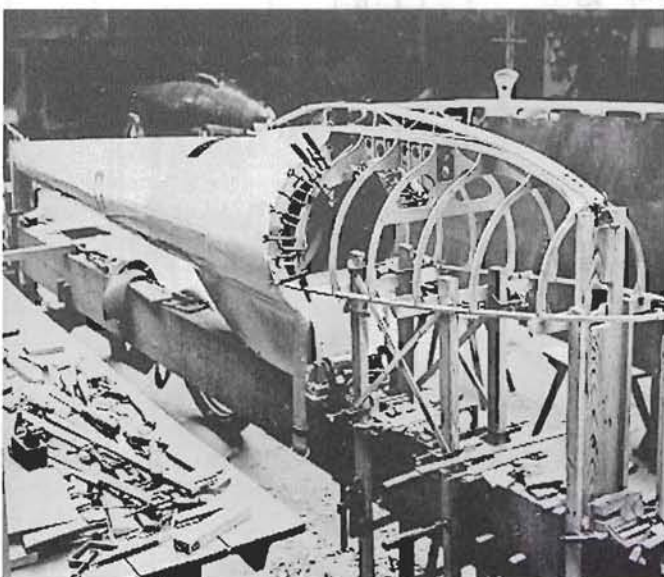


Figure 5 : Construction of Front Fuselage

The maiden flight of the „Windspiel“ took place on the 8th of July 1933. With the pilot Hans Fischer the D 28 immediately joined the Rhön competition in 1933. The success was only moderate; during the competition the plane was damaged by a stone during landing.

On 16th of June 1934 Hans Fischer achieved a world distance record with 240 km from Darmstadt to Montmédy in France. In the 1934 Rhön competition Hans Fischer with the D 28 became winner in the distance class and third in the duration class.

1935 saw the end of the D 28 prototype in an unusual accident. In the vast grassfield of the Griesheim airport a small sportsplane found no other landing spot than the D 28! During

1936 the Akaflieg Darmstadt built a second example „D 28b“. Due to some changes and additional equipment the empty weight increased to 72 kg. The main design change was the division of the wings trailing edge flap into an inboard flap and an outboard aileron. Also with this configuration for camber control the ailerons could be moved together with the inboard flap. This plane became famous especially with a flight from north to south across the Alps with Hans Osann at the controls. He started at Salzburg and landed after 240 km near Udine. During the 1937 Rhön-Competition the D 28b was flown by Hans Osann; he finished with sixth place. Bernhard Flinsch piloted the D 28b during the 1938 Rhön-Competition and reached 12th place, flying against a crowd of better and much faster ships like DFS Reiher, DFS Weihe, Minimoa and Condor II. His best achievement was a cross country flight of 365 km!

The D 28b survived the war, was captured by American troops and then shipped to USA. Sadly enough the plane was not packed professionally and due to very rough sea it was destroyed on the Atlantic.



Figure 6 : Demonstration of the Weight!



Figure 7 : Hans Osann in the D 28b preparing for crossing the Alps (31st, May 1937)

Due to happy circumstances the workshop drawings of the D 28 survived the war, the complete set of drawings exists still today in the archive of the Akaflieg. Not only the drawings survived, also the young apprentice is still alive who made his first experiences in building wooden aircraft structures during the construction of the D 28. After his apprenticeship he became the workshop master of the Akaflieg for many decades. Heinz Hinz became famous in the German soaring

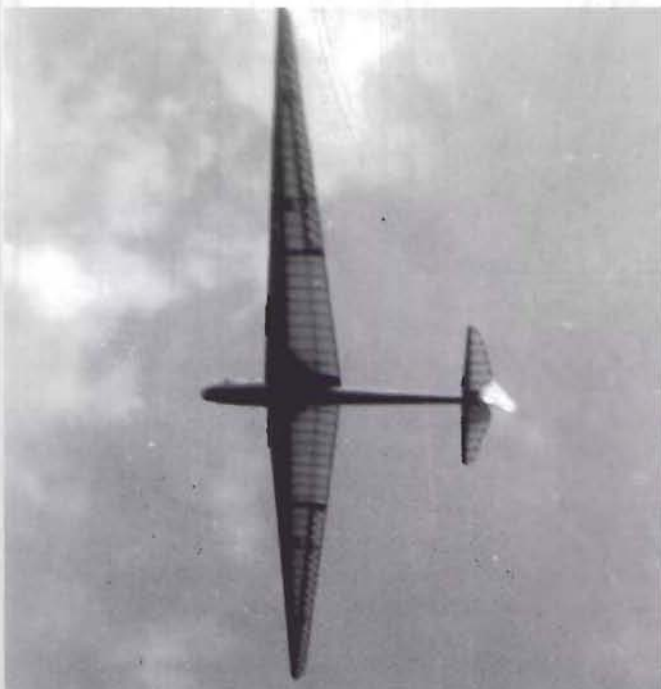
scene as „McHinz“ and he trained many generations of students at Darmstadt in skilful sailplane building. During his professional career with the Akaflieg Darmstadt he had his watchful eyes on the work of the active students on famous planes like the D 30, the D 34, the D 36 and the D 38, the latter became in fact the prototype of the well known Glaser-Dirks DG 100. Still today at the age of 80 he appears in the Akaflieg workshop nearly every morning and gives some good advice. And he was a fine help for the author in writing this article.



Figure 8 : Heinz Hinz with a section of the D 28 wing structure. In the foreground the wing root and flap track of the D 40, a more recent design of the Akaflieg Darmstadt.

Since the workshop drawings still exist, there may be the magnificent project to build a third D 28. Nevertheless a word of warning is necessary to potential enthusiasts. For the delicate structure absolute top class craftsmanship is required and the total effort will be much higher than with standard wooden sailplane structures. The high strength spruce and the top quality plywood will be difficult to procure. Also the certificate of airworthiness will be a problem, at least in Germany. And Chris Wills warns that the cockpit is very small.

Bernd Ewald



Rhönadler 32 flown by Collins in the 1934 National Contest. Note that there were no upper wing surface spoilers at that time.

Early Histories

We have several times asked all the overseas representatives to contribute a short history of the early days of gliding in their countries but there has been a somewhat disappointing response. However, the replies we did receive show the amazing diversity of vintage gliding. Who ever knew of John Houshold whose story, by Mike O'Donnell, starts this off this group of articles? (Chris, as would be expected, has written so much on British gliding that part will have to be left over with the Belgian history until the next issue and we have had a promise of something from Denmark. Ed)

AFRICA'S FIRST GLIDER PILOT

It is not a very impressive monument, just a block about the size of a kitchen table, made of rocks cemented together. It stands on a windswept hill in Natal and you have to hunt for it amongst the weeds and tall grass. Inscribed on a metal plate on the flat top of the monument are the words:

First Glider Flight in South Africa.

Between 1871 and 1875 John Goodman Houshold undertook two flights in a self-constructed glider from a ridge in this vicinity, one flight carried him approximately 500 metres.

And that is all.

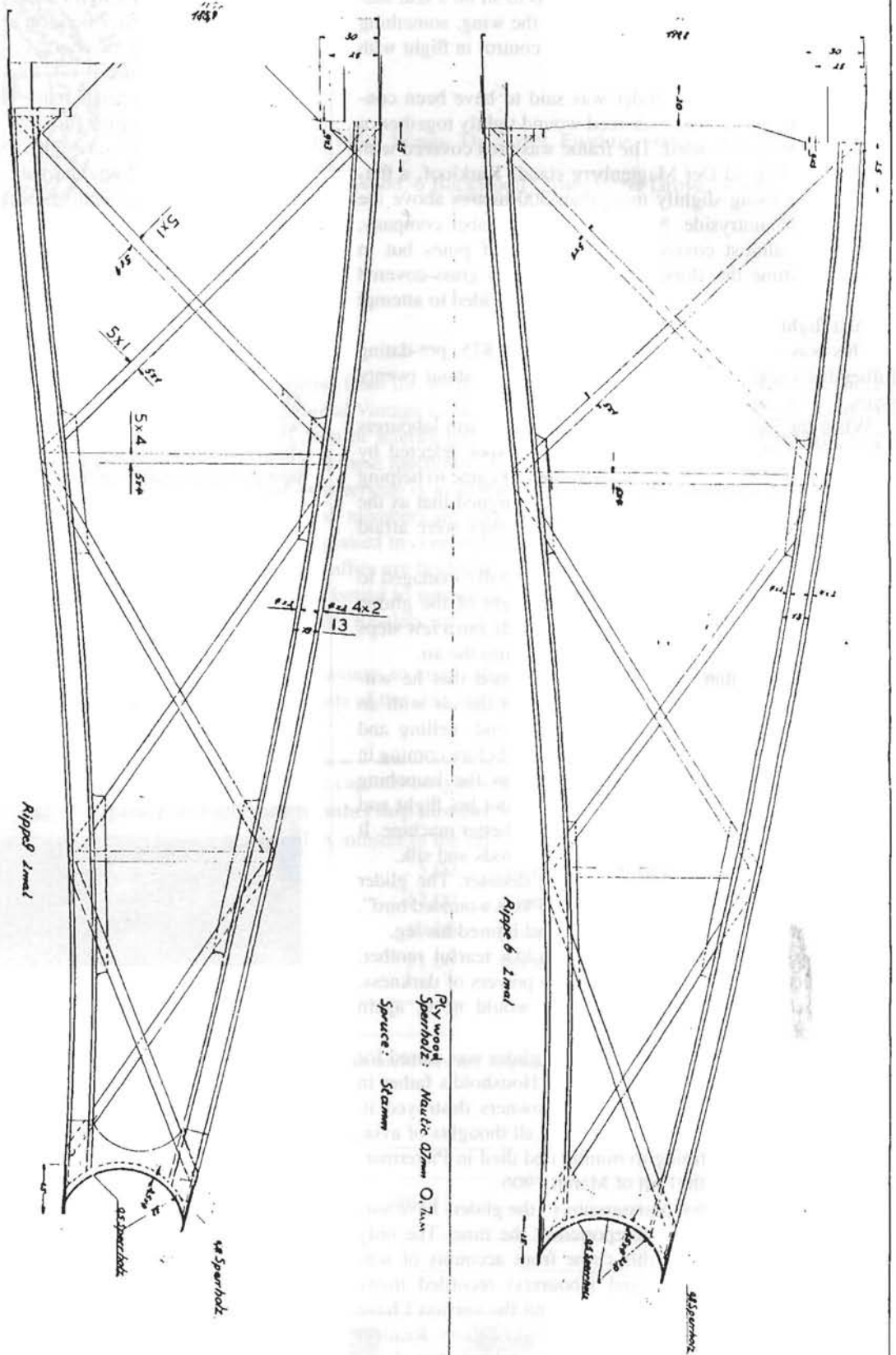
So what is known about this man and his attempts at flying? John Goodman Houshold (you would expect there to be an 'e' in the middle of his surname but there isn't) was born in Wisbech, Cambridgeshire on the 9th December 1845 and emigrated to South Africa with his parents in 1864. His father bought the farm "Der Magtenberg" in the Karkloof district of Natal.

For some years young John worked on the farm and showed unusual mechanical ability. He was a clever inventor and built several labour-saving devices for use on the farm. Later in life he successfully operated a gold mine with equipment he designed and built himself.

The young Houshold would wander in the hills near the farm and, as a new arrival in Africa, was fascinated by the rich variety of bird life, particularly the hawks, vultures and eagles. His interest in aviation was quickened when he noticed how the larger birds stayed aloft just by balancing themselves on the wind deflected upwards by the slopes of the hills and he reasoned that what birds did naturally, men should be able to do by artificial means. The secret, he thought, lay in the ratio between body weight and wing area.

Houshold shot many birds and carefully recorded their weights and wing measurements. Nothing is known of his experiments with models, although there must have been many, before he felt confident enough to construct a man carrying glider.

The actual building of the glider had to be done secretly because Houshold's family considered his actions unchristian and a violation of God's Law. The neighbours thought he was mad. Only his brother Archer was in on the secret and helped with the construction.



Für jede Rippe ist der
zugehörige Holmsteig
gezeichnet. Dicke 3mm
Spruce, Stamm

Rippe 8 Lmael

Rippe 6 Lmael

Ply wood
Speerholz: Nautic 0,7mm 0,7mm
Spruce: Stamm

Nr.		Anzahl		Datum		Name		Ort	

Unlike other experimenters of the time, Houshold did not try to copy the shapes of bird wings but made a single long wing in parallelogram form. The pilot was to sit on a seat suspended on four ropes from the centre of the wing, something like a child's swing, and would exercise control in flight with movements of his body.

The framework of the glider was said to have been constructed with a species of river reed wound tightly together or possibly bamboo was used. The frame was then covered with oiled paper. Behind Der Magtenberg stands Karkloof, a flat-topped ridge rising slightly more than 300 metres above the surrounding countryside. Now owned by a timber company, Karkloof is almost covered with a carpet of pines but in Houshold's time the slopes would have been grass-covered with very few trees and it was here that he decided to attempt his first flight.

This was some time between 1871 and 1875, pre-dating Lillienthal's similar experiments in Europe by about twenty years.

When the glider was ready a gang of Zulu farm labourers carried it up the slope of Karkloof to the spot selected by Houshold for his launching point but, when it came to helping him leap off the hill, they demurred. They argued that as the "baas" was surely going to break his neck they were afraid they would be accused of his murder.

With the help of Archer, Houshold eventually managed to persuade them. The Zulus took up the weight of the glider, with Houshold sitting on his swing underneath, ran a few steps down the slope and heaved the contraption into the air.

An old Zulu, interviewed in 1908, claimed that he witnessed this flight. The glider sailed through the air with an excited mob of black children running behind, yelling and gesticulating. It drifted twice across the river before coming in to land successfully about 500 metres from the launching point. Houshold was wildly enthusiastic about his flight and immediately set about building a bigger and better machine. It is said that this time he used imported steel rods and silk.

Other flights followed but then came disaster. The glider crashed, "falling", as another Zulu said, "like a wounded bird". The glider was smashed and Houshold had injured his leg.

Now the secret was out and Houshold's tearful mother, who believed he was tampering with the powers of darkness, extracted a promise from him that he would never again attempt to fly.

He burnt all his plans and notes. The glider was stored for years in an old barn but on the death of Houshold's father in 1901 the farm was sold and the new owners destroyed it. Houshold kept his promises and gave up all thoughts of aviation. He went from farming to mining and died in Pietermaritzburg from fever on the 13th of March 1906.

Sadly, no sketches nor photographs of the gliders have survived and the flights went unreported at the time. The only evidence of Houshold's flights come from accounts of witnesses (family, neighbours and labourers) recorded many years later. Naturally the versions vary but the version I have given above agrees substantially with most of them. Readers may feel that the story is, to say the least, unlikely but if you stand on the crest of Karkloof as he did, look out over the lush farm land below, feel yourself the wind ruffling your hair and tugging at your clothing and watch a solitary berg eagle working the ridge, it is easy to believe that the story is true and that John Goodman Houshold was indeed a great aviation pioneer and the first glider pilot in Africa.

Mike O'Donnell

BRITISH GLIDING HISTORY

In 1851 **Sir George Cayley** succeeded in launching his coachman in a perambulator beneath a great sail, which filled as it was being towed by two horses ridden by grooms. As soon as forward momentum fell off, the aircraft pancaked on to the ground and the coachman made off, saying he was hired to be a coachman, not a pilot. Lateral stability was through wing flexing due to air pressure underneath it. Forward stability was due to the horses. Longitudinal stability was supposed to be controlled by an oar with sails at its rear extremity, its shaft being held by the coachman from the rear of the perambulator. A replica was successfully built and flown by Derek Piggott at Lasham. The coachman clearly would not have been able to influence proceedings. Sir George's 1851 flying models were really good and his contributions to aviation were really important.

Percy Pilcher 1869-30th September 1899. He followed in the steps of his friend Otto Lillienthal but his flights ended with a fatal accident at Stanford Hall near Husbands Bosworth due to a bracing line snapping, causing the tailplane to arch upwards and round, hitting him on the head. He was hoping on that day to fly a powered triplane which, if successful, would have been the first powered flight in the world.

José Weiss was a painter who came to England in 1870 from Alsace due to the Prussian arrival there. He painted to earn enough money to build his gliders which, we believe, he did not fly himself.



16 year old Eric Gordon England in the Weiss glider in 1909. He stayed up for 58secs so was this the first soaring flight?

In 1909 the sixteen year old **Eric Gordon England** was launched from the top of the South Downs in one of the Weiss gliders. As it was 58 seconds before he arrived on the ground 300 feet below, it is thought he must have encountered hill lift and thus he is credited with the world's first soaring flight. During WW1 Weiss gave up building aircraft as he was desolated that they were being used for war.

Itford Hill 1922. The first British International Gliding Contest. The Daily Mail newspaper had offered £1,000 for the first flight of over 30 minutes duration. After both the British hopes **Raynham** and Gordon England, had crashed, the Frenchman **Maneyrol** won the contest with a world duration record of 3 hours 21 minutes on the last day. His incredible tandem wing Peyret aircraft, which no-one thought had a chance, was displayed in Selfridge's department store before returning to Paris at the Gare du Nord where he was given a hero's welcome. Both he and the Peyret were carried shoulder high through the streets to the cries of "Vive l'Aviateur"!!!



President: Chris Wills, Wings, The Street, Ewelme, Oxford OX10 6HQ

Treasurer: Austen Wood, 6 Buckwood Close, Hazel Grove, Stockport SK7 4NG

- The Club arose from the wish of the vintage glider owners at the very successful first International Vintage Glider Rally at Husbands Bosworth in 1973 to encourage the preservation of worthy gliders of the past, particularly by the ownership and active flying of these machines.
- Individual membership is available to those who wish to support the activities of the club, and all members are very welcome at Rallies.
- Rallies are organised in conjunction with local groups several times each year, and International Rallies are held annually in sequence.
- A magazine is issued to members, and there are technical articles about gliders of historic interest. Readers are always invited to contribute articles of interest to publish.
- The club endeavours to keep subscriptions as low as possible. Donations towards the running costs of the club are always gratefully received.

MEMBERSHIP APPLICATION FORM (2000) (block capitals or typewritten please)

Membership No. (please include your membership number when renewing)

I wish to renew/apply for membership of the Vintage Glider Club, subject to the rules of the club and enclose remittance for:

Initial Membership fee	<input type="checkbox"/>	5.00	(payable only once on joining)
Annual subscription	<input type="checkbox"/>	17.00	(Great Britain)
Annual subscription	<input type="checkbox"/>	19.00	(Europe)
Annual subscription	<input type="checkbox"/>	21.00	(Rest of the world to cover airmail postage)
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Total			

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Tel: 0161 487 4522

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Belgium, Firmin Henrard, Rue de Porcheresse 11, 5361, Mohiville-Hamois

Canada, Terry Beasley, PO Box 169, 940 Lalonde Road, L'Orignal, Ontario, K0B 1K0. trbmsec@hawk.igs.net

Denmark, Niels-Ebbe Gjörup, Seglen 69, DK-8800 Viborg, Denmark

Finland, Risto Pykälä, Ristkarinkatu H A 13, 15170 Lahti. rpykala@edu.lahti.fi

France, Didier Fulchiron, 333 Rue Louis Blanc, 38420 Le Versoud. didier_fulchiron@mail.schneider.fr

Germany, Jörg Ziller, Preziosastr.19, D-81927, München. Kto: 42856937, BLZ 603 501 30, Deutsches VGC Konto

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Ireland, John Finnan, Talavera, Emily Square, Athy, Co Kildare. j.finnan@epa.ie

Italy, Vincenzo Pedrielli, Via Tintoretto 7, 20033 Desio (MI). Tel 0362 630293. vpedrielli@murata.it

Japan, Hiroshi Yoneda, 97-6 Tsuruta-machi, Utsunomiya, Tochigi 320. hiroshi-y@mxg.mesh.ne.jp

Netherlands, Nell Dijkstra-Adriaansen, Melis Blekiaan 61, 4634 XV Woensdrecht. Fax 0031 1646 15887.

knvvlpda@xs4all.nl Bank account ABN-AMRO 466746318

Norway, Petter Lindberg, Edvard Munchs GT 10, 1511 Moss.

Poland, Piotr Liqwinski, 93 038 Looz, ul Sannockd, 39m20. pikolo@krokus.com.pl

Slovakia & Czech Republic, Josef Ott, Panska dolina 2, Nitra. potk.josef@post.cz

South Africa, Nigel Rotherham, PO Box 13407, Northmead, 1511, RSA. nigel.r@netline.co.za

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jgarci21@pie.xtec.es

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UK, Geoff Moore, Arewa, Shootersway Lane, Berkhamsted, Herts, HP4 3NP. geoffmoore@cwcom.net

USA, Jan Scott, 12582 Lutheran Church Rd, Lovettsville, VA 20180. Flycow@aol.com

Zimbabwe, Mike O'Donnell, 23 Montgomery Drive, Winston Park, Natal, Republic of South Africa. mikeodon@hotmail.com

The club would be pleased to have fuller details of your glider(s) on a separate sheet, enclosed with this form

For owner members (block capitals or typewritten please) Membership is individual, not by syndicate.

Member name and number _____

Make and type of glider _____

Year built _____

Registration letters or numbers _____

Colour scheme _____

Where normally flown _____

Other owner(s) _____

Condition (airworthy/under repair/refurbishing/museum exhibit) (*delete where applicable*)

Note:

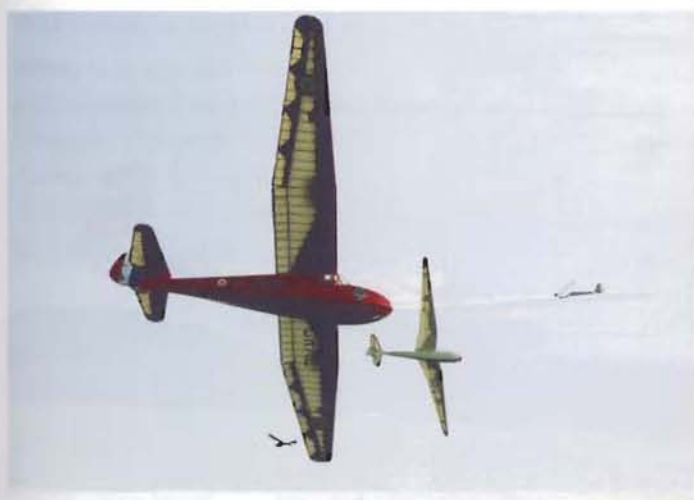
The club records are on computer file. So that we keep within the British Law (Data Protection Act 1984) please sign opposite:

I have no objection to (a) my VGC membership record being held on a computer file and (b) being made available to other members via the internet

Signed _____









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No req £

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 "Whispering Wings" & "Cloud Cuckoo" (Cartoon) 2hrs 55mins. English
 Historic pictures with commentary
 Pathé News, Itford 1922 – "Wings for Pauline" – misc Vintage & "Sutton
 Bank 1994" 1hr 14 mins English.
 "Vol-à-Voile" 1hr 39 mins French.
 "8th International VGC Rally at Sutton Bank 1980", from Jan Scott's
 amateur film. 1hr 30 mins English.
 "Wolf Hirth Remembers" Commentary by Chris Wills 2hrs. 1930s,
 English.

"Aufwindjäger", Swiss mountain flying, 17 mins 1947, German.
 and from "Green Dragon Graphics"...

"Vintage Scene 1972-92". Clips and stills from 32 glider meetings, 2hrs
 50 mins English.

"Dunstable, 1957-92", clips and stills, 2hrs 50 mins, English.

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all at £12.00 plus postage, UK £1.00 Europe £2.00, Overseas £3.00. Be
 warned that the quality can be poor, especially the older ones transferred
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In 1923 taking part in the light aeroplane trials at Lympe, Maneyrol, the hero of Itford, lay dead amidst the wreckage of his aircraft (not a Peyret). The British, who had won, announced that the way forward was clearly to put an engine on the gliders ... and so was born the light aeroplane movement... and the Moth Club etc.... and it therefore received the airfields, hangars, club houses and government money, etc.



The winner of the 1922 meeting at Itford Hill, Maneyrol in the Peyret tandem monoplane being launched with a double bungee.

Concerning gliding, there was darkness throughout the land and there are no records of any motorless flights until the 4th December 1929, when at the instigation of **D.C. Culver**, a "Gliding Lunch" was organised in the Comedy restaurant in London. 30 people indicated that they would come, but 56 arrived. It was resolved to create the **British Gliding Association** and to invite the Rhön champion **Robert Kronfeld**, to come to make demonstration flights all round Britain with his Wien. **Carli Magersuppe** would also come to fly a Professor glider and this was subsidised by the Daily Mail newspaper. **Professor Georgii** came to talk on soaring and meteorology and **Fritz Stamer**, the CFI from the Wasserkuppe came to give a talk on training ab-initio pupils to fly. There were plans to start Gliding Clubs everywhere, such was the outburst of enthusiasm. It had to be agreed that Doug Culver's lunch had been a success. He had unleashed an avalanche!!!!

The first glider registered by the BGA as BGA 100 (heaven knows why it was not BGA 001) was the primary Columbus and it was built by the Kent Gliding Club. It received its first BGA C of A in August 1930 but we cannot discover what happened to it afterwards. During 1930 and 1931 so many gliders



Carli Magersuppe in the Daily Express sponsored Professor introducing gliding to Britain in 1930.

were designed and flown in Britain that it is hard to list them all. **C.H. Lowe-Wylde** designed 9 gliders in 2 years and all of them were built and flown, known as BAC (British Aircraft Company) types 1 to 9. No 7 was the first two-seater glider designed and built in Britain and one is in the hands of Michael Maufe (*and currently for sale Ed.*) BAC 8 was a flying boat that was successfully launched from the Welsh Harp Lake and from the Thames at Rochester. His gliders used two types of wings. Some had a rectangular form while others had wings of rectangular plan form in the centre section with tapered outer panels. The latter was a very efficient wing and **John Sproule** took inspiration from it to design the first Slingsby Tutor in 1937. Lowe-Wylde probably died from overwork as no-one else has ever designed and built 9 gliders in 2 years.

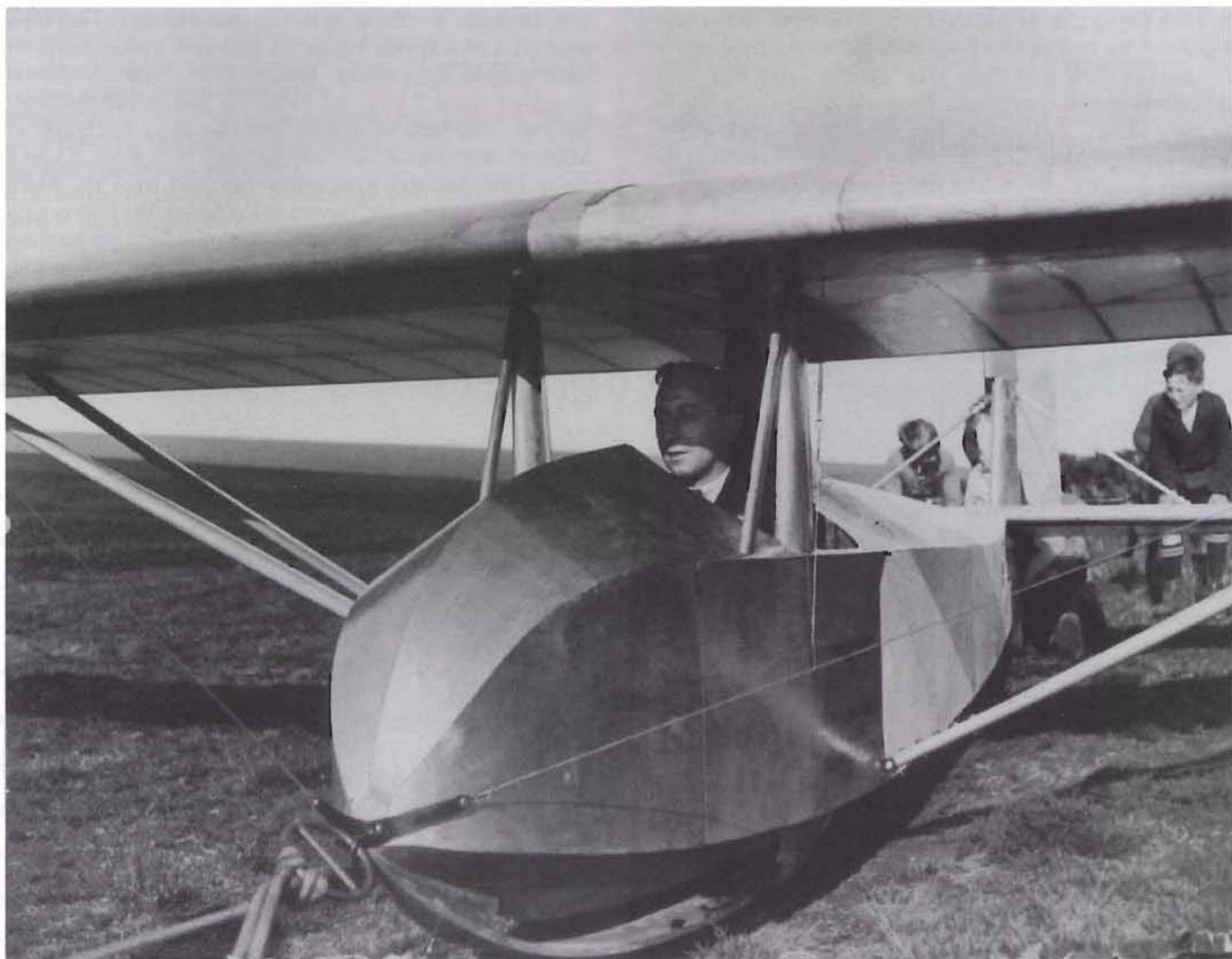


Eric Collins in a BAC-7 in which he flew the first cross-countries in Britain in 1933

The first Slingsby type 1 Falcon 1 was born on the suggestion of Carli Magersuppe (later Karl Marsens) who told **Fred Slingsby** that it was a good glider. As we have discovered from the replica which is currently flying, it was a fine glider with silky smooth handling and a performance rather better than that of a Grunau Baby 2. Of course, the pilot remains forever in the shade of the wing and becomes cold even in mid summer. It was, however, three times as difficult to build as a Grunau Baby, but Slingsby built it and saw somebody very stupidly crash it. He took the decision to repair it on the way home, and that is how Slingsby Sailplanes emerged from his previous furniture making business.

There was the Baynes Scud 1, the Manuel Wren, the Cloudcraft Phantom, the Alert, the Holdsworth glider, the Wilkinson glider, the RFD sailplane, the Dagling, the Albatross, the Dickson, the Reynard, the Airspeed Tern, the Cramlington Camcraft 2, the Manuel VI Primary, the Payne ICI (a Primary designed by J.H. Payne and built by Imperial College students for their gliding club in 1931) and probably there were others. The above fleet was powerfully reinforced by the following gliders from Germany:- Zogling, Hols der Teufel (which was certainly built in England although the first came from Germany) Falke, Kassel 20, Professor, Westpreussen, the two seater Kassel Herkules and the tandem two seater Poppenhausen.

On the 13th June 1930, ISTUS (Internationaler Studienkommission fur Segelflug) (the FAI does the job now) was founded by Dr Georgii in Frankfurt am Maine and, on the next day, the founders, who included Eric Gordon England, the



Fred Slingsby in his first glider, the Falcon 1. This became the Slingsby Type 1 in 1931 when he became a full time glider builder. It was a copy of the Lippisch-designed RRG Falke which Slingsby built on Maggersuppe's suggestion. It was a very good glider but it took three times as long to build as a Grunau Baby. Photo V G Rhodes.

Master of Semphill (President of the Royal Aeronautical Society) **Captain Latimer Needham** and probably **Toby Ashwell Cook** and all the great names in gliding of that far off time, met on the Wasserkuppe. The result was that the British delegation returned to England all starry eyed and determined to "build a Wasserkuppe amid England's green and pleasant land", and almost never came down to earth again. **Dudley Hiscox** had been to the Wasserkuppe before the formation of the London Gliding Club at its present site and the Germans had told him that the clubhouse should be at the bottom of the hill, rather than at the top like theirs because it was less hard work to get down to the clubhouse in the evening, rather than to have to struggle back upwards, when they were tired. It has to be said that of the over 100 British gliding clubs that had been formed during the initial outburst of enthusiasm in 1930 most failed through lack of experience. Power pilots had bad reputations, as one would arrive asking whether he might fly that thing, all dressed up in leather coat, flying helmet and britches. The club members would say "at last, someone has come to show us how it is done", someone who may well have been at the Front during the war. The next moment, this hero would be stepping out of the wreckage which had been the

club's only glider. Only at the London Gliding Club at Dunstable was there enough ability and experience to lead to progress. It also had more than one glider and it attracted the power pilot **Mungo Buxton**. On the 21st February 1931 two pilots soared for just over 5 minutes in the cold winter air. Their names were **Graham Humby** and **D.C. Smith**. These were the first two pilots in Britain to gain their C certificates. At last, after weeks of frustration and hardship, there was progress. Other Clubs to keep going were the Southdown and the Dorset Clubs and in the North were the Newcastle, Barrow in Furness and the Derbyshire and Lancashire Clubs. There was also a group that later amalgamated to become the Yorkshire Gliding Club. Only one University, the Imperial College in London, had started gliding. In Northern Ireland, the Ulster Club started operations. When one thinks that almost all these Clubs are still going today, tears come to the eyes.

In 1931, there was the Great Channel Race with the Daily Mail offering a £1,000 prize. The flights had to be made both ways after aerotowed launches in each country. No lift was ever experienced during these flights but Kronfeld won the prize after finally crossing the Channel by moonlight to land back in France.

Lissant Beardmore had also made the flight in a Professor but he had not been officially observed. The Cloudcraft Phantom was also prepared for the event and was kept at readiness by the Dover cliffs but some very ill-disciplined soldiers broke it badly while just playing with it. These, together with the aerotowing of a BAC-7 flown by **Group Captain Mole**, with **Barbara Cartland** as passenger, from Maidstone to Reading, were the first aerotows of gliders in Britain.

During 1931 the Lyons Tea Meetings were held at Woofa Bank etc. with hundreds of spectators attending. On the 21st May 1931 at Dunstable, Maneyrol's World Duration Record of 3 hours 21 minutes which was set in 1922 was at last exceeded in Britain (although it had been substantially increased to 8 hours 42 minutes by Ferdinand Schulz flying his FS3 "Broomstick" over the East Prussian sand dunes); this was done by **Henry Petre** an aeroplane pilot, staying up for 3 hours 28 minutes in a London Club glider. By 1933, Dunstable was beginning to mean "gliding". Probably more flying was done there than at all the other Clubs put together. Its private owners went on expeditions all over the country cheerfully towing their trailers with cars that boiled on every hill. With their Wrens and Scuds they launched off mountains, landed on rough moorland and returned to Dunstable with ludicrously funny stories to tell. By April that year 43 Club pilots had obtained their C certificates. This shows what can happen when the right people get together.



Eric Collins with his Rhönadler in 1934/5.

Among the growing number of pilots who had started their flying at Dunstable was a young man of small stature who became so fascinated by gliding that he bought himself a cottage nearby. His name was **Eric Collins**. There are not many born pilots but Collins was one of them and although he did not have the advantage of gaining experience through power flying, he soon knew more about soaring than any other pilot in the land. In the spring of 1933 he was flying passengers in the two-seater and, with them, regularly connecting with lift under cumulus clouds. To help him, he fitted and learnt to interpret a primitive variometer. Then he taught himself to fly blind in clouds. During June 1933 the BGA held its Second National Meeting on Huish Hill, a south-facing slope near Pewsey in Wiltshire. A few days after the camp started Collins several times found lift in the BAC-7 two-seater and was extending his normal two-minute circuit time to 5 or 6 minutes. On the 3rd July under a clear blue sky he climbed to 950 ft and decided to leave the site, with his wife as passenger. He found just one other up-current before having to land in a field 6 miles away. This was the first cross-country flown by a British pilot in Britain. It had also been flown in a British designed and built sailplane. (Kronfeld had flown other cross-countries earlier across Britain in his Wien)

Back at Dunstable, Collins soared 22 miles on the 3rd August reaching 2,300 ft on the way. This was the second, but not the last, time that he had held the British distance record. The pilot with whom he was going to share the honours had obtained his A certificate at Dunstable in April of that year.

He was a young aeroplane pilot called **Philip Wills**. Not a natural pilot like Collins, Wills possessed an ambitious determination that drove him on until he reached the top. Such a force was just what was needed at the time, for Wills's flights and particularly his written accounts of them, did a great deal to remove the outdated image of gliding and to show it as a new and marvellous sport. March 8th 1934 dawned with a freshness to the air and a clear blue sky. Soon, with the warmth of the sun, small cumuli would start. The light wind on the hill would assist the gliders to reach them. Collins arrived early and got the Kassel Herkules ready for passenger flying. With his wife as passenger again, he soon discovered that the hill was working and that there was promise of thermal life everywhere. He landed to give another passenger experience in the promising conditions and for his third flight he took with him a German guest, a Herr Exner, who may well have not been aware of the great adventure which was about to befall him. While all this was going on, another LGC member **Sebert Humphries**, had got airborne in the Crested Wren and joined Collins in the hill lift. During the afternoon a great cloud street was seen developing over the Aylesbury Plain and it was drifting towards the Dunstable slope. Humphries flew forward from the slope into its lift and was steadily gaining height with Collins following him. When several miles upwind of the slope and probably further from the site and higher than he had ever been in his life, Humphries had to decide what to do. If he continued circling he would soon be in cloud. If he turned down wind he would, with a ground speed of about 60 mph, be quickly swept past the site. The little Wren was seen to hurtle over the site at a great speed and tremendous height and soon vanished over the country which lay beyond. During this excitement, Philip Wills arrived and quickly rigged the Club's Professor. He became airborne from a bungee launch just when the clouds were becoming rather large with some of them deluging hail. He had neither a variometer nor map and had never made a

cross-country in a glider before. He left the hill at 1,600 ft and circled up to 3,800 ft ahead of a hail storm. He travelled some 15 miles before the hail storm enveloped him. He fought his way out of its icy grasp to discover that he was near a town which he could not identify. After being down to 1800 ft and deciding to land, he caught more lift before another hail storm and reached 4,000 ft. Still trying to decide where he was, he saw that there was not only water ahead of him, but also on both sides of him. He landed in a field of blackberry bushes at 15.45 p.m. near the river Blackwater in Essex. His 56 mile distance was not only the British distance record but also his Silver C distance. The Wren had flown about 22 miles and the Herkules 46 miles which was the National two-seater record. Club members had to furiously repair the trailers before the retrieves. Philip Wills managed to store the Professor for the night in a farmer's barn and, by so doing, did not overstretch the Club's almost non-existent retrieve organisation. Thus, it was subsequently recognized that the 8th March 1934 was the day that British glider pilots finally cut loose from their sites to make cross-country flights.



L.E. Baynes the designer and builder of this Scud 2 with G. Mungo Buxton in the cockpit before the height record set at the 1934 National Contest at Sutton Bank on 29 September 1934

During April 1934, Eric Collin's father, whom Eric had not seen for 8 years because he could not get on with his step-mother, noticed in the newspapers his son's great achievements and bought him a Rhönadler 32, which was then the finest cross-country sailplane that one could buy. Towards the end of April cumulus once again sailed over Dunstable Downs and Eric was launched in to the light breeze that was on the hill. After being down to 100ft he found a thermal in the bowl and circled upwards without a variometer to 1,000ft. Then he flew upwind to another cumulus and its lift took him to 3,500ft. With his self-taught instrument flying, he found himself rocketing upwards in a developing cloud. He then managed to connect with the lift under 5 more clouds. Trying to fly cross wind to avoid London, he was forced to land 52 miles away at Rayleigh in Essex. This was his Silver C distance. He tried to pass to the East of London in order to fly into Kent towards the Channel... and to France... and unrestricted distance. Later in July further attempts to get round London and then into Kent were unsuccessful. Both Collins in his Rhönadler, and Wills in his Scud 2, tried. It required cross wind flying for longer than had ever been done before, but at



Phillip Wills looking at his Wrist Altimeter

least the battle ground was free of London's smoke. Wills found himself without a parachute or barograph, in his shirt sleeves at least a dozen times in cloud at 5,000 ft, frozen stiff and out of control as he had only been expecting to make a short hop! He had not noticed the cloud which was hidden by the Scud's wing above him. The Scud had to be flown at 70 mph, which was way beyond its Never Exceed Speed, to extricate it from the cloud, to a landing SE of London. Meanwhile Collins kept trying to get around London to the West. Finally, he felt defeated by the sea of houses ahead and landed at Hanworth. Clearly, in a soaring wind from Dunstable, London was quite an obstacle.

At this time a young lady, **Joan Meaken (later Price)** was aerotowed from Germany in a Rhönbussard. She was not a Club pilot but had been engaged by Sir Alan Cobham's Air Circus and had been trained to fly gliders on a course led by Wolf Hirth in Germany. Her display was to be aerotowed to 1,500 ft by an Avro 504K and to do aerobatics before landing in front of the crowd in the not over-large fields from which the Circus was sometimes operated. On one occasion she did not descend but was keeping up in lift. Suddenly she noticed two of the Circus's pilots alongside who were signalling her to land at once for what she expected would be a ticking off. But no, she was sent off on a distance record attempt. She landed after 40 miles near Salisbury from an aerotow to 2,500 ft near Bristol.

Distances from Dunstable were also possible with the slope working in a SW wind. On the 5th August 1934 Collins reached Holkham Bay, 98 miles away, arriving over the East coast still at 3,000 ft. England in that direction was simply not

large enough for him. His start was in scratchy lift but he was later able to often work it up to 4,800 ft and breaking the British distance record. In 1935 he visited the Hornberg for a course with Wolf Hirth. He broke the local height record and was allowed to fly Hirth's famous Musterle. On his return to Britain he was killed attempting a forward loop (bunt) in a Grunau Baby 2 as a special attraction at Sir Alan Cobham's Air Circus. At that time it was not known that forward loops should not be attempted except in very special aerobatic gliders. He always had to be the best and could get angry if other pilots did better than him. He would not have been able to remain at the top for ever but perhaps gliding gave him the only happy time in his life. His father was an instrument maker and it was known that there was a Collins variometer in the Rhönadler in 1938 and this was probably the third variometer ever built in Britain.

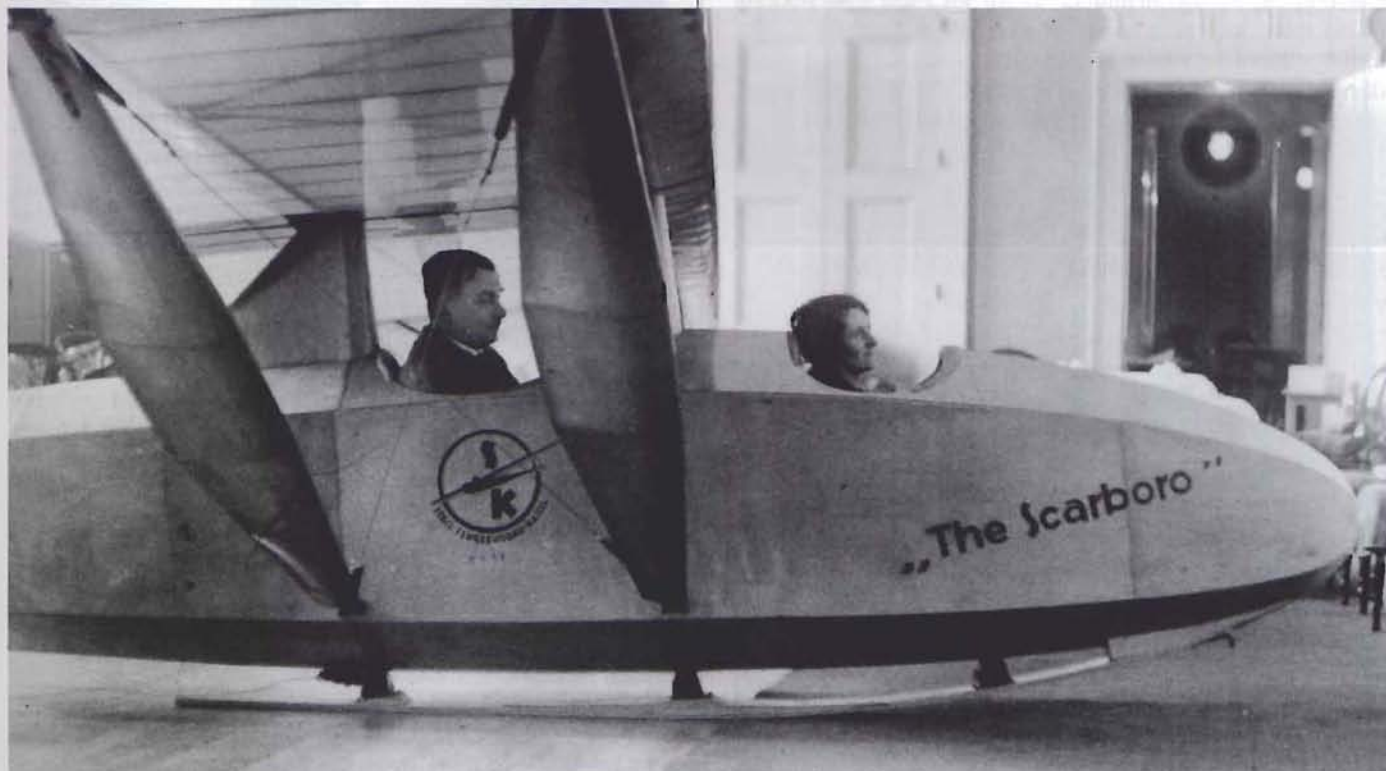
Also during 1934 the National Contest was held at Sutton Bank. During the Contest, as seen in the film "Plane Sailing", Daniel MacClement spun in in the Willow Wren on to the slope. One of the glider's owners was Kit Nicholson (who later designed the London Club's Clubhouse and became British gliding champion in 1938 and 1939) who, with his partner, then bought the Scud 2 that Mike Beach has now. During the contest on September 4th the fantastic height record of 7,970 ft was flown in a Scud 2 by Mungo Buxton in a CuNim. Jack Dewsbury landed the Blue Wren at the coast after having been over the sea. Collins flew longer in his Rhönadler so it had been a day to remember.

The Great Struggle. From late 1933 there had been a quarrel between the Clubs and the BGA on the grounds of the latter's extravagance and incompetence. Philip Wills investigated the situation and soon discovered which side he was on. "One cannot tell the truth about these people as it would be libellous" he once said. The offer of a government subsidy only prolonged the quarrel as the others wanted to get their hands on it. He found that the BGA Council only had 8 Club members

but 22 others! First one Club or person and then another had been irritated and then infuriated by the incompetence of the BGA. Philip Wills's resignation had been in the hands of the President for some time but Eric Gordon England, who had been Chairman for three years could scarcely believe what he was hearing. A meeting voted unanimously not to re-affiliate to the BGA until it had changed its constitution to properly represent the gliding clubs. Simultaneously, Philip Wills was putting in an immense effort to establish a National Gliding Centre at Sutton Bank to be run by the Yorkshire and neighbouring Clubs. He felt that the Dunstable slope of under 250 ft was not adequate to easily contact thermals and get away onto cross country flights. The slope at Sutton Bank was 600 ft high, a figure already accepted in Germany as adequate for a take-off to cloudland. He arranged a loan, but the Ecclesiastical Commissioners who owned the land, were against Sunday flying. However, they were persuaded to change their minds but insisted on a ban on flying on Good Fridays. On his instigation a wealthy resident, Major Shaw, not only helped the scheme but enabled Slingsby to create his factory at Kirkbymoorside by investing the necessary capital. If these activities were not enough, 1934 was also the year of the first British Silver C badges. It was a race between Wills and Collins. Wills, after a 56 mile record flight in March needed only the duration leg, whereas Collins needed the distance. So it was a meteorological race between a good thermal day and a good West wind day. The thermals won and Collins gained the first Silver C with the International number 26 (just after that of Hanna Reitsch). Philip's West wind later obliged and his Silver Cs International number was 45.

The above has been written with much adherence being given to Ann Welch's "The Story of Gliding" and Dr Slater's magnificent "Sailplane and Glider" magazines.

To be continued in the next issue, with the new BGA now reflecting the wishes of the Clubs.



The famous Kassel Herkules of Collin's records. Mrs Slingsby is in the front cockpit in this picture taken in the ballroom of a hotel in Scarborough where the Herkules had just been 'christened'. Photo V.G. Rhodes.

THE START OF GLIDING IN ITALY: BY VINCENZO PEDRIELLI

As Graham Ferrier allowed only a limited space, I will not start from Leonardo da Vinci, but a little later... say in 1924, when the National Aero League, sponsored by the newspaper "Gazzetta dello Sport", announced the first gliding competition on Mount Sisemol, in the Asiago plateau. The site, selected after a long search, was not really the best, as it had been a theatre of WWI, which left clear signs of the several battles, but as far as flying conditions are concerned, they were excellent during the month of August and possibly in September. Actually, the meeting was set for August, but due to the delay in building the gliders it was rescheduled twice and finally fixed from 1st to 15th October, when the flying conditions were not so good any longer. Those who took the challenge of participating in this first international meeting were the students of the University of Pavia, headed by **Ettore Cattaneo**, the real engine and heart of this new way of flying in Italy. After thousand of difficulties, mainly including financial headaches, the students of Pavia succeeded in preparing two gliders for the event. The first, the Goliardia, designed by **Emanuele Gambilargiu**, was a monoplane with a thick cantilever wing and the cockpit situated in the middle of the wing. The elevator and the rudder were placed on twin tail booms which, together with the ailerons, were controlled by the stick and the pedals. For landing, it had a double sledge reinforced by metal cables. Some characteristics of Goliardia: Wing span 13 m., length 5.60m., height 1.05, wing area 24 sq.m. and wing loading of 7Kg./sq.m. Empty weight 100Kg. The second



The Goliardia starting from Monte Sisemol with not much wind according to the flags.



The Febo Paglierini with Franco Segre on board ready to start. Look at the thickness of that wing!

glider was the Febo Paglierini offered to the students by the company Gabardini in Cameri. This ship was also a monoplane with a very thick cantilever wing and a square section fuselage. For landing it was equipped with a two wheel cart. The pilot sat in an open cockpit, just in front of the leading edge. The controls were also in this case obtained by stick and pedals. The Febo Paglierini was a bit too heavy and also had few other defects such as for instance small surface of the tail planes and, as with the Goliardia, it was very difficult to rig. These sailplanes, as I said, were built in a great rush and with big delay and they were actually the cause of the rescheduling of the meeting, so the pilots had not even had the time to test them properly and get acquainted with flying them.

The National Aero League had also invited some of the best German pilots like Martens, Fuchs and Papenmeyer, who came to Asiago with their efficient machines such as Moritz, Consul, Deutschland and Alte Dessaure. That was done also for the purpose of offering our engineers and pilots the opportunity to learn from them more about their advanced building and flying technique. There was not in fact a real competition, as the Germans were far more experienced and with much better machines, but the students of Pavia did their best as they felt the responsibility to start motorless flight in Italy. The Goliar-



The Febo Paglierini landing and setting a new Italian distance record for Franco Segre

dia for instance, flown by Ettore Cattaneo, reached the maximum established height at Mount Sisemol and the Febo Paglierini, flown by **Franco Segre**, after a spectacular launch from Mount Mazze, established the Italian record of distance. Needless to say that all the Italian records were established during that competition. Besides the University students of Pavia, which formed the largest Italian group, **Luigi Teichfuss** also took part in this meeting with his Condor which he built in 1923 behind the tiers of the cycle-track of Bologna and had taken by train to Asiago. To reach Mount Sisemol, Teichfuss used the mule which was rented for 5 Lire by the University students to take back the sailplanes after landing and any other useful transportation activities during the competition. A funny story is reported about this mule which was named "Matricola" by the University students. (Matricola is the name given to the young students entering the University and who must be always ready to serve the senior students). One night, Matricola which was tethered nearby the Condor, after having eaten the hay provided by the students and still feeling hungry, started eating the tip of the wing of the sailplane. It must have tasted special to him due to the sweetish taste of the casein. We can imagine the great surprise of Teichfuss the next morning. The wing in fact was heavily damaged and almost out of order, but Teichfuss did not give up and made a makeshift repair with simple materials which he could find on the spot. Luckily, the ribs which were made of hard wood, had not been damaged by



G.P.I. on Monte Mottarone ready to start for the world distance record. The inscription on the nose "Non ti fidar di me se il cuor ti manca" (Do not rely on me if you do not have courage) but the person with the Chianti bottle has other ideas!

the strong teeth of Matricolà, but still the Condor could not recover the original conditions of strength and safety. In fact, after having been bungee launched from the slope, the repaired wing twisted slowly and the Condor stalled too badly and crashed to the ground. The brave **Marshal Canavesi** was seriously injured and taken to hospital in Asiago, but luckily he could tell his story several weeks later. For the Condor unfortunately, there was too much to do and probably she was buried in Asiago. (Frankly speaking, I wanted to verify with some of the persons who were there in 1924, if this story was true or not, but to my great disappointment I could not find anybody to ask about it... too late!) Well, that meeting in Asiago was really the beginning of gliding in Italy. Everybody learnt from



The Condor of Luigi Teichfuss

that experience and recognised how much they would need to learn to reduce the gap between them and the Germans, starting of course with designing and building better machines besides, of course, improving how to fly.

The lesson was great and the results did not wait too long to come. One year later, in December 1925, after receiving some financial help, the students of the University of Pavia, again guided by Ettore Cattaneo decided on the construction of a new glider, which was designed by **Ing. Abate** and got the name of "G.P.I." standing for **Giovanni Pirelli**, a young and brave student killed in an air accident. The glider was built in the factory of the **Visco brothers** in Somma Lombardo, near Varese and was not built to improve the Italian record estab-

lished in Asiago, but to fix a new world record of distance, still owned by the Frenchman Thoret with a distance of 8,100m. When finally the G.P.I. was ready to fly, **Ettore Cattaneo** decided to try that venture from Campo dei Fiori, overlooking the Lake of Varese. It was December 1926 and the weather was not very good for challenging a new record of distance. The Pavia students had to postpone the launch a couple of times and that was increasing the excitement of that exploit, but finally on the 18th of December, as the weather was slightly improving, Ettore Cattaneo decided not to wait any longer and made the start from Mount Mottarone in the direction of the Lake of Varese. Despite the strong opposite wind the G.P.I. successfully accomplished her target and hit the distance of 11.50Km, over 3 Km. more than the previous record! The G.P.I. was a beautiful ship, of the same standard as the Consul or the Vampyr and comparable to the best German machines of those days. She had adopted all the improvements and technical solutions observed and learnt during the meeting in Asiago. She had a tapered wing of 16.80m., with a wing surface of 24sq.m., and a wing loading of about 8 Kg/sq.m. The total length was 6.50m. with an empty weight 120 Kg. and total weight of 190 Kg. The wing was built in 4 parts with strong aspect ratio and the ailerons had a large surface. The fuselage was a five sided box structure covered with plywood in the front and fabric in the rest and it was provided with a single skid for landing. She had a special mark on the nose of the fuselage which was showing a heart, as a symbol of courage, surrounded by the sentence: "Non ti fidar di me se il cuor ti manca", meaning "Do not rely on me if you do not have courage (heart)". But Ettore Cattaneo and the Pavia students proved they had courage and determination and they were proud to have started gliding in Italy.

In 1927 the first gliding school started in Pavullo which trained many new pilots for this new flying discipline which spread all over the country and, besides Ettore Cattaneo, Luigi Teichfuss and **Emanuele Gambilargiu**, other people arrived and left their mark for the development and the promotion of sailing flight. I would like to name a few of them before closing my article: **Vittorio Bonomi**, **Camillo Silva**, **Ermenegildo Preti**, **Stelio Frati**, **Alberto e Piero Morelli**, **Ermanno Bazzocchi**, **Gian Luigi della Torre**, **Adriano Mantelli**, **Edgardo Ciani** and surely a few other whom I may have not yet discovered.



The 1939 DFS Weihe EC-RZZ at the 1948 World Championships at Samaden, Switzerland. L to R Ava, Sevillano and Juez. Note the light in the nose of this special Weihe.

THE EARLY STAGES OF GLIDING IN SPAIN

Gliding in Spain can be divided in three main stages. A first stage when the pioneers appeared from 1930 to the beginning of the Spanish Civil War in 1936, a second or post-war stage when gliding was only state-run (military and civil) from 1939 to 1966 and a third stage from 1966 to the present when the first private clubs and societies appeared.

First Stage Although some military engineers showed an interest in gliding in the 1920's, it was in 1930 when the first gliding societies and clubs began to form, first in Barcelona and Madrid, then everywhere else in Spain. The military were also interested in gliding and sent two officials to the Wasserkuppe. The most outstanding pioneers and clubs in this first stage were: **J. Luís Albarrán** (a military man trained in Wasserkuppe) main promoter in the whole of Spain; **Mariano Foyé** from the Falçots Club in Barcelona, who spent several months in 1934 at the Grunau School; **Juan Maluquer** from the Gliding Industrial Engineers School in Madrid; the **Bescós brothers** from the Aero Club in Huesca. Several military men from the engineer and aviation sections collaborated in the spreading of gliding and deserve to be mentioned as pioneers: **Mas de Gaminde**, **Ordovás**, **Peñafiel** (all trained in Wasserkuppe), **Corbella** a specialist in construction and **Cibillo** a meteorologist.

In 1932 the Gliding Centre co-ordinated by Dirección General de Aeronáutica is formed. In 1933 the first gliding federations are formed, the Catalan in Barcelona and the Central or Madrilenian.

During this period, gliding-flight was confined to slope soaring and the gliders were mainly Primaries, the launching through sandows, (bungees) car or winch. Only in 1932 did some trials of aerotow occur with a De Havilland DH-6 and a Professor glider, flown by **Albarrán**. However, after several successful flights, the tow-plane had an accident, the pilot died and there were no more trials. On the other hand, there were no sport contests, only "week-long meetings" (gliding weeks) when the pilot trainees from the various clubs obtained their A, B, & C certificates and the more expert fliers tried to break a record for the longest flight. Also, expeditions were made in order to test a new glider or gliding flying area.

In 1935-36 the First and Second National Gliding Weeks took place on the fields in Monflorite owned by the Huesca Aero Club. In 1936 there were 28 gliding clubs and societies in Spain with 226 pilots of different abilities with: A-138, B-39 and C-20 certificates. There were 41 gliders, mostly Primary, 8 Zögling, 7 Anfänger, 18 C.Y.P.A. (a primary designed and built in Spain), 1 Zorrilla (Spanish primary), 1 Caraciolo (idem), 1 Prüfling (built by members of the Falçots Gliding Club in Barcelona), 1 Falke, 1 Professor, 1 Espenlaub 32 (built by Arnal from Huesca Aero Club), 1 Ingeniero Industrial (designed and built by **Maluquer**), 1 Grunau Baby 2 (built by members of Aero Popular in Madrid). The beginning of the Civil War on July, 18th 1936 finished this period.

Second Stage. Once the war ended, in 1939 a group of enthusiasts led by **Miguel Tauler** started again with what was left of Madrilenian clubs and El Cerro del Telégrafo, 15 km. away from the city. Also, **Juan Balcells** formed a group of gliders in the Industrial School in Barcelona, but it was closed down in the 1940's due to an accident. That year, all the gliding was organised and controlled by the Air Force forbidding its practice in private clubs. The Tauler group was militarized and

gliding courses became boarding with military discipline. This system lasted until the early 1980's even though military discipline disappeared in the 1970's and the forming of private clubs was allowed from 1966. During this period, only four gliding centres worked: El Cerro del Telégrafo in Madrid until 1959, Monflorite in Huesca, Llanes in Asturias until 1962 and Somosierra also in Madrid. In Madrid another new school was opened in Ocaña in the province of Toledo. Although these official centres' objective was the pre-military training of future pilots and not the promotion of sport, some people who worked in these schools as instructors, had sport motivation and achieved important success in international contests giving Spanish gliding prestige to such an extent that the F.A.I. honoured Spain with the organization of the World Contest in 1952. The pilots mentioned are: **Miguel Ara** and (in brackets) **Luís V. Juez** - 1945, 6 932 m (6 263 m), 1948 in the Swiss Samedan, 5th with a Weihe (12th with a Kranich II), 1952 in Spain Cuatrovientos, 10th with a Weihe (1st with a two-seater Kranich II), 1954 in England Camphill, 8th with a Weihe (8th with a two-seater Kranich III), 1956 France Saint Yan, 7th with a Sky (2nd with a Sky), 1960 Germany Butzweilenhof, 13th with KA-6 BR (5th with a KA-6), 1963 Argentina Junin, 6th with a KA-6 (7th with a KA-6). Both pilots have a Gold C with three diamonds. In 1958, Juez crossed the Pyrenees for the first time in a glider, from Monflorite in Spain to Tarbes in France, flying a Sky.

Concerning glider construction during this period, they were all German designed and were built by A.I.S.A. 50 SG-38, 60 Kranich II, 8 Weihe and approximately 50 Grunau Baby II. The last ones were built in military workshops. To take part in international contests 2 Skys, 3 Foka-4 and 1 HP-14 were imported.

Third Stage. In 1964 all the Kranich II and Baby II were destroyed, which were the four official school types of gliders. Since then, mass produced gliders have not been built in Spain. From 1965, to provide official schools with single-seaters and two-seaters, 8 Bergfalke III, 5 L-Spatz-55, 4 KA-4 Rhönlérche, 35 Blanik L-13, 20 SZD-30 Pirat and 20 Slingby Swallow T-45 were imported. Later, an important number of these were handed over to private clubs formed from 1966. In 1970 the 1942 Act, which stated that gliding training was the responsibility of the Air Force was overruled and it was transferred to the Dirección General de Aviación Civil, which belongs to the Ministry of Transport, and allowed private clubs to have their own schools. Nowadays, there are 20 clubs, but there are no more than 350 pilots with a sports licence

J. Ignacio G. Colomo

Translated by Olga Margarit

THE VERY EARLIEST DAYS OF SWEDISH GLIDING:

The Swedish Pioneers get their wings at the Wasserkuppe.

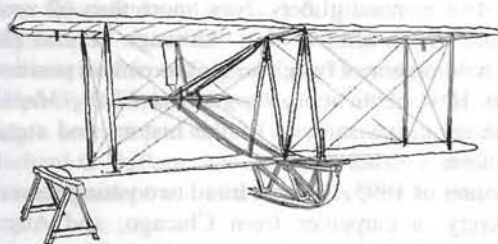
It all started on a chilly day in January 1923 when the 23 year old Swede, **Rolf Bergwik**, arrived at the Wasserkuppe. He would be the first Swedish pilot with the C-diploma. It was also said that Rolf was the first "clean" glider pilot without former power flying experience. In that year some other Swedes found their way to the Wasserkuppe. They looked for adventure and lived like kings on their Swedish money because of the galloping German inflation. Teachers were Alexander Lippisch, Fritz Stamer and Willy Pelzner. The Swedes helped Lippisch with his glider and sometimes, when hitting their fingers by mistake, they burst out in Swedish: "Djävlar anamma", or in German "Hol's der Teufel", which was going to be the name of the glider. That Lippisch design, sometimes a bit modified, was later built privately in great numbers as were eight at the Schleicher's factory. Below is a famous picture of Wolf Hirth in "Hol's der Teufel".



One of the Swedes who paid a visit to the Wasserkuppe in 1923 was a very handsome, charming and well trained pilot. (Swedish licence number 98), twice member of the Swedish Olympic team. His name was **Count "der Conte" Douglas Hamilton**, a captain in the army. His primary goal was to cross the water between Sweden and Denmark with a glider and get some prize money (He made many attempts which all ended in the water). For that purpose he bought a Messerschmitt S-12 (which crashed at its first start) and an Espenlaub E 4 which was going to be the submarine in the Swedish waters. Hamilton and Pelzner had a lot in common, in spite of, or because, of different characters. They probably thought Sweden in those days was the country where they could make a living in gliding. So Willy Pelzner packed his suitcases and gliders and joined Hamilton in Sweden already in the year 1925. Their idea was to found a private gliding school. The place would be Hammars Backar (Hammars Hills) outside the southernmost Swedish town Ystad. Before

that they had briefly tried places like Halmstad and Gothenburg (where Bergwik inspired the pupils at the Chalmers Institute of Technology to build two samples of the later ill fated "Grüne Post"). At Hammars Backar Pelzner produced 227 gliders and sailplanes. Hamilton promoted the idea of gliding in magazines, newspapers and by lectures all over the country. They founded Svenska Sportflygförbundet, "Swedish Sport-flyers association" 1927. All together they examined almost 200 pupils through the years. It is said however that there was a lot more work for the pupils in the workshop than gliding on the hills (As it was everywhere during the pioneer years!)

Epilogue: Bergwik worked hard to introduce the new sport in Sweden. However with minor success. It took thirteen years until Sweden got C-diploma number two. Bergwik was instructor and developed his own glider "Anfänger". Pelzner returned to Germany 1935 where he started a career in an airplane factory and later as "Flieger Hauptingenieur" in the Luftwaffe. Pelzner died in 1977. Hamilton, the father of gliding in Sweden, was never accepted in the leading Establishment of Swedish aviation organizations and we will never know his reason for serving as volunteer in the armies of Finland, France and Germany. We can only guess that he thought he was fighting Communism. Hamilton died of war-wounds in a respirator in 1943.



An original Pelzner glider P2 from 1927-28 was recently discovered in a barn in the middle of Sweden and brought to Arlanda Air Space Museum in Stockholm where it is exhibited.

Thorsten Fridlitzius

Vice President, SVS, Segelflygetas Veteran Sällskap (Swedish Veteran Gliding Association)

OCTAVE CHANUTE, ENGINEER AND SCIENTIST

by Simine Short (from Falconer 2000, the journal of the Dassault Falcon Jet)

In the decade before the Wright brothers' historic 1903 flight, French-born, American Civil Engineer Octave Chanute developed and flew the world's most advanced aircraft. Chanute's novel biplane glider, an engineering masterpiece in the world of 1896 flying machines, was the foundation for 20th-Century aircraft. His craftsmen and engineers became experienced glider pilots, breaking all existing heavier-than-air flying records.

Born in Paris in 1832, Octave Alexandre Chanute was introduced to the New World at the age of six when his father, a history professor, accepted an assignment in New Orleans. By 21, young Chanute, now Americanized, added an "e" to the family name and dropped his middle name. In 1854 he completed the process, becoming a naturalized U.S. citizen.

Engineering challenges fascinated Chanute. As a 17-year-old, he sought and received an unpaid position with the Hudson River Railroad just to learn about railroad engineering. Over the next four decades, he became one of the country's most experienced and successful civil engineers. Chanute designed the first rail-road bridge across the Missouri River and encouraged the standardization of railroad tracks throughout the U.S., an achievement that helped to open the West. He also designed the stockyards in Chicago and Kansas City. But it wasn't until he retired in 1884, supported by the income from two private ventures, that he was able to indulge his curiosity about flying.

Cautiously at first, Chanute began to discuss novel scientific inventions like flying machines. By 1890, he was lecturing on aerial navigation to engineering students at Cornell University, and submitting articles monthly to *The Railroad and Engineering Journal* on the "Progress in Flying Machines." He was named chairman of the Aeronautical Congress during the 1893 World's Columbian Exposition in Chicago.

The following year, inspired by the pioneering work of Otto Lilienthal, a German glider enthusiast, Chanute began to design his own manned gliders. Now more than 60 years of age, Chanute never actually flew, although several photos depict him holding one of his gliders in the correct position for takeoff. His 1894 publication, *Progress in Flying Machines*, became the definitive analysis of the history and status of flying machines.

In the winter of 1895, Chanute hired two young associates, William Avery, a carpenter from Chicago, and Augustus Moore Herring, an engineer from New York City, to design and build flying machines. Herring, who had built and flown his own Lilienthal-type glider, was arguably the country's leading pilot at the time.

In the summer of 1896, Chanute established a "flying camp" in the dunes of Indiana along the southern shore of Lake Michigan where the city of Gary is today. The location was perfect for his flying experiments: it was close to Chicago and it offered steady winds, dunes from which a glider could be launched in any direction, and acres of sand for soft landings.

Herring's rebuilt Lilienthal glider, one of several flying machines built and flown at the camp, proved too hard to handle, but a multi-wing glider Chanute designed was much easier to fly. Chanute's machine, named the "Katydid" after the large Midwestern grasshopper, was designed to study automatic stability. It consisted of a wooden framework with a large vertical tail at the rear. Twelve wings, each with a six-foot wingspan, were mounted in pairs on either side of the frame, at the front of the craft, and two of the six pairs were attached between the forward wings and the tail. The structure was covered with Japanese silk varnished with pyroxyline. Katydid was 10 feet long, 18 feet wide and weighed just 33.5 pounds. From late June to July 4, Chanute's team conducted test flights with six different wing configurations. The wings were numbered so each new wing arrangement could be easily identified. Details of flights were carefully noted: wing positions, wind direction and speed, distances flown and flight

times. Taking the scientific approach befitting an engineer, Chanute's team even released down feathers in front of the leading edges to study the airflow over the wing surfaces. On July 4, the group returned to Chicago to evaluate the data and redesign the flying machine.

Later that summer, the team returned to the dunes with a new machine, a triplane. Its wings were set one on top of the other, braced with the Pratt truss that Chanute knew so well from constructing railroad bridges. The triplane was designed to be a trustworthy structure, capable of being analyzed, yet able to withstand the expected forces of flight and any possible mishap due to pilot misjudgment. After just a few flights, the team removed the lower wing section and the biplane was born. This simple modification enabled Herring and Avery to make flights of up to 359 feet in length and 14 seconds in duration.

Chanute's little craft was, at the time, the most successful heavier-than-air flying machine in the world, and a major step toward the invention of the airplane. However, the project was not without controversy. Herring, who was hired by Chanute, claimed that it was his design of an automatically regulating tail that made the biplane so successful. Chanute disagreed, claiming it was William Avery, the carpenter, who had recommended removing the bottom wing surfaces. Further, he asserted, Herring and Avery together made Herring's invention of an elastic attachment to the tail work properly.

Subsequent biplane designs show trussing similar to Chanute's still in use, but the automatically regulating tail attachment-proposed by Herring-was redesigned as a stabilizer and elevator. Herring went his own way when the glider camp closed, and Avery worked for Chanute periodically after that.

The following year, an Elmira, NY, banker, Matthias Arnot, ordered a biplane glider from Herring. Avery built the Chanute-type glider, which featured flying characteristics similar to the 1896 design. For two weeks, the machine flew daily, weather permitting, and was even piloted by several inexperienced newspaper reporters, one of whom from *The Chicago Times-Herald*, submitted a positive report on his aeronautical experience.

How it feels to fly, a Reporter tries an Aerocurve. With one of A.M. Herring's flying machines he soars 110ft on the first trial. A description of his experience.

"One will never know what it is to sail through the air at a speed of thirty or forty miles an hour, until he has tackled the aerocurve, or gliding machine. The first step is to get under the apparatus...

Once underneath the machine one finds himself standing on a wide plank which rests on the sloping side of a sand hill. The hill is about 100 feet high and steep enough to test the lungs and legs of the strongest man. You face the wind as squarely as possible and shift the machine to and fro until you feel that it is balanced fairly on your arms. You are suddenly aware that the broad expanse of varnished silk above your head is pulling on your arms and trying to get away from you with each gust of the freshening wind....

Grasping the uprights with a grim determination to never let loose, and drawing a deep breath, one takes four or five running steps down the plank and jumps off, expecting to drop like a stone to the sand. To his surprise and pleasure, he experiences about the same sensations felt by a man when taking his first ascension in an elevator....

As the machine mounts in the air one sees the ground sinking beneath. He imagines he is 100 feet in the air, and begins to wonder if he will ever come down....

The thought no sooner comes when the machine suddenly begins to descend with lightning speed. The wind rushes in the face of the operator like a hurricane and hums through the network of fine wire that forms part of the framework with a high, shrill note....

Just as one stretches his legs out expecting to plant his feet on something solid, the wind suddenly lifts the machine again toward the sky. As it mounts upward one's confidence returns. It is not so dangerous after all, just as Mr. Chanute and Mr. Herring and Mr. Avery said...."

In the fall of 1897, Chanute addressed fellow members of the Western Society of Engineers in Chicago. He explained that his aeronautic experiments were being conducted at his own expense, in the hope of gaining scientific knowledge and without any expectation of personal profit. It seemed unlikely that a commercial machine would be developed soon, he surmised, predicting that overcoming the obstacles of flight would actually involve a process of evolution: one experimenter venturing into the labyrinth, the next penetrating farther and so on, until the very center was reached and the puzzle solved.

Chanute corresponded with many would-be pilots and flying machine designers in the ensuing years, all of whom sought his advice. In May, 1900, a letter arrived from two young bicycle makers in Dayton, OH, both of whom confessed to being "afflicted with the belief that flight is possible to man.

"In appearance," Wilbur Wright explained, the gliding machine the brothers had created "is very similar to the 'double-deck' machine with which the experiments of yourself and Mr. Herring were conducted in 1896-97." Three years later, the Wrights succeeded in making the first controlled powered flight. Their letter marked the beginning of a friendship that continued until Chanute's death in 1911. In fact, he became their closest friend and most ardent supporter.

"The double-deck machine," Wilbur Wright said, "represented a very great structural advance, as it was the first in which the principles on the modern truss bridge were fully applied to flying machine construction."

"The impact of the Chanute-Herring design on other aircraft builders is apparent," wrote Dr. Tom D. Crouch, Senior Curator at the National Air and Space Museum in Washington, D.C. "In the U.S., the Wrights and virtually everyone else used the braced biplane structure as their starting point. The little biplane glider clearly influenced thinking in Europe, as well. Chanute's lectures to the Aeroclub de France in 1903 reignited French interest in heavier than air flight. Copies of Chanute-Herring gliders were among the first aircraft flown by Ferdinand Ferber, Gabriel Voisin and other French pioneers. "Chanute's" rigid, lightweight structure became the model for all externally braced biplanes" Dr Crouch wrote. "It was nothing less than the first modern aircraft structure".

Simine Short is an aviation historian and Chair of the National Landmark Committee of the National Soaring Museum. She has written more than one hundred articles on the history of motorless flight for aviation and philatelic magazines in the United States and Europe.

HISTORY OF SOARING IN USA

From the American Soaring Handbook

THE SOARING SOCIETY IS FORMED

In the spring of 1932 a group of soaring enthusiasts headed by Warren E. Eaton of Norwich, New York, all of whom had participated in the 1931 National Contest, gathered together to organize and sponsor the Third Annual National Soaring Contest. At this meeting the Soaring Society of America was born, with Warren Eaton as its first president; A. C. (Gus) Haller, vice-president; Arthur L. Lawrence, secretary and treasurer; and Charles H. Gale, editor of the *SSA Bulletin*. Others in the parent group, including Dr. Edward P. Warner, William R. Enyart, Jacob S. Fassett, 3rd, Franklin K. (Bud) Iszard, Sherman P. Voorhees, Ralph S. Barnaby, Russell Holderman and Earl R. Southee, were named directors. While this society was formed for the specific purpose of organizing the Third Annual Soaring Contest in 1932, the organization has continued and has sponsored all national contests since that time. It soon became recognized as the representative of the gliding and soaring devotees in the United States, and later was given the privilege of sanctioning, supervising and documenting the sporting activities of gliding and soaring in the United States, a privilege granted by the National Aeronautic Association, the U.S. national aero club representing the Federation Aeronautique Internationale.

Under the able leadership of Warren Eaton the Soaring Society flourished and expanded, though even by 1935 the membership of about 230 was pitifully small compared with figures received from England and Germany.

Ralph S. Barnaby, vice-president at the time, became the Society's second president. Barnaby was succeeded in 1937 by Richard C. duPont, who had previously served terms both as a vice-president and as the Society's treasurer.



Baby Bowlus with its usual rudder markings. Hawley Bowlus designed it using the wing of the Grunau Baby on a plywood pod and a steel tube boom bought from a hardware store.

Growth of the Soaring Society

Under duPont's leadership the Soaring Society started a second phase of growth. A monthly magazine *Soaring* replaced the earlier mimeo-graphed *Gliding and Soaring Bulletin*. A general manager, Lewin B. Barringer, was installed, and a program of expansion began. In addition to his SSA activities Richard duPont joined with Hawley Bowlus to form the Bowlus-duPont Sailplane Company which produced a few sailplanes and utility gliders. During the three years Richard

duPont was president of the Soaring Society its headquarters were first in Wilmington, Delaware, duPont's home town; then in April, 1937, when Lewin Barringer became general manager, they moved to Philadelphia, Pa. In the spring of 1939 Henry N. Wightman took over as general manager and the offices were moved to the National Aeronautic Association head-quarters in Washington, D. C.

Richard duPont was succeeded as president in January, 1940, by Earl R. Southee, one of the Society's original directors and SSA's general manager under Warren Eaton. Southee served only a few months, resigning in May of the same year.

At a special meeting of the directors on May 25 1940, Robert M. Stanley was elected to fill the presidential vacancy until the next regular election, which for some reason took place that July during the National Soaring Contest for the first time. Ralph Barnaby was again elected to the office.

During this, Barnaby's third term, the Soaring Society received from the National Aeronautic Association a franchise as governing authority for the sport of gliding and soaring in the United States, on a trial basis renewable annually. This franchise has stayed in force ever since.

In July, 1940, Parker Leonard succeeded Ralph Barnaby and continued as president until 1946. An event of this period was the affiliation in 1945 of the Soaring Association of Canada with the Soaring Society of America.

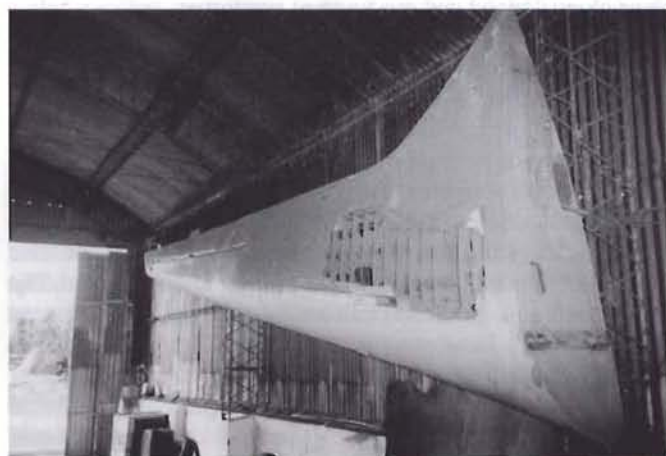
During the World War II period, of course, there was a tremendous build-up of military gliding activities, but not much in the way of sport flying. No national contests were held, and Soaring Society activities were at a low ebb. Only the herculean efforts of such dedicated members as Ben Shupack, who was SSA secretary, Alex Dawydoff and Gus Raspet, who kept things moving and kept Soaring magazine coming out until Taylor Boyer took over as editor in January, 1945, held the Society together during that trying period.

On April 13, 1946, Ralph Barnaby was once more elected to the presidency, and in August of that year the first post-World War II national contest was held, the thirteenth. At these first thirteen contests, the winner had become the National Champion and the custodian of the original Championship Trophy, presented by Colonel Edward S. Evans, founder of the National Glider Association, under whose auspices the first two national contests had been held. By winning the 1946 contest John Robinson, who had also won the title at the two preceding national contests in 1940 and 1941, became permanent possessor of this trophy, and the Society found itself with no championship trophy. This lack was quickly remedied by Allaire duPont, who had a trophy designed and presented it to the Soaring Society as a perpetual Championship Trophy in memory of her husband, Richard C. duPont, former president and three-time national champion, who had been killed in the crash of an experimental military glider in 1943.

In 1947 the annual National Soaring Contest was held for the first time at a site other than Elmira, namely Wichita Falls, Texas, the potentialities of which had been demonstrated some years before by Lewin Barringer. E. J. Reeves of Dallas, Texas, became president of SSA, serving three terms until July, 1950, when Jon D. Carsey, also of Dallas, was elected. The enthusiasm and active support of these two Texans did much to build up soaring in that part of the country, and to build up the Soaring Society in general. Jon Carsey served four terms as president, to be followed in July, 1954, by Lt. Col. Floyd J. Sweet, U.S. Air Force, the first native Elmiran to head the Society. Floyd Sweet was followed by Paul A.

Schweizer, another Elmiran though not a native, as president in 1957. Paul served through December, 1958, and Dr. Harrier Selvidge took over on January 1, 1959. During Paul Schweizer's administration the directors established the calendar year as the basis for officer terms. The elections, however, still continued to be held at the directors' meeting held at the time of the National Soaring Competition, those elected taking office the following January 1. After serving two terms, Dr. Selvidge was succeeded by Paul Bikle, who took office on January 1, 1961. He in turn was followed by William S. Ivans, Jr., in 1963 and John D. Ryan in 1965.

Through all the years of its existence the Soaring Society have operated financially more or less on a shoe-string, with the time-to-time support of people such as Warren Eaton, Richard duPont, E. J. Reeves and Jon Carsey, who rendered inestimable assistance both personally and financially. It had always been the feeling that if a certain amount of time, effort and money could be put into building up the Society, its membership and its services, it could become self-supporting. In November, 1957, largely through the efforts of past-president Floyd Sweet, the Soaring Society received a grant from the Chichester duPont Foundation of Wilmington, Delaware. Under this grant the SSA received \$10,000 toward its budget to establish the office of executive secretary. Additional contributions of \$8,000 for the year 1958, \$4,000 for 1959 and \$2,000 for 1960 were approved. As the result of this gift Lloyd M. Licher was hired on a full time basis as executive secretary, membership activities were increased, an insurance plan was inaugurated, and Soaring, the SSA magazine, took on a new look. With the July 1959, issue it once again became a monthly magazine after having been published on a bi-monthly basis for over nineteen years. Under this new impetus the SSA has forged ahead, its membership has advanced to an all-time high and is still rising. The duPont gift has run out, but it has served its purpose well, and the Soaring Society of America has now become a self-supporting organization.



Horten 15b (AE34m) stored in a hangar at Cordoba in Argentina which was seen by Justin Wills in 1999.

ARGENTINIAN NEWS

In 1950, Reimar Horten designed a small tailless sailplane for the Buenos Aires Club "Condor". To make it inexpensive and easy for the club members to build, the sailplane was designed to be built in one piece. Reimar wanted to make the aircraft attractive to both students and experienced pilots and therefore, a light medium performance 12 m wing span flying wing was laid out. Waldemar Sturm, the club's instructor was in

charge of its building. He also test flew the Horten XVI Colibri in straight flight across the airfield at Merlo from an auto towed launch in 1952. The Colibri was then taken to the larger airfield of Juarez Calman near Cordoba for further testing by Heinz Scheidhauer, the well known Horten test pilot. During his first aerotow, in the Colibri, in spite of the tow rope being 500 ft long, it appeared to be caught in the propeller wash and was uncontrollable. The Colibri touched the ground briefly and then shot up to about 50 ft, stalled and came down inverted. Scheidhauer emerged from the wreckage by a miracle with only minor bruises. Scheidhauer told CW, that it was not propeller turbulence from the towplane that had caused the crash, but rather the Colibri's C of G that was wrong. Heinz Scheidhauer told CW that the Hortens' C of G was critical, ie they had narrow limits. If it was within these limits, there was absolutely no problem about flying any of the Hortens. The Colibri was never rebuilt after the crash.

We later heard that Waldemar Sturm was wanting to build a Horten IVC i.e. a Horten 4a with a seated pilot which would have been a very interesting aircraft indeed. However, after the passing of so many years, we have heard via Jochen Kruse, who has contacts in Argentina, that the machine in Waldemar Sturm's workshop, near Buenos Aires (Escosar) is not a Horten flying wing, but a 15 metre wingspan, pod and boom fuselaged sailplane with an open cockpit (like the Wien) and a max. calculated L/D of 1:34!! Perhaps, the canopy has not been made for it yet. The wing centre section is 6.3 metres span and each outer wing is 4.35 metres. The aircraft has a landing skid, in which is a small wheel. The whole aircraft is covered with plywood and glued with Cold Glue with artificial hardening ie. Epoxy. Empty Weight is calculated to be 200 kgs (440 lbs). We don't know the name of this sailplane. Although Reimar did design a "universal" sailplane with four different wingspans with the same fuselage and tailplane (one of them was built and flown) this is not one of them. This new wooden sailplane is well within sight of being finished. We believe that Waldemar Sturm did intend to build a Horten IVC after this aircraft, but we fear that time is against him. Waldemar Sturm once said that first he would build the "Condor Andino" and then afterwards, he would build the Ho 4c. Perhaps the sailplane in his workshop is the "Condor Andino"? Therefore, the only airworthy Horten in Argentina is the Horten 1b.

Justin Wills, who was in Argentina last year, wrote that, derigged in a hangar at the larger of the two Cordoba Gliding Clubs was a Horten 15b (IAe 34 m). He was impressed by the great size of its wings. A photograph has revealed that one wing was not badly damaged and gave the impression that it could be easily restored. The rather small wooden Centre Section also seemed to be not beyond redemption. There was no photograph of the other wing, which may have been in worse condition. The club would probably give it away! This was certainly one of the Horten 15 single seaters that were built for the 1952 World Gliding Championships in Spain. Its pilot was almost certainly Ricardo Bazet. It became damaged while outlanding on the penultimate day. It was said that Bazet lacked competition experience and especially experience flying the Horten 15b. The problem confronting an owner in Europe is mainly the cost of shipping it in a container and paying the Customs duties. We think that this Ho 15b, with its calculated max.L/D of 30 and its seated pilot, would be a good proposition for VGC operation and we wonder whether a museum could get it over to Europe on the understanding that a VGC member could restore and fly it and, should he not

want to fly it any more, it could go into that museum, so that the museum could be a sort of safety net should things go wrong. One wonders about the type of glue used but it can not have been too bad, if the Horten has stayed together this long. The **Scott Viking 1** in Argentina. From *Sailplane & Gliding*, March/April 1940, page 24. The Viking 1 taken out to Argentina, by Mr R.P. Cooper, rather more than a year ago, and left by him in the hands of the Club Argentino de Planeadores Albatross, has been doing good work there. On November 27th last, in the morning, Roberto Verginillo in the Viking, and Helmuth Teichman in a Condor 1, were towed up simultaneously by a Pelikan aeroplane to 1,000 metres above Merlo aerodrome, 15 miles west of Buenos Aires. They circled, slowly gaining height, and then set off together, keeping only a few metres apart for the first 25 kms. Then the Viking slowly forged ahead, making distance to the north and climbing to a maximum of 2,610 metres (8,563 ft), and finally, after being 4 hours 55 minutes in the air, landed at Estacion Alcini, 106 kms (66 miles) from the start. The place is 10 kms from Baradero, which is 80 miles NW. of Buenos Aires. The Condor reached the same place after being up for 6 hours 15 minutes, and climbing to 3,150 metres (10,335 ft) on the way. On December 31st (1939), Teichman set up an Argentine distance record of 200 kms (124 miles) by soaring (in the Condor 1 CW?) from Merlo to Estacion Colman, the previous record of 170 kms (106 miles) being held by Peter Riedel. (in 1934 in the Fafnir 1, CW) About the middle of January (1940), the Viking beat this with 230 kms (143 miles), the flight having taken 2 1/2 hours, starting with an aerotow to 500 metres. Another achievement of the VIKING was a flight of 6 hours 5 minutes, in thermals over flat country, starting from Merlo with an aerotow to 580 metres, and finishing there. The pilot, Raul Olivares, reached a maximum height of 1,800 metres. Since then, the Argentine altitude record has been raised to 3,600 metres (11,811 ft) by a member of the Albatross Club, but the message gives us no details."

AUSTRALIAN VINTAGE GLIDER RALLY 2000

This year's Vintage Glider Rally was held at Lake Keepit near Gunnedah in northern New South Wales between the 8th and 15th January.

Our host, the Lake Keepit Soaring Club, is one of the most active full time gliding clubs in Australia and is located on the shores of a large irrigation storage reservoir within Lake Keepit National Park. Situated in a large shallow valley with surrounding hills, the scenery is quite spectacular and the area is a popular destination for both locals and tourists. Being a National Park the wildlife is prolific and every day at dawn and dusk mobs of, at times, several hundred kangaroos cover the airfield. They pose no hazard as by 8am they have disappeared back into the surrounding bushland and do not appear again until the early evening. Only those returning from long flights around dusk need to be watchful when landing.

A total of nine gliders attended the Rally, including two from the Homebuilders Association, and a local Ultralight glider who flew with us 'Hors Concours'

Members came from as far afield as Melbourne Victoria, the Barossa Valley in South Australia and Cairns in far north Queensland as well as N.S.W., some travelling well over 1000kms to get there.

The weather in Eastern Australia has been very unseasonal this year with virtually no Spring at all, the cold weather and rain staying with us right up until Christmas. The period of the Rally was somewhat frustrating in that the soaring conditions

were excellent with temperatures around 28 degrees Celsius and cloudbase averaging seven to eight thousand feet every day, with occasional 10-15 knot thermals, however on four out of the seven days this was accompanied by 25 knot winds and on the remaining days averaged 10-15 knots.

To add to our frustrations the winch the club had provided for our use broke down completely after the first three days and could not be repaired. Aero towing was available by Pawnee as the clubs professional operations continued during our presence but this unexpected additional expense was only taken up occasionally although the high winds precluded flying on most days. As always the day before the rally finished the wind abated and we experienced a magnificent day when everyone could have stayed up all day if they had chosen to.



Short Span Kookabura with Tighe and Alan Patching and Geoff Hearn by the nose. Photo Edwin Shackleton

The 23rd Annual General Meeting of the VGA was held on the 12th January where the President, Alan Patching, reported that after many attempts the VGA has now been recognised as a formal Gliding Federation of Australia Committee and will in future be reporting its activities to Council and the Executive. The Council however indicated that the word 'Association' in our name would not be appropriate under the circumstances. Discussion on this matter took place and it was agreed that the term VGA be retained partly for historical reasons and also to save expense in changes to stationery, letterheads, logos etc. A decision was made to change the name to Vintage Gliders Australia which satisfied all counts.

During the year a steering committee had been formed resulting in the creation of the Australian Gliding Museum Inc. which amongst other things aims to establish and operate a public museum to collect, preserve and display items of sports aviation historical interest with a division in each State. The Museum Committee has also been recognised as a formal Gliding Federation of Australia Committee. Gliders are already being donated to the Museum and worked on, while Bill Riley has made his hangar available at Tocumwal in southern N.S.W. for storage.

Some support has been obtained for our participation in the International Vintage Rally at Harris Hill, New York State, in July 2000 and five of our members are definite in their planning to attend. The decision has been made to take the Golden Eagle despite the cost, however our American colleagues are organising help with transport in the USA.

The Far North Queensland Soaring Centre, having been disbanded, have generously donated their Schleicher K4 Rhonlerche glider VH-IKK with trailer to the VGA together with the sum of \$500 to help defray costs associated with its delivery. Thanks to Kevin Sedgman, the club's Patron, the glider is being brought to Lake Keepit and will be trailered back to Bacchus Marsh in Victoria where it will be kept ready for flying at future Rallies. (Photo of the handover was in VGC News No 99 Ed)

Ray Ash handed over to the VGA, constructional drawings of the Hütter H17, Grunau Baby, Cherokee, Eon Olympia and Chilton Olympia which were passed on to him from the estate of a recently deceased member Ron Meares. It was reported also that in the past 12 months, efforts by the VGA have resulted in six older gliders being restored and returned to the register, with several more under way.

Despite the windy conditions a number of good cross country flights were completed although nobody ventured further than 50kms from the airfield. John Fleming completed all legs of his Silver C in his K8B owing to the generosity of John Ingram from the Barossa Valley and his foresight in bringing his barograph with him. Alan Patching ran a contest every flying day where each pilot was given a two hour period of his own choosing to attempt to fly as far as possible. Each aircraft was handicapped according to its performance, and penalties and bonuses applied if landing before or after the prescribed two hour period. Photos of turning points were asked for although in most instances the pilots word was taken as to where he had been and photos only called for if a protest was made by another pilot. This was difficult however as one of the rules of the contest was that protests were not allowed, which made for a very friendly contest.

Those who attended the Rally were as follows...

Alan Patching, Ian and Ruth Patching, Tighe Patching, Geoff Hearn, Golden Eagle, Victoria. Kevin Sedgman, Don Burnell, Rhonlerche, Queensland. Wally and Sonya Wolf, Grunau 4, Victoria. John and Sue Fleming, Ray Ash, K8b, N.S.W. Ralph Crompton, Ka6, Victoria. Wally Stott, Lloyd Hodges, Ka6, N.S.W. John Ingram, Kevin Barnes, Schneider, Ted Bowden, Super Arrow, South Aust.

Flying Hors Concours were:

Graeme Betts, Carbon Dragon, N.S.W. Terry Whitford, Malcolm Bennett, Monerai, Victoria. Peter Raphael, Woodstock, Victoria

Also in attendance was Ged Terry from the U.K. making his 18th annual pilgrimage to Australia flying in the back seat of the Rhonlerche with whoever cared to fly it. He also flew



Zephyrus and Doug Lyon Photo Edwin Shackleton

Wally Wolf's Grunau 4 to great heights. Gary Sunderland, designer and builder of the Moba sailplane spent several days with us with his wife Robin, bringing with him his collection of WWI model aircraft in a trailer. Bob McDicken and his wife Mary also came for a couple of days announcing that he was retiring from active gliding and will be disposing of his Ka6 and Grunau 4.

Despite the windy conditions four contest days were flown and a number of cross country flights were completed, all landing back on the airfield and therefore no outlandings were made.

Day 1

Ralph Crompton, Ka6, 160kms, 2 hrs 7min

John Fleming, K8b, 34kms, 2hrs 16min

Ray Ash, K8b, 95kms, 2hrs 12min

Alan Patching, Gold.Eagle, 58kms, 1hr 7min

Ian Patching, Gold.Eagle, 12kms, 1hr 14min

Wally Stott, Ka6, 154kms, 2hrs 13min

Kevin Barnes, Sup. Arrow, 112kms, 1hr 49min

Day 2

John Fleming, K8b, 93kms, 3hrs 33min

Wally Stott, Ka6, 110kms, 2hrs

Day 3

Wally Stott, Ka6, 77kms, 1hr45min

John Fleming, K8b, 48kms, 3hrs

Day 4

John Fleming, K8b, 103kms, 5hrs 6min

Ralph Crompton, Ka6, 178kms, 2hrs 44min

Wally Stott, Ka6, 99kms, 1hr 55min

Lloyd Hodges, Ka6, 138kms, 3hrs

The Monerai and Woodstock also made a number of flights and short cross countries. Some local flying was carried out as the weather permitted with the K4 doing circuits with those wishing to try it out with either Ged Terry or Kevin Sedgman in the back seat. Others hired the Keepit club's ASK21 or Grob Twin for family flying.

A dinner and presentation night was held on the Saturday evening with Wally Stott being declared the Competition winner. The Edmund Schneider Trophy for the best maintained Schneider aircraft was awarded to the Super Arrow (*Photo in VGC News No 99 Ed*) and was accepted on behalf of the owners by John Ingram. The K4 Rhonlerche won the Best Restoration Award.

The Encouragement Award went to Tighe Patching, who at a mature 14 years of age has undertaken editorship of our Newsletter 'Vintage Times'. The trophy for the best single seater went to John Fleming with his colourful K8b. The rally was voted a success both socially and from a flying point of view and a decision to hold next year's meeting at Bacchus Marsh in Victoria from 6 to 13 January 2001 was carried unanimously. As the three clubs resident there will be away, there should be plenty of hangarage space for our gliders, as well as accommodation. Catering will be available and also very possibly a winch.

THE AUSTRALIAN KADET

The story proceeds, but not very happily...

Martin Simons has confirmed that the glider is one of the earliest Kadets and was shipped over to Australia in kit form in 1939. The only other comparable one is the Kadet UT-1, which is, he believes, in the USA. Despite the earlier expectations that restoration would soon start, the glider in fact, has been taken away! It seems that the Gliding Federation of Aus-

tralia thought they were the sole owners but two brothers also claim to have paid some money to a now deceased person who, his widow believed, owned it. They did nothing with the glider while it was in their possession but stored it in a garage in Adelaide until recently. Meanwhile, they fell out with one another and now do not speak except through their respective lawyers and neither is now active in gliding.

With the approval of one brother the Kadet was taken to Gawler north of Adelaide (South Australia) and was later towed 400 miles to Benalla (in Victoria) for restoration to begin. On hearing about this the other brother, apparently enraged, rushed over to Benalla with a trailer, grabbed the Kadet and towed it all the way back to near Adelaide but presumably in a different place. We understand the glider is safe and dry but we hope the story is not yet over although things are not going quite as planned.

BRITISH NEWS

The warm and dry March has been followed by the wettest April in living memory in the South of England and May wasn't much better. This has meant that our 10th Kirby Kite Rally at Haddenham/Thame from 29th April until the 1st May was "rained off" due to a waterlogged airfield. It is the first time in the ten years of these rallies, which have always been enjoyed and usually had good weather, that one has had to be cancelled. We say sorry to the Upward Bound Trust members who have always worked so hard to make our traditional first rally of the season a success... and to VGC members who were intending to take part in it.

At Wycombe Air Park, Booker, the group which was founded by Mike Birch and Graham Saw, has continued to work on old gliders. The present task is the restoration of the KITE 2 BGA 751, which formerly belonged to Dave Richardson, but now belongs to Robin Willgoss and Duncan Reid, recently of the Army Gliding Club. Enthusiasm to do this work was animated by the appearance of the two airworthy Kite 2s, "Percy" belonging to Peter Warren, and that of Bill Tonkyn and Frank Irving, (BGA Numbers 663 and 689 respectively) at the Percy Pilcher Remembrance Rally, which was held on the 29th of September 1999.

London Gliding Club. As of 1st May, news from Peter Underwood is that he has finished the woodwork of the flying surfaces of the **Minimoa**, BGA 1639. He has fabric covered one wing and aileron and is about to cover the other wing and aileron. The next job to be undertaken will be the restoration of the fuselage (and canopy). As the standard of construction of this 1938 Schempp Hirth Minimoa is extremely high, it is hoped that the fuselage will not present too many problems, other than de-corrosion of metal fittings. Peter Underwood also has his German, wartime-built Grunau Baby 2b-2 ready for fabric covering. It will be finished in the Elflein (RAL 1015) coloured paint of those times. Peter's Dagling, the standard training glider of the British pre 1940 gliding clubs, has been put aside to allow progress on the Grunau Baby 2b and Minimoa. The VGC congratulates Peter on his continued restoration work at his home, which is an inspiration to us all. We are also glad to report that the R.N. **Grunau Baby 2B**, BGA 2433 belonging to Laurie Woodage is now flying again after his extensive work on its NSFK-built wings; these are now not quite so NSFK-built due to the large amount of work he has had to do on them. Perhaps its fuselage is RN. Dockyard built (Fleetlands)? Congratulations on getting it airworthy again Laurie. We are sad to report that the **Kite 1** BGA 394, which formerly belonged to Ted Hull, and was restored

by him, has now been sold to an American.

Vintage Gliders as National Culture. In France, Germany and Holland, certain vintage gliders have been declared objects of National Culture and, as such, they can not be sold abroad. We feel that this should happen here, especially as some of them have been nurtured carefully from the 1930s when they were built. This has taken some doing, and they have been much loved. That we have more here than in many other countries means that we have a more liberal regime, apart from government control, and that is what Philip Wills fought for.

THE COLDITZ COCK. This has now been taken to the Imperial War Museum, Lambeth, by John Lee and will be put on static exhibition there. It will never fly again but at least everyone will be able to see it. The replica was built by South-down Aero Services for the television film which was shown in February 2000. John Lee built its wings and flew it for the film at RAF Odiham, after it had been given two test flights by Derek Piggott. Present, watching the flying were Bill Goldfinch and Jack Best, who built the original Colditz Cock in the roof of Schloss Colditz during the latter stages of WW-2. Jack Best made the tools which were used to build the aircraft. These wonderful characters were delighted to see the replica of their aircraft fly. Regretfully, we have now heard that Jack Best died on the 22nd of April from a heart attack after an operation in a Herefordshire hospital. He had had cancer and no doubt this operation concerned that. We are sad that he did not win his last battle and we send our sincere sympathies to his family and to all those who knew him.

BELGIAN NEWS

The Administration Council has two new members who are both pilots. The Ka2 has restarted flying again with Club members. The main Belgian Rally will be held between the 3rd and 7 August at Maubray, near Tournai, close to the French border. (unfortunately this stops them coming to the International Rally at Tibenham.)

FRENCH NEWS

Situation at the GPPA Régional Musée de l'Air at Angers Marcé.

Work in progress: AVIA 152A No.301. Its wing ribs are all built, as are its bulkheads, its keel and also its seat in the fuselage. This is one of the very rare survivors of the 1942 nacelled primary gliders, which were developed from the AVIA 151A nacelled primary of 1938 which in turn came from the AVIA 15 of 1932. Many hundreds of this AVIA 152 were built during the war by Roche Aviation, and afterwards, by the Caudron Boufabrik, 30 kms SW of Algiers. This firm had been started by the Renault car company after the Armistice in June 1940. The firm also started to build 310 Morane 315 aeroplanes which became very popular towplanes in the gliding clubs after the war.

Another AVIA 152 A is being flown after being rebuilt by the AVIA Historique Club of which Guy Uriot is the President. Castel 25S No.141 F-CRBI. Its wings are finished and now work is continuing on its tailplane. It may be airworthy at the end of 2000.

DURUBLE RD-02 Edelweiss. No.1 F-PKVF. Hervé has worked on the fuselage and it has been sprayed with silver paint for protection.

Fauvel AV-22 No.1, F-CCGK. This is in the middle of a General Overhaul. Some parts of it are far from being simple to take apart.

Foka No.177 F-AZKA. Its elevator is being re-covered.

Zugvogel 3b No.1054 F-CCPT. Its wings, flying surfaces and fuselage have received new fabric and are prepared for final finishing (ie cut) with glass paper. The rudder hinge that was missing was received on the 28th of last January. Painting of the fuselage started on the 28th February and the wings were finished. As of 5th May, the sailplane was being presented for final inspection by the GSAC.

The following sailplanes are airworthy, but not all of them will be reactivated this year because of insurance and GSAC inspection costs.

Breguet 901 F-CCCP "Jean Cayla"; Breguet 904 F-CCFN; Weihe No.3 F-CRMX "Paul Genest"; AIR 102 No.26 F-CAGQ.

There are also aeroplanes in this category. They are : the Morane 505 "Storch" No.149 F-BIPJ, Potez 60 No.1 F-PVQB and PIPER J3, F-BCPY "Ville d'Angers".

8 aeroplanes are being worked on.

We congratulate the new Musée de l'Air Régional for having had 20,000 visitors during its first year of operation in 1999. It really must be worth visiting. BRAVO to Christian Ravel and his Team!

We believe and hope that Maurice Renard is restoring his Castel C.301S this year. It is one of the oldest gliders in France. The design started as the Castel C.30S and 24 were built in 1939. It was redesigned as the C.301S and was the only type to achieve large scale production during the war. 216 were built during 1940 by S.N.C.A.C and 99 were built by the Marches Fougat during the same year. It was developed from the "Moustique" (Mosquito) by the Sports Aériens before 1943. Maurice's aircraft is almost unique as only one other is being flown by S.P.A.C. at Paray le Monial. The type was named "Ailette" (Little wing? CW). There is only one other older designed French sailplane flying in France. That is the 1935 Avia 40P belonging to François Ragôt. This machine had been flying in England since 1952 and was very much more recently restored by Mike Birch at Wycombe Air Park. It was first finished on December the 21st 1942 and was then probably taken to Germany for service with the Wehrmacht Luft, which had 14 of the type airworthy in 1944. We have no definite information about what happened to it after 1942 or on how it came to be in England after the war (with perhaps one other of the type). (One must not forget the basically older Avia 152A that is airworthy in the Avia Historique Club that, we hope, will soon be joined by another being prepared by the G.P.P.A.)

Late news is the Museum at Angers Marcé will be closed to



The marvellous new building of the Musée Régional de l'Air at Angers-Marcé

the public from the 12th May until the 1st of September, to enable a "Museographie"* to be installed. The workshops and the "Bar de l'Escadrille" will stay open, for all our wellwishers and workers. All accounts indicate that the new Musée de l'Air Régional is the most beautiful place to visit for all those interested in Aeronautical history. (CW very much regrets that he does not know what a "Museographie" is)



This picture was sent by Francis Humblet from France of what looks like a Darmstadt Margarete in Egypt. Can anyone confirm that?

GERMAN NEWS

During the beginning of March, the 100th anniversary of the birth of Wolf Hirth was celebrated in the German Gliding Museum on the Wasserkuppe. Wolf Hirth's son Helmuth was there but there were almost none of his prewar and wartime employees present. Helmuth presented Theo Rack of the German Gliding Museum on the Wasserkuppe, with his Father's Silver C, which was Silver C No.1. (He shares the Silver C No.1 with Robert Kronfeld, who completed the requirements 3 years before the Silver C was invented in 1930.) (Helmuth was also the name of Wolf Hirth's brother, who was Germany's most famous power pilot before WW1). His brother Helmuth was also responsible for the firm which built the very good Hirth aero engines, which powered the Klemms 25 and 35 etc etc. Before all to admire was Klaus Heyn's Musterle replica, which was even more beautiful than the photographs were able to indicate in VGC News No 99. There was also a display of photographs which were a celebration of Wolf Hirth's life.

News of the replica of the **Reiher 3** which is being built by the OSC Wasserkuppe is that, on the 22nd March, it was having its wings proof loaded. During the next weekend, it was to have been taken to the firm of Eichelsdörfer for painting. From this, one realizes that all woodwork, including its canopy, must be complete. All fabric must be on the rather few non plywood covered parts. We have been told that it will fly this year and that its LBA C of A (Zulassung) should be helped as the LBA already knows Seff Kurz for his DFS Habicht replica, which impressed them. It is not known whether it will take part in the 28th International VGC Rally at Tibenham.

Roland Pöhlmann writes that on April 7th this year, he visited the Alte Flugwerft-Halle at Oberschleissheim, Munich and saw the Horten 4a, restored by Peter Hanickel and Christian Biepenburg suspended next to the Mu 10 Milan, CASA 2-111 (He 111) and Douglas C.47 (DC-3). In the workshop, restorations of the Kranich 2B-2 D-6171, as well as that of the RW3P Mulptoplan D-EJYW are going on well. The Hütter H.17A, D-8129, is suspended in the new exhibition hall, after having been rebuilt in the museum's workshops some years ago. The VGC thanks Roland Pöhlmann for the news. C.Wills adds that as the Weihe D-0700 is not mentioned as being on exhibition, it adds credibility to the possibility that it is the one being advertised for sale in the USA in the current "Bungee Cord". So far as we know, 3 Kranich 2b-2 b-2 s are in Museums and collections in Germany (Flugwerft Ober-

schleissheim, Wasserkuppe and the Fritz Ulmer Collection at Göppingen Betzenriet), but 3 more Kranich 2b-2 s may well be airworthy in Germany by the time that this is in print. News of the **Reiher 3** on the Wasserkuppe is that it should fly this year!

Progress on Gunther Brödersen's Hütter H.28-2 has been more rapid as its fuselage is finished, and so are the parts, including main spar, for the wings. There is a problem concerning the assembly of the wings, as the rooms in his house are too small even for the less than 6m. spans!

We have heard that a replica **Minimoa** is being built at Landsberg

Concerning the **Kranich 2** at Achmer, all the woodwork was finished by March. It is expected that it will fly sometime during this year.

Otto-Ernst Hatje. Otto was born on the 12th May 1925 and died, through cancer, on the 8th April 2000. He learned to fly gliders at the age of 14 in 1939 at Uetersen near Hamburg. He found that he preferred working in the workshop to flying the gliders, and so he became a young workshop foreman (Werkstattleiter). At the age of 17 in 1942, he joined the Parachute troops. Although an earlier report said that he had survived the Battle of Crete, he was mainly in action on the Italian Front and had helped to free Mussolini on the Gran Sasso Mountain flying in a DFS 230 9 seat troop carrying glider. In the 1980s, he decided to build a replica DFS230 using small drawings from a book, as the plans could not be found. He built its 20.87 m. span wooden wings by himself but its welded steel tube fuselage was built by groups around Frankfurt am Maine. The replica **DFS 230** was first exhibited in the Flugwerft at Oberschleissheim (Munich), where VGC members saw it during the International VGC Rally there. It has recently been transferred to the Luftwaffenmuseum at Berlin-Gatow

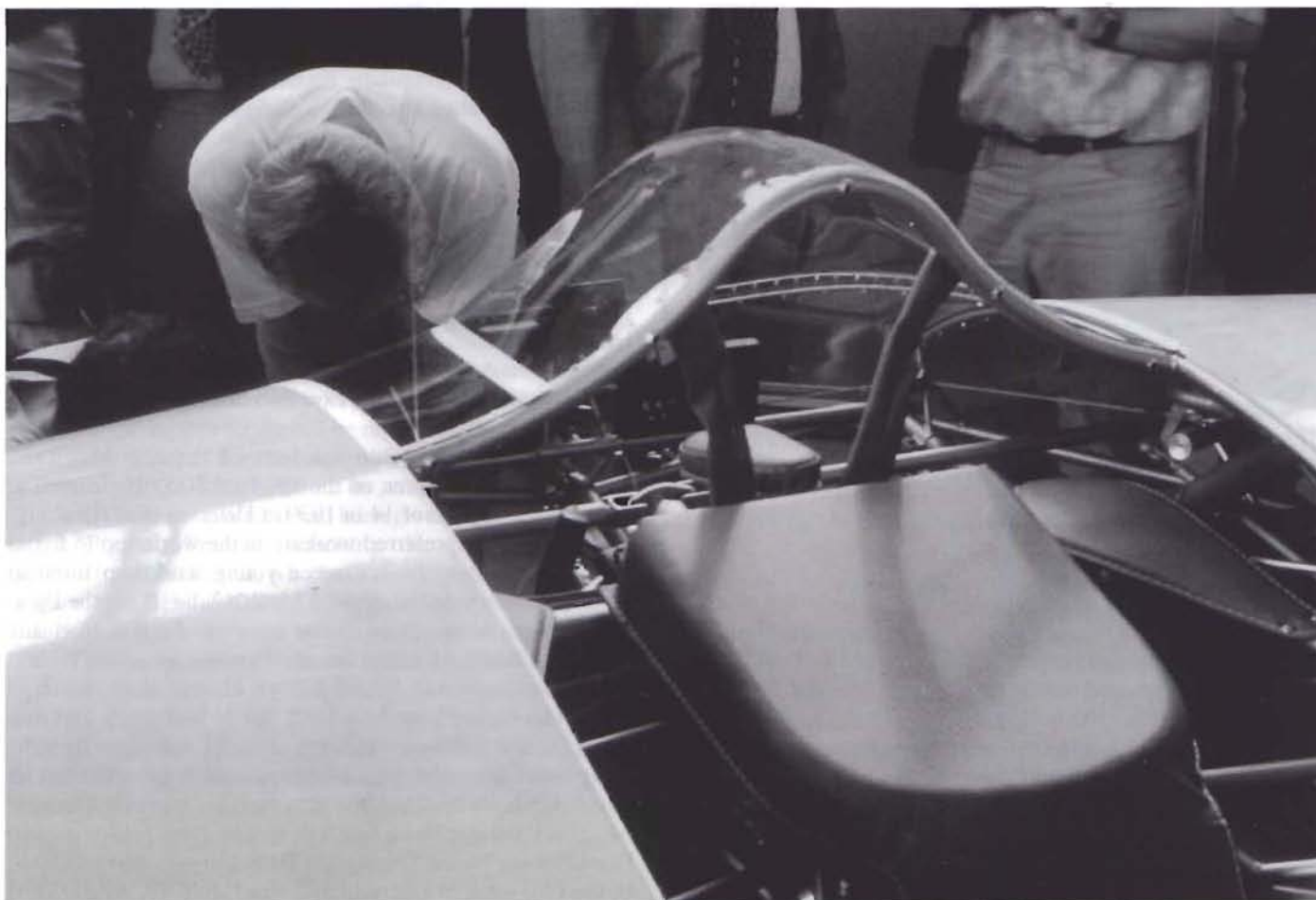
Otto then took over the building of the replica of the **1921 Hannover Vampyr** from the late Bjarne Reier, our sadly missed Norwegian member.

The German Museum in Munich has the original Vampyr but the German Gliding Museum on the Wasserkuppe also wanted an example of this famous aircraft which led the way forwards for glider development. Such famous names as Professors Madelung, Pröll, and Blume were involved and the pilots Martens, Hentzen and Ferdinand Schulz flew world records with it and its successors in Germany and in other countries such as the Crimea and North Italy. Otto could not finish it because of his oncoming illness. He worked on it less and less and finally retired to his home. It is a pity that all his ability has gone. He was so skillful that he never did a job twice. It was always right first time. The VGC sends all its condolences to his wife and to all his friends. Such skillful glider woodworkers are becoming fewer and fewer in Germany.

Someone else will have to be found to finish his work. The Vampyr is not easy to build. The wing is in a jig and still requires its torsion D-box leading edge. It was the first glider ever to have one of these. It will be hard to move the wing in its present state.

Update on Hortons

During Chris Wills's visit to the D.T.M. (German Technical Museum) in Berlin on 10th October 1999, he found that the restoration of the Horten 6 v2 had not started, but was to be initiated very soon. It will be displayed when finished, together with the Hortons 2, 3f and 3h, in the DTM before being returned to America to be exhibited statically in the



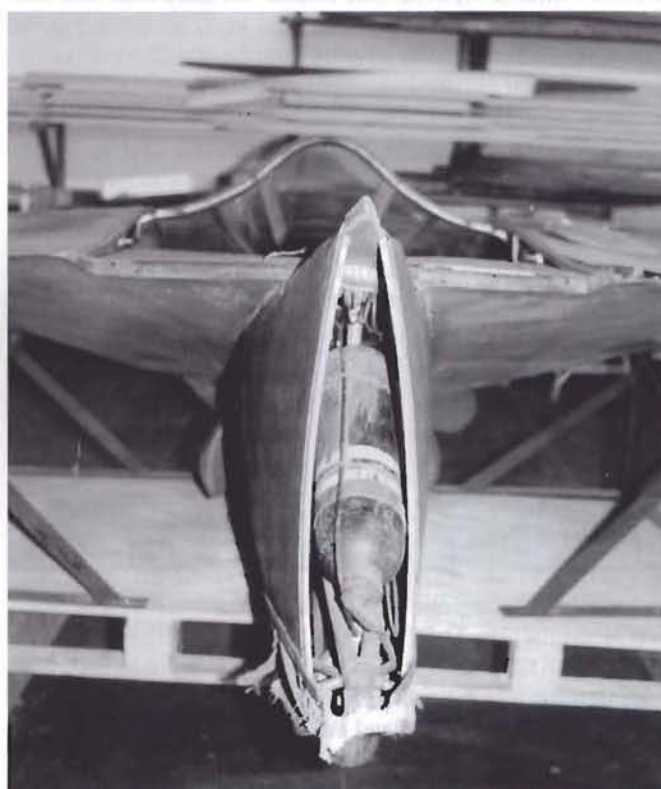
View of the cockpit of the restored Horten 4a at Oberschleisheim showing the support pads for the prone pilot's chest, chin and elbows and the restraining straps.

Smithsonian's new Dulles Airport display facility, which should be opened in three years' time. The Ho 2 will remain in Berlin.

The Ho 6 was the highest performance sailplane in the world in 1945 and was so, for many years afterwards. It was thought to be not practical for club or contest flying but it was hoped that it would have a use for research flying in waves etc. The Ho 6v2 in Berlin still has the original small oxygen bottle installed in the rear of the centre section. The Ho 6v2 was never flown, but the Ho 6v1 was flown against the Ho 4a in the Spring of 1945 and found to have a performance that much better than the Ho 4a as the 4a's performance was over all other sailplanes (except the D30 Cirrus.) Its max calculated L/D was 44/1

It has been written that the Ho 6v2's wings were not built like those of the Ho 4a and Ho 6v1, but like those of the Ho 4b ie lengths of a ply-balsa-ply preformed sandwich structure were formed in a mould and then glued on to the spars to form the leading edge. Chris Wills could find no evidence of this when he photographed it. A photo of the Ho 6v2, taken from above, in the USA indicated a "starved" wing surface revealing many internal ribs. Please could C.W. have confirmation of this please.

The Ho 6v1 prototype was being flown at Göttingen almost up until the arrival of the American troops who then burnt it. It is possible that to get the absolute best performance from the Ho 6v2 its canopy is lower than that of the previous Ho 6v1 and Ho 4a. The pilot's visibility is, in C.W.'s opinion, very marginal.



The rear of the centre section of the Horten 6v2 in the German Technical Museum in Berlin showing the installation of the small oxygen bottle. This Horten never flew.

Book Review

***Exploring the Monster, Mountain Lee Waves: the Aerial Elevator* by Robert F. Whelan. ISBN 1-89118-32-3**

A Book Review, by Raul Blacksten, VSA Archivist & *Bungee Cord* Editor

Every once in a while, a book comes along that I can really be enthusiastic about. This is certainly one of them!!

This story about the Sierra Wave/Jet Stream Project of 1951-2 is truly a remarkable one. Over the years, I have read the stuff in *Soaring* magazine, talked with Vic Saudek, and heard Larry Edgar tell his tale. I thought I knew most of the story, but I was wrong. Whelan here has presented us with a virtual word picture of a group of intrepid glider pilots who challenged the forces of both nature and man.

In the beginning was an idea in the head of Victor Mead Saudek, a chance for him to make a little extra cash. In the end, there were world record setting flights (one still stands today), and an understanding of a meteorological phenomenon that had been largely ignored.

Inspired by the post-war Bishop, California flights of glider pilots Johnny Robinson, Paul MacCready, Bill Ivans, and Bob Symons (who soared a P-38 Lightning), Saudek conceived of the idea to explore the wave. What he found was that no one, not even the world's top meteorologists, knew what in the heck he was talking about. In fact the scientific community thought Saudek and his friends were lying.

Enlisting the aid of his fellow Southern California Soaring Association (SCSA) members, Saudek first tried to interest the US Navy and finally found backing from the US Air Force and the University of California at Los Angeles (UCLA). What resulted in the two years of the project was ground breaking atmospheric research that astounded the experts.

It also nearly killed Edgar and Dr. Joachim Kuettnner. In one flight, the two experienced a 7000 foot per minute (over 30 m/s) drop in less than 10 seconds! Later, Edgar had one of the war surplus Pratt-Read gliders used in the project break apart around him at 40,300 feet, under an estimated +12Gs and over 10,000 pounds of force.

The whole story, as put forth by Whelan, is nearly as engrossing and thrilling as an action/adventure novel without the love interest—although there was Betsy Woodward.

One thing I particularly liked was the way Whelan would profile certain individuals at the beginning of some chapters. In this way, we get to meet Dr. Joachim Kuettnner, Harland Ross, John Robinson, Larry Edgar, Bob Symons, Vic Saudek, Dr. Paul MacCready, Bill Ivans, Betsy Woodward, and others, explaining what each brought to the project. He continues on to explain the invaluable contribution each made to the project itself. Very well done.

I highly recommend this well written and easy to read paper bound book. 'Exploring the Monster' should easily find a place in any glider pilot's library. Whelan has certainly done his homework and gives us what is a long overdue account of the pioneering research into understanding the mountain (Moazagotl) wave and jet stream phenomena.

This book is available from the publisher at: Wind Canyon Books, PO Box 1445, Niceville, FL 32588. Phone: 800-952-

7007, Fax: 850-729-1112, email books@windcanyon.com

"Take Up Slack" A history of the London Gliding Club 1930 to 2000 by Edward Hull.

This 120 page softback is a gem. Ted has hit on a way of describing the history of the Dunstable club from its official inauguration in February 1930 mainly by means of a large number of short, one paragraph stories relevant to the period being discussed. This makes the whole book an enjoyable wallow in nostalgia, starting with the wonderful cover picture by Tony Hutching of Robin May forming his ASH 25 on Geoff Moore's SG38 Primary.

So many accounts of club life concentrate on the prime movers in the club, usually the Chairman or Secretary, but in this book Ted gives very many stories illustrating the well known fact which is often ignored, that a great deal of the work necessary to run a club is often done by unsung heroes. A lot of the "characters" in gliding clubs do not often get their names into print but they do here.

It might be thought that the London Gliding Club, with all that association with the capital means, would be one where paid employees do all the work. It is true that the LGC has employed people since the appointment in 1935 of world war one pilot Tim Hervey as CFI/Manager but an astonishing amount of work has been done by the members themselves including tree planting around the entrance area, building a workshop/garage and, of course, the award winning combined clubhouse and hangar was designed by Kit Nicholson. Before the advent of professionally built winches the club, like most, had to build their own and a series of ever better winches resulted. There are chapters on ghosts, field developments, the Test Group, aerobatic competitions, problems caused by the Airways, and even on the Vintage Glider Club.

The club fleet and most of the privately owned gliders are listed together with the Presidents, Chairmen and all the CFIs, Staff Instructors and Tug Pilots, Managers, and Gazette Editors. Oh, I nearly forgot, there are also 120 photographs and drawings.

All in all this is a very comprehensive view of the LGC and Ted is to be congratulated on the two years of research and dedication he has put into a wonderful book. *Graham Ferrier.*

Treat someone or yourself to this lovely book. It is published by Woodfield Publishing, Bognor Regis, West Sussex, PO21 5EL, UK, and is available from the London Gliding Club, Tring Road, Dunstable, Beds, LU6 2JP, UK. at £9.99 (plus £2.00 post & packing inland, £3.00 Europe and £5.00 USA, in Sterling cheques only made out to London Gliding Club.)

A PHOTOGRAPHIC RECORD of Hungarian Gliding from 1926 by Imre Mitter.

These are 446 of the best of Imre's collection of photographs arranged in chronological order. Many of those taken during wartime are in colour. The titles for the photographs are in Hungarian, but, as the photographs are numbered, it is possible to discover what the titles refer to in the back of the book where the titles are translated into English and German. Reproduction of the photographs is acceptable. Many German, Russian, Czech and Polish gliders are included because they took part in Hungarian gliding history. Also there are photos of the Hungarian heroes of the old days which include Lajos Rotter sen. Laszlo Taznadi and Robert Meray-Horvath. For those who are interested in Hungarian Gliding, this soft-back book is strongly recommended. Imre certainly

knows his subject and many of the photos are his own. He started gliding during the war and completed his GOLD C in 1952 flying an M.22. It was the 5th Gold C won in Hungary, although he had flown his 310.7 kms during July 1950. It seems that the Hungarian Gold C list only started from 1945 as those of Lajos Rotter, Tasnadi and Meray-Horvath are not listed. There had been one Gold C flown in 1942 and 3 flown in 1943. The book may be obtained from: Imre Mitter, Budapest X11, Rath György ut.171, Hungary 1122... and maybe later, from VGC Sales.

THE HISTORY OF GLIDING IN JAPAN by the late Prof.

Hiroshi Sato. Prof. Sato often attended the Rhön Contests in Germany during the 1930s and is known as the Father of Japanese Gliding. He designed many gliders in Japan before the second World War with the late Ken-ichi Maeda, who wrote the book we reviewed on Page 38 of VGC News No.97. Mr Ken Maeda, who is the son of the late Ken-ichi is, at time of writing, working to rebuild the "Asahi-shiki Komadorigata" primary glider. The type name in English means "Asahi Type Robin." He plans to bring this glider to the VGC Rally at Pavullo in Italy. It is a 1940 designed Primary Glider similar to an SG.38, and is illustrated on Page 208 of this history.

We must confess to a certain feeling of shock. Before, we had never seen a Japanese Gliding Book. Now, we have two! Unlike Mr Ken-ichi Maeda's book, it starts with page 1 at the front of the book in Western style and works through to the end. The sentences are horizontal working from right to left, as far as can be made out. It is illustrated with photographs of the gliders, pilots, designers and equipment etc. and, towards the end, there are 3-view drawings of Japanese gliders which include wartime military troop carrying gliders. The 3-view drawings in Prof. Sato's book have not the fine detail of those in Mr Maeda's book, but should nevertheless be of great interest to aeromodellers. The Japanese designs show generally great originality although there were perhaps three designs similar to the Grunau Baby.

Mr Maeda's book might be obtained by telephoning : 03 3262 6450, or by Faxing : 03 3262 7932. Prof.Sato's book might be obtained by telephoning : 092 (771) 0132. or by Faxing : 092 (771)2546. Its code is : ISBN 4-87415-272-4. Both are very well produced books and although few of us can understand Japanese, they should be of great interest to enthusiasts.

Flugzeugtypen. Aircraft profiles-Scale documentation for flying models. Vol 5, Sailplanes 2.

from Modellsport Verlag GMBH, D-7666530 Baden-Baden, Flössweg 1, Germany. Tel ++49-(0)7221/9521-0.

Types represented are: Rhönadler 35, Standard Libelle, Schleicher ASH26/26E, Glaser-Dirks DG200 & 202, FVA 10b Rheinland, Ka2b Rhönschwalbe, Schemp-Hirth Discus and Motor glider Grob G-109. The text is in really excellent English. The drawings are by Hans-Jürgen Fischer and are superb, as are the photographs which illustrate the text.

Edition (Band) No 1 which came out some time ago described the LY542K Stösser, Doppelraab 4, Gö 4, DFS Habicht, Ka6CR, Lo 100, DFS & FW Weihe, Rhönbussard, Schleicher Ka1 Rhönlous and Gö 1 Wolf. We assume and hope that this edition is still available.

Info Please

Mark Wakem has identified the Scud-like two seater in our last issue and says "Roy Scott part-built a machine and sold it to a group at North Walsham in Norfolk before he left East Anglia and started his main building activities (Scott Light Aircraft, Zander and Scott, etc) at Dunstable. There is a reference to this machine in Norman Ellison's book in the chapter on Glider Manufacturers and I also found it noted in the autobiographical preface to Scott's own booklet "Manual of Gliding, Design & Construction, specially prepared for the RAF & ATC": "The semi finished model on which I had been engaged was purchased by a North Walsham club and was never finished". Norman Ellison makes mention of the likeness to the Scud (1 & 2) which can be seen in the diamond-section fuselage. The interesting thing is that it looks fairly finished to me".

Ted Hull has had some correspondence with Wing Commander Ken Wallis who writes:

"There is no question that it is the glider I acquired in 1939 for the vast sum of 30 shillings! (£1.50) I bought it from Ken Brett, who was about the same age as myself, and who had been working for Humphrey Dimmock. As I recall it, Dimmock was managing the Electricity Company in Ely but had a field from which he flew a number of aircraft, including a Miles "Speed Six" and B.A.C. Drones. On at least one occasion he flew a Drone with Ken Brett standing with a foot either side of the cockpit to adjust the converted Douglas motorcycle engine in flight! I don't know whether Brett had tried the glider before I bought it. Like the Drones it had been fitted with a little wheel in the skid. I think Ken was about to be called up when he sold it to me but the construction seemed to me to be meticulous and it would have involved an immense amount of time and trouble, with all the repetition of making the ribs etc.

It came with a length of stranded towing cable & that has been useful for fence repairs & a host of other jobs right up to today!

I only tried the glider in straight hops along a field belonging to the Runciman family in Ely. I went to King's School with two of the brothers & they did the towing with the old Morris-Cowley car for which I had paid £2 on the understanding that the scrap dealer would give me 30 shillings for it when I had done with it.

Looking back I think the design of the glider was flawed, although it might have handled better two-up. I only tried it solo and the Cof G should have been OK. However, it lifted off at very low speed & there seemed to be virtually no rudder control. However there was lots of aileron drag and any attempt to lift a wing to level the glider resulted in a skidding flight which the rudder could not correct. In consequence I did some damage to the skid on landing from one of these very low hops. Admittedly, I was not very experienced in flying with only about 37 hours total time, on DH 60s, Moth "Minors" and BAC Drones at the time, but it did feel wrong. It might have been better "two-up" when a higher speed might have given the rudder more authority, but I would not be so keen to try it today.

When I had it I toyed with the idea of putting a little Villiers, or similar engine on each forward lift strut (shades of the Drone experience) but it was not long before my period of "Deferred Service" was up and I was soon flying Magisters at

EFTS at Woodley, near Reading. It was a great advantage to have an "A" licence.

For a while the glider languished, dismantled among the beams in the old barn at my father's Ely Cycle and Motor Works. Then I returned on leave, to be told that he had sent the glider and a Gnome-Rhone rotary engine I had also acquired to the scrap man! It may have been for the best. *Ken Wallis.*

Armed with this information Chris Wills telephoned Roy Scott to confirm that he was, indeed, the builder. Chris heard that Roy had designed and built the two-seater, on the lines of the Scud 2, in 1932 when he was only 19 years old and had sold it, uncovered, to the North Walsham club. Somehow it went through several hands until eventually bought by Ken Wallis in 1938 – and the rest of the story is as above. (A success for VGC News! Ed)

Chris thought that Roy Scott would welcome calls from members to talk about gliding. His address is 10 Highfield Rd, Corfe Mullen, Wimborne, Dorset, BH21 3PE and his telephone number is (Poole) 01202 693883.

I found this picture of this delightful biplane glider model in the VGC picture archives (a suitcase in my room!). Can anyone identify the glider and anything about it or better still, does anyone know the builder? (Ed)



In the last issue we asked Oly 463 owners if they would allow a member to have a good look at their glider in order to complete his large radio controlled model (colour scheme, instrument panel, external markings etc) but at that time I had mislaid his name. He is Mac Cowdray and his telephone number is 01225 761922.(Bath)

In the VGC News No 99 on Page 20, it was stated that the Elfe 2 and the Horten 4b were the first two sailplanes to use laminar flow profiles, and both crashed. We have now discovered from a new Japanese gliding book, that the Japanese used the laminar flow wing profiles NACA 64 series on two side by side seated two seaters in 1939, on one single seater in 1940 and on another single seater in 1945. The first British glider to employ such profiles was the Skylark 1 in 1953. So far as we knew, this was the first sailplane to successfully use the NACA series 6 profiles in the world. Chris Wills would be very glad to hear whether the four Japanese sailplanes with these profiles, were a success before this time.

Letters

From P.N.Tolson.

'In the last VGC News, Chris Wills mentioned in his column the need for a 'British' Gliding Museum. It has been a belief of mine that the UK should have a similar facility to those such as found in the USA, Germany and France. In communications with Chris it seemed the best approach was to try to form a group of people who may have an interest in trying to establish such a museum. Unfortunately Chris is busy with his work for the VGC and does not have the time to fully devote to such a project – so I have 'volunteered' to take this project on. I would be very interested to hear from anybody who may be interested in establishing such a group or with experience/knowledge in this area. I can be contacted by e-mail at oly2b@aol.com, phone/fax 01778 423283, or by mail at 4 Princes Court, Bourne, Lincolnshire, PE10 9BQ.'

(Perhaps the VGC could combine with an existing gliding club to share their field, hangar etc and thus have a permanent base somewhere in the centre of England. Ed)

From Glyn Fonteneau

'In the last VGC News (which is improving all the time) you asked for web sites. One I have been using for a long time now is the Flying Wing site, www.nurflugel.com. I have been building a flying wing glider recently which now flies very well, this was to give me experience so that I can build a scale flying wing of the Polish SZD Vampir. Drawings are completed so work can start soon. The site has some very good pictures of the Horten that was recently restored.' *(Let us have some pictures soon, Glyn, of this glider or any others. Ed)*



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Bungees. The Swiss Oldtimer Glider Club wishes to sell: 1 Glider Launching Rope (Bungee), complete with pulling ropes and Four 3/4" (19mm) diameter elastic ropes, each 23 metres long. Made up in the UK during 1994. Contact: Willi Fahrni, Sanatoriumstr.24, CH-8236 WALD, Switzerland. Fax: +41 55 246 52 20. The above information was received from Willi Schwarzenbach during the end of February 2000.

Kranich 2B-2 and its wooden trailer. The Kranich was built by Mraz in Bohemia in 1943 and it has been stored sheltered in its trailer, which itself has been covered in a shed. It is believed that the glider is still in good condition but still needs its canopy covering and its wings, tailplane, elevator and rudder fabric covered. Offers to : Mike Russell, The Old School, 80 Holt Road, Field Dalling, NR25 7LE. Tel: 01328-830518. (The Kranich 2b-2 is BGA 1147 and it was brought to England by the RAF from Germany, together with two others in 1963, for sale to civilians. It had been in RAF use since 1945. In Britain, it had the RAGSA No. 215.) Constructor's No. is 821. Although, we state above that it was built by Mraz, it is recorded as having been built by Schleichers in "British Gliders", the Merseyside Aviation Society Publication by Phil Butler. If this is so, this is another firm building Kranich 2s in Germany, which is not recorded by German wartime production, or planned production information which we have received.

EoN Olympia 2B BGA 1692, Works No.120, which was assembled in 1959. Its empty weight is 454 lbs. It will have a C of A but has no trailer. Offers to Martin Breen, The Old Post

Office, Amersham Road, Hazlemere, Bucks. HP 15 7PY. Tel: 01494-535005.

ZLIN 125 Sohaj registered in Belgium. It is a 15 metre span 1949 Czech sailplane with a max.L/D of 1:27. It is no relation to a Meise/Olympia. It has a broken canopy, the wings are in a bad state and it needs a complete restoration. Price: 20,000 Belgian fr. or 3,500 French fr. Offers to Henrard Firmin, rue de Porcheresse 11, 5361 Mohiville/Hamois, La Belgique.

He also has a Scheibe **Zugvogel 3B** 1964, immaculate, new fabric, well equipped with LX1000. Sold with aluminium trailer, Belgian C of A and registered. 240000Bfr or 400000FF.

Gliding Magazines: Gliding (5 editions, 1951-53 incomplete set); Sailplane & Gliding, small format (54 editions 1959-73 incomplete set); Sailplane & Gliding, large format (42 editions 1978-95 incomplete set); Soaring, from USA (185 editions 1980-95 complete set). For full listing or offers phone or e-mail Pete Harmer 01276 31971 or jillandpete@harmer-tomh.freemove.co.uk

EoN Olympia built in 1949. Owned by Royal Verviers Aviation. Ready to fly and located on the private airfield of Theux-Verviers, Belgium. This glider is no longer of interest to the older pilots and the club is too respectful of the Oly to allow the young ones to fly it. It was towed across the Channel by a 65HP Piper Cub. Paul Bourgard Tel Belgium 32 87 52 4

KA6CR First flight 1959. Radio, electrical vario & usual instruments. Time expired parachute. Glass fibre trailer. Glider owned by professional aircraft repairer who lacks the time to fly this glider which might need some work. DM8500. Contact Werner Brombacher. Tel Germany 07721 26842 or 07702 5480. Fax 07721 28760

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Production figures for the Mü 17 which were built by the Flugtechnische Fertigungsgemeinschaft Prag during wartime. This information will be most gratefully received by C.Wills, "Wings", The Street, Ewelme, Oxon OX10 6HQ, England. Tel: 01491-839245. Fax. 01491-825121.

Front Cover. *Heinrich Bauer's Bergfalke D-1167 starting a winch launch at Tondern last year*

Rear Cover. *Hütter 28-3 homebuilt by the late Earl Duffin seen flying at Oberschleissheim*

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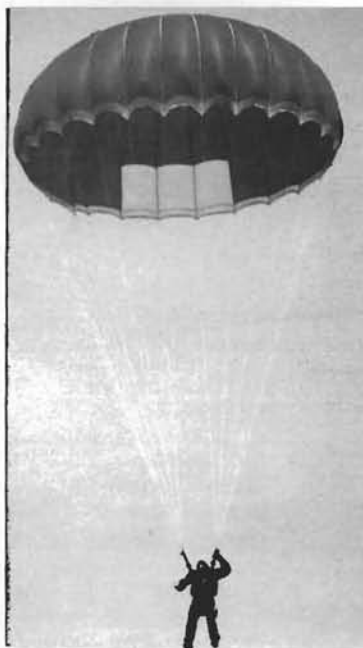
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