



VGC News

No. 80 Winter 1993/4





Aviation Ltd.

"You can bank on us"

THE NEW XK10 "CLUB" VARIOMETER

The latest state of the art digital circuit. Flaskless variometer, with a sine wave audio that codes value of climb rate, built in electronic gust filter. Standard meter size. £239.00, with 60mm repeater meter £319.00. (Plug in 60mm "dedicated" LCD display averager available late 1993.)

GLIDER ELECTRONICS

T/S Inverter "High Tech Model", 12V in - 24, 26, 28V out £22.90.

INSTRUMENTS

Latest zero resettable PZL Sensitive Variometers complete with speed to fly ring and flask. Standard size £169, Miniature £199. PZL expanded scale sensitive ASI 0-140 kts in 1½ turns or 0-200 kts in 1½ turns £97. PZL TE Compensator £25.90, Stainless Steel Total Energy Probes £18.60, Reconditioned Sensitive Altimeters 30,000' £157. New IFR 20,000 Altimeters £159.90. Surplus T/Slips, Glider Rate, with 12v Converter £109.00. Reconditioned 12V T/Slips £144. New Miniature 60ma low power consumption 12V PZL Turn & Slip £259. Reconditioned Bendix 3¼" Artificial Horizons with adjustable pitch datum and new inverter £349. Airpath Panel Mount Compasses reconditioned £43, new £48.90. New IFR Pedestal Mount Compasses £64. Ex Ministry Accelerometers Standard Size £82, New IFR Mini Accelerometers £169.00.

RADIOS (ICOM SPECIAL OFFER)

ICOM A2 Tx/Rx. £277.90, ICOM A20 Mk 2 Tx/Rx + VOR £339.90, Inc. charger, nicads and accessories. Delcom 960 £199.00, Panel Mounting £36.00.

NEW PARACHUTES

SK94 - latest state of the art, 24 gore, large canopy, two pin release, soft comfortable back pack parachute. Rapid opening with low descent rate, steerable, 20 year life. Complete with adjustable Lumbar Support, Transport Bag and Manual. £450.

AIRFRAME SPARES

Cadet, Tutor, Sedbergh, Prefect, T.31, Grasshopper, Swallow.

ASH SKIDS

K-7, K-13E and OLY 2B, from £69.

OTTIFUR RELEASES

"Ottifur" re-condition service £46.00.

TRAILERS

Superior well engineered metal trailers for the discerning glider owner. POA.

GLIDERS

*SZD-51-1 Junior \$28,850

*SZD-50-3 Puchacz \$42,000

*SZD-55 \$45,850

*SZD-48 Jantar 3 \$32,250

*New gliders in conjunction with Anglo Polish Sailplanes Ltd. Prices subject to revision.

Prices shown exclude VAT and carriage.

COLIN D. STREET

"Yewdown House", 7 Sharphorne Close, Ifield, Crawley, Sussex, RH11 0LU.

Tel: 0293 543832, FAX 0293 513819 24hrs



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

President - Chris Wills

Vice Presidents:

Hans Dijkstra (Netherlands)

Willie Scharzenbach (Switzerland)

Paul Serries (Germany)

Committee:

David Shrimpton - Chairman

Robin Traves - Secretary

Geoff Moore - Treasurer

Mike Birch - Technical Officer

Jane Ballard - Rally Secretary

Colin Anson - Sales Officer

Colin Street - Council Member

Graham Saw - Advertising

Neill Rush - Editor

International:

Belgium - Firmin Henrard

Czech Rep - Jaroslava Hanackova

France - Didier Fulchiron

Germany - Jurg Ziller

Hungary - Imre Mitter

USA - Jan Scott

VGC News

No. 80 Winter 1993/4

Contents

Reports from the Committee	1
21st International Rally	3
OldTimers – First Timers	6
Rallies	10
International News:	
British – Wasserkuppe	12
Brooklands	13
‘New’ Machines	13
Scud Flies	14
Dutch	15
Eire	15
French	15
German	15
Swedish	18
Models – Zurvogel Details	18
Letters from members:	
Flying the XLNE-1	19
Petrel Lament	19
Hamsey Green Remembered	22
Obituries	
Bjarne Reier	22
Reimar Horten	23
Pegasus 2 Test	25
Christmas Cards	26
Prizes	27
Classified advertisements	28

Photo Captions:

Front: Chris Wills' Rhönbussard BGA 337 in flight

Rear Cover: Bunjee launching on the Wasserkuppe – SG38

Inside Rear Cover: The LF-109 Pionyr. The prototype of the Czech training two seater had its first flight in 1950. The factory of LET at Kunovice built 205 Pionyr. The factory of Orlican at Chocen (formerly Mraz at Chotzen) built 250 Pionyr. Later in 1957, the Kazan Aviation Institute (KAI) redesigned it with metal wings and tailplane. It became known in the Soviet Union as the KAI 12 Primorets and 800 were built in 1957. It was designed by Vladimir Stros assisted by Karel Dlouhy (who later designed the Blanik) and Ing Jiri Matejcek who later designed the Orlik, the motor glider M.17 but made his name with the LF 107 Lunak, before working on the Pionyr. Examples of the Pionyr went to Austria and Hungary. Its performance figures are Max. L/D 11/18.5, Min. Sink: 62kms/hr. 1.07 m/sec. at 62 kph. Max. Never Exceed speed 220 kph. Landing speed 52 kph. Unladen weight: 235 kgs. Wing Loading: 20 kgs/sq.m.

We were glad to have an excellently restored Pionyr at our Zbraslavice International Rally.



FROM THE CHAIRMAN

Once again it is a pleasure to be able to report that the International Rally at Zbraslavice in the Czech Republic was a huge success. I would like to add my thanks to those already expressed by others to the organisers for making the facilities available and to the helpers for making it all possible and most enjoyable.

We discovered that the Czech language is quite difficult to grasp, even for our Continental friends, but having learned the fundamentals such as 'prosim and dekuji' (please and thank you), problems soon evaporated as we managed to communicate by one means or another.

The rally started with a formal welcome and the 'blessing' of a vintage glider by a representative of the local church. Where I fly from, our gliders are more likely to be 'cursed' by the locals. The thought crossed my mind that the 'incantation' rendered by this local gentleman could be some form of alternative to the C of A. The vintage glider, a Lunak, certainly performed impressively thereafter!

The most popular 'out and returns' were to the ancient city of Kutna Hora, the beautiful city of Prague and the nearby Bohemian glass factory. A visit to the Blanik factory 300 kms south of Zbraslavice also proved very interesting.

Most of these sorties were made either by car or coach, although an Antonov biplane was organised to carry those who wanted to visit the Air Museum in Prague. With the flat countryside and warm weather providing the only enticement needed, bicycle rides proved a pleasant and easy attraction.

The choice of goods and souvenirs available in the Czech shops was excellent. Reports of gliders having to be left behind to make way for artifacts being taken home may have been unfounded, however several glider trailers did appear to be negotiating the roads very carefully on the journey home. To avoid breaking the Bohemian glass perhaps?

There were some emotional partings with our new found friends when the rally finally ended, but those of us who often attend the 'International' know that there is every chance we could all meet up again someday. I know that many of our members would like to return to the Czech Republic again.

And now, welcome to two new committee members, Mike Birch and Graham Saw. Mike takes over from Ian Smith as Technical Officer, whilst Graham adds his talents where needed. They, incidentally, bring the committee up to full strength.

A very emotive subject at the moment is the high cost of insuring our gliders and equipment. During a recent discussion it was said that the purchase of a vintage glider frequently resulted in inheriting an old trailer, equipment or parachute in

suspect condition. Indeed the glider itself could be in dubious condition. If this really were true, then classifying VGC members as a high insurance risk would undoubtedly be valid.

However, I believe that the majority of VGC members are very conscientious in the upkeep of their gliders and equipment. The evidence, when one looks around at our rallies, certainly confirms this. Many of our gliders are as good today as when they first left the factory. Surely we deserve lower insurance premiums for our types of glider, reflecting the careful way in which we maintain, operate and fly them?

Those who own more than one glider would also appreciate a scheme whereby they only pay for the periods which they fly each glider; such schemes already exist for aeroplane collectors. Some of our members are even looking at insuring their gliders abroad in order to cut costs.

In view of the present climate of ever 'soaring' insurance premiums the Committee now feels that it should look into the question of insurance costs on behalf of members and at least be able to advise what terms are available and where.

Finally, since Christmas will be upon us by the time this magazine is published, I would like to take this opportunity on behalf of the Committee, to wish you all, enjoyable celebrations and a happy and prosperous New Year.

David Shrimpton – Chairman.

TREASURER'S NEWS

It has been decided to increase subscriptions from January 1994 due to increased cost of postage and printing of the VGC News. Our aim is always to keep costs as low as possible to members, the last increase was some five years ago. You will all agree our VGC News is getting better and better with each edition and growing in size with coloured pictures. News items, stories and pictures are always welcomed to print, it is your magazine so keep them coming in. The new subscriptions for next January will be UK £12.00, Europe £14.00, Rest of World £16.00. Renewal forms are in this issue and will be included with a mailing in January 1994.

FROM THE EDITOR

When I stand back and look at the Vintage Glider Club and all that it stands for I cannot help wondering why there has been no serious attempt to record the histories of the individual gliders. Nothing has been written to detail the machines that were impressed into service during the war and nothing about the individual ATC Gliding schools that were formed from 1942.

This then is my area of research, my aim is to compile as much information on the pre-war gliders, their owners, and their wartime history and eventual fates.

Documents have disappeared as years went by. The report by Flt. Lt. 'Dougie' Davie, who was requested by the Air Ministry to conduct a survey on suitable gliders to be requisitioned for the ATC, seems to have vanished. In February 1944, the BGA requested in S & G that people inform them of the whereabouts of all gliders in the UK. This too, is no longer to be found.

Research, and the help of members of the VGC and various museums, has turned up much information on the Slingsby T.6 Kite histories. All we are lacking now is the details of ATC use between 1942 and 1947. After all this was the first mass-produced sailplane before the war (all 25 of them!). I doubt if we will ever solve the histories of the Primary Gliders but what about the Falcon 1, 2 and 4, T.5 Grunau Baby and all the other British pre-war types?

If any VGC member (or anybody) has any details will they

please write to me because if we do not make a serious attempt to do this now, we never will.

A couple of things I do need help on at the moment are: Any information on 22GS at Kirkbymoorside and subsequent bases from 1942 to 1955, and absolutely anything on the Welsh Gliding Schools for the same period (61GS – 74GS).

Apart from all this, I was pleased to be asked to become the Editor of VGC News recently, but you must forgive any errors in this issue as the lead time was a bit short and I had to master this computer in only a week or so. My thanks must go to our Chairman for his help over the first few weeks and to Margaret for bothering her with phone calls pleading stupidity.

Will all members please note that the copy deadline for the next issue must be January 1st 1994 to give us some hope of getting the next magazine out for March.

JANE BALLARD recently contacted me and requested that anybody who is thinking of organising a rally or meeting for next year please contact her with details on (0256) 389553.

Neill Rush – Editor.

FROM THE PRESIDENT

1993 has been another year of steady progress with no major set-backs. Although the weather has been sometimes good, the year will again be remembered for restorations and aircraft built new to the old drawings. In Britain, Eon Olympia, Krajaneck, Weihe, Swallow, Scud 3, have been made airworthy, and Hütter H.28-3 and Penrose Pegasus 2 have been built new. All have successfully flown. Two people who have held their gliders in store for years, have sold them to restorers. There are now not many left held in store in Britain.

England's first Glider Museum has been started and has created a good impression among the public, more than 40,000 visitors having seen it. We thank the new Brooklands Museum for allowing this to happen, and Mike Beach for creating the exhibits. In Britain, future restorations have been started or are about to be started. These include: Scud 1, Petrel, Kite 2, Grunau Baby 2B's, Minimoa, Cadet, Kite 2 etc. Some of these should be ready to fly next summer.

For our International Rally, our 21st, we have broken new ground, having for the first time been to the Czech Republic. As was hoped for, the weather was good and most participants had good flying over a beautiful countryside, and we were among friendly people. It is a bit early to know whether we have kindled a lasting flame for our movement in the Czech Republic, but we were astounded to have with us no less than four perfectly restored Czech sailplanes, from the first wave of Czech sailplanes designed and built after 1945. There was one other that looked likely to be restored. This seems to be an auspicious omen as we have only had the Czechs with us for three years, although Josef Fecko from Slovakia has been with us longer.

There are also exciting stirrings from Germany, Holland, France, Sweden and Switzerland, and from other countries.

What of the future? Our 22nd International Rally is to be held at Lasham next August, and the Rendezvous Rally held at the London Gliding Club with its magnificent slope. We thank both Lasham and the LGC for being prepared to have us for our 21st year of operation as a club. Members who are working on projects in this country, can use this as a goal to aim for. Our continued (slight) problem is that some of our members own more than one vintage glider and it might not be possible to get them all to an International Rally at any one time and then to keep control over who flies them. We got away with

this problem at Zbraslavice with the British gliders. However, I am sure that just the sailplanes they do manage to bring, will make a major impression on the world's vintage glider scene, especially as many of them will have never been seen before. (One way to solve this problem might be for them to bring half of their gliders to the Rendezvous Rally, and the other half of them to the Lasham International Rally!)

We are, I am very pleased to note, restoring our vintage gliders more and more to their original conditions and I think that most of them look more beautiful like that. Moreover, they create an old time atmosphere. I have to admit that I thought that the Belgian Nord 2000 Meise created a nostalgic impression of times long ago. I know that no Meise Olympias were ever finished like that ... except the first British Olympia, which was owned by the unforgettable Dudley Hiscox of the LGC Dunstable.

Will there be a breed of young heroes ready to bear our flag and our gliders triumphantly forward in to the next century? Our vintage gliders can survive now ... but what of the future? However, today is today, and we have a glorious climate for us and our projects. All is made possible by the enlightened attitude towards us and our gliders created by the BGA and its Chief Inspector, Dick Stratton. In such an environment our movement has every encouragement to thrive. The situation is so sympathetic towards us and our aircraft in Britain that we have members coming to us from the United Europe begging to be allowed to build a vintage glider under the British system as they believe they would have problems in their own countries. We must 'Make hay while the sun shines' and we hope that the gliding world will remember us ... and our gliders, and look after them when we are gone.

The final question is why we do it? We do it because we want to and our sort of gliding is clearly cheaper than the new gliding. I believe that we all are being given unique flying experiences by our vintage gliders every time we fly them. How good some of them are has never ceased to amaze us. I was lucky enough this year to be allowed to fly a 1927 Lippisch designed glider and I could not believe just how good it was for one created so long ago.

Lastly, I believe that our gliders have been contributing something constructive to gliding in general. We noticed how slowly the Ulf's were flying from the Wasserkuppe last August. Our lightest gliders are perhaps showing the microlight gliders the way forwards, by giving them more speed with our faster wing sections. Our heaviest gliders with their Göttingen wing profiles, seem to be able to compete with all wooden sailplanes even if they should have laminar wing profiles. This means that some of the pre-1945 sailplanes are far better than they were originally thought to be. The post-1951 designs, still with the old profiles, but with higher wing loadings, go even faster and really will compete with wooden laminar flow profiled wooden sailplanes as well as with some of the fibreglass ones. But for us, this might never have been discovered. We perhaps should not compete with any of them on account of the ages of some of our aircraft. We should just have fun ... but to do an occasional cross-country, preferably out and back, does lead to adventure, and, we hope satisfaction. Our 12 m span gliders may be going to knock on the door of the new World Class 12 metre sailplanes. Our modified 15 metre sailplanes would probably give a Skylark 2 or KA 6 a hard time. It is sad that when our old gliders were new they just could not have had these modifications, for they then would have been the best in the world. However, our club is really all about bringing back the genuine old gliders to see what they have to offer. For when

they were new, conditions were not sometimes ideal for their exploitation. The 1921 Vampyr may be one of them, and we have its drawings. The drawings of the famous Moazagotl have also been found but I can't believe that this would ever be a pleasure to fly. One never knows, for this aircraft actually came second in the first World Gliding Championships on the Wasserkuppe in 1937. Our club is interesting because it has so many different gliders of different ages in it. Some may be modified, some not, but they will all have something to tell us and something to give us. We are very privileged, because of the free conditions which the BGA has allowed us, to be in a position to be able to share their innermost secrets and their qualities. Our members have often been setting other club members a good example by working on gliders and equipment whenever possible, sometimes in the most primitive conditions. Other clubs often value our members.

Generally we have a lot of different activities which contribute to the many coloured tapestry which is the VGC. Within our club, there are many sub movements led by individuals with different temperaments, and we are the richer for it. That we all belong to one VGC, within which there are many different nationalities, means that the greatest achievement is that we are together in spite of everything, and the love of old gliders is keeping us together. Long may this remain so.

THE 21st INTERNATIONAL VINTAGE GLIDER RALLY at ZBRASLAVICE in the Czech Republic from the 4th-15th August 1993.

For those who had been at the Wasserkuppe, the transference by the southerly route took 10 hours of non-stop driving, except for the halt at the frontier. In spite of the most gloomy predictions, crossing the frontier at Chleb went off without problems. Chleb airfield was where Willy Watt had landed a King Kite after his most brilliant flight (for much of the time in cloud) during the 1937 Wasserkuppe International Contest. It was 111 miles from the Wasserkuppe in a straight line. Our journey by road felt more like 200 miles. Nevertheless the weather was as brilliant, as it had been during our last two days on the Wasserkuppe, and the general feeling was that at last we had escaped from the Atlantic climate.

The Czech countryside was unlike any that we had experienced before. Here were small lakes, woods and fields and hills in a sparkling tapestry of sun-scape that seemed to wish to bubble in mirth like strong Bohemian Sekt.

The number of small lakes on seemingly high ground gave the impression that water from many springs was exploding from the ground. There were high hills well above the rolling countryside that would be good gliding sites, such as Rana, the Czech Wasserkuppe. Peter Riedel, flying for German Lufthansa, used to regularly fly his Junkers F.4 over the mountain in 1934, flying from Chemnitz to Prague. If he had no passengers aboard, he would circuit the beautiful mountain waving his wings to the inhabitants of a small town, as the mountain lay on the frontier between German speakers and Czech speakers. Those were happy times. Rana had been a gliding site since 1932 and was used by both Czechs and Germans.

Soon Prague was circumnavigated and we came by a good road to a point near Zbraslavice, whereupon the road became not so good. Most of us got there without problems but we do not know what happened to Dominique Hagenauer and his A.V.36 from Pont Saint Vincent near Nancy. We thought that he should have been there and we hope that nothing bad had happened to him and his flying wing.

On our arrival at the airfield, the warmth of our welcome was only matched by the warmth of the weather that was still perfect. Much beer flowed. The problems that the Rally office had were tremendous. They were eventually all solved. We can only marvel at the patience of everyone concerned, especially those who worked ceaselessly for long hours in the office, with the help of a computer that sometimes did not function very quickly. The office was at the airfield's entrance, near which there was a Mig (21?) gate guardian. We sympathize with the Czech organization in this office. They always said, in spite of all problems ... that they did not matter as they liked us.

Among the incredible problems was that the Czech Republic had just revalued its currency. So that, whereas before we

had been told to pay for everything only in D-Marks, now we would have to pay for everything in beautiful new Czech Koruns. This disturbed many of us as we had only brought D-Marks. However, a bank was set up in an office so that we could change our money (again). However, thank goodness, we were finally allowed to pay in D-Marks as every time we changed money we lost 10% of its value. On Wednesday, August 4, the Official Opening Ceremony took place before the National flags of all the participants.

Among the important people present was the Czech Republic's Minister for Economy. A band played and a priest christened the gliders newly and beautifully restored by the Zbraslavice Aero Club Lunak.



The man, the machine, the models – Mike Birch and his Krajanek.

1	Schleicher KA-2	HB-274.	Switzerland – Willi Fahmi.
2	Bergfalke 2/55	HB-690.	Switzerland – Willi Fahmi.
3	KA-4 Rhoenlerche	PH-247	Netherlands – George Slot.
4	Goe 1 Wolf	D-9026	Germany – Otto Grau.
5	Grunau Baby 2B-2	D-3856	Germany – Markus Lemmer.
6	L-Spatz 55	HB-732	Switzerland – Jurg Waelti.
7	Rhönbussard	OO-ZVO	Belgium – Firmin Henrard.
8	Spyr 5	HB-369	Switzerland. – Werner Roth.
9	Spalinger S.19	HB-225	Switzerland – Hansueli Renz.
10	Rhönbussard	BGA 337	U.K. – Chris Wills.
11	T.31b	BGA 3229	U.K. – Ian Smith.
12	Prefect	PH-192	Netherlands – E.J.Vermeer.
13	T.31b	BGA 1346	U.K. – Colin Anson.
14	DFS Meise	D-1420	Germany – Jorg Ziller.
15	Nord N.2000	00-ZHQ	Belgium – Hullpe Coffaux.

16	Hütter H.17a	BGA 490	U.K. – Nick Newton.
17	Kranich 2B-1(Swedish)	BGA 964	U.K. – P. Chamberlain.
18	Zlin 25 Sohaj	D-8857	Germany. – Jurgen Alliger.
19	Spalinger S.18-2	HB-411	Switzerland – W. Schwarzenbach.
20	Nord 1300	HB-348	Switzerland – P-A. Ruffieux.
21	KA-6B	PH-851	Netherlands – A de Keeuw.
22	Bergfalke 2/55	N 70160	USA – Jan Scott.
23	JS Weihe (Swedish)	BGA 1093	U.K. – Keith Green.
24	Zlin 24 KrajaneK	BGA 655	U.K. – Mike Birch.
25	Condor 4	BGA 2292	U.K. – Mike Birch.
26	Tutor	BGA 485	U.K. – M.W.Jones.
27	Specht	OO-ZCN	Belgium. – R.d'Huart.
28	Grunau Baby 2B	PH-214	Netherlands. – Neelco Osinga.
29	Grunau Baby 2	HB-234	Switzerland. – Jacques Beguin.
30	Grunau Baby 2B-2	PH-801	Netherlands – Peter Deege.
31	Cumulus 3F	D-6059	Germany – C.Kroll.
32	Castel C.25S	F-CRML	France – J.J.Valere.
33	Habicht-E	D-8002	Germany – K.H.Kellermann.
34	T.31b	FDQ	Netherlands – Jan Foerster.
35	VT 425 Sohaj 3	OK-5988	Czech Republic – J.Krumpolc.
36	King Kite	BGA 2769	U.K. – David Jones.
37	Nord N.1300	F-CRGN	France – D.Fulchiron.
38	Spalinger S.18-3.	HB-458	Switzerland. – P.Egger.
39	Grunau Baby 2B	PH-212	Netherlands – J.Visser.
40	LF-107 Lunak	OK-0927	Czech Rep. – Aeroclub Zbraslavice.
41	Goevier 2	D-1080	Germany – Ingo Tegen.
42	Goevier-3	PH-206	Netherlands – C. van Beugen.
43	LF-109 Pionyr	OK-	Czech Republic – Pavel Bula.
44	Orlik I	OK-2923	Czech Republic
45	Ka-1	D-1484	Germany – J. Doppelbauer.
46	Castel C301	F-CRBJ	France – Maurice Renard.



International flavour, Rhönlerche PH247 with Bergfalke HB690.

There were speeches by many others including Vladimír Morava, the chief organiser of the rally. Chris Wills then made a speech in Czech, German, Dutch, French and English (he hoped it was not Double Dutch!) and rang the bell to officially open our 21st International Rally.

It had been a brilliant opening ceremony and the official guests were then entertained to a light meal and a drink.

Then followed the rigging of the gliders to take advantage of the fine weather. But, wait for it, a front started to arrive from England. We were not even safe from the Atlantic weather here, 1,000 miles from the sea! Both the Swiss Spalinger S.19 and Bergfalke were landed out because of rain due to the front.

There was a stampede to try to get our rigged gliders into the hangar out of the rain. Desperate attempts were then made to dry them. Those in the hangar staked claims for future hangar space which lasted for the rest of the Rally. At this time it was possible to take note of the gliders and their participating owners. Many that there were listed had failed to arrive, so the rally was not as large as we thought it was going to be. The participants are not listed as representatives of nations, but as if we were one, at last, united family. Such is the spirit of the new time.

THE MACHINES THAT WERE AT OUR INTERNATIONAL RALLY FOR THE FIRST TIME

Firstly, there were the Czech sailplanes. It was incredible that the rally organization encompassed the arrival on the airfield of four perfectly restored Czech sailplanes. As they were all the same colour and restored to the same standard of excellence, it is tempting to imagine that they were all restored at the same place. This was not so. The LF-107 LUNAK was the result of many months of restoration work by some members of the Aero Club Zbraslavice. Its paint-work, resembling training yellow, was shiny, whereas the originals in 1949 could have been matt. This superb Lunak was not cleared for aerobatics and had a somewhat limited never-exceed speed to that which it had when new (400 kph!!!).

The PIONYR. This was also restored excellently and arrived at the rally on, or in, a covered lorry (in best Soviet fashion). This is a tandem two-seat training sailplane with fabric-covered steel tube fuselage and wooden wings. The same type was built under licence in the Soviet Union as the Primoret. We imagine that it was a good trainer, with fine soaring capability and that it was cheap to build.

The ZLIN 25 SOHAJ. This is a 15 metre span shoulder wing high performance sailplane built after 1947. With such a wing profile, it must be fast. The one at the rally with German registration had arrived in the US Zone of Germany in 1950, being flown by an escaping Czech officer. Its max. L/D is 1:27 at 75 kph. After release by the Americans in 1951, it obtained an LBA C of A, which it has had ever since. It is of all-wood construction.

The ORLIK 1. This has also been superbly restored and is now the last airworthy Orlik in Czechoslovakia. The type was designed in 1962 and has wooden laminar flow sectioned wings. Much thought was given to ease of rigging and derigging and cheapness of construction, especially for its laminar profiled wings. The type was mass produced in two versions for all Czech glider pilots to fly in one-type contests. They all recently have been banned from flying because of glue used in its plywood skin. One is flying in Germany with an LBA Certificate of Airworthiness after its plywood glue had been subjected to tests, which proved it satisfactory. Because this

Orlik 1 is now airworthy in the Czech Republic, we suppose that others may be going to be restored to fly.

The LG-30 KMOTR. This aircraft was not airworthy and money is needed for its restoration. It belongs to a museum. This aircraft is a side-by-side two-seater designed shortly after the war (1947?) and was clearly inspired by the Gövier. The Gövier design was much simplified with no Huetter wing fuselage transition fairings, and a larger cockpit (as no longer were the pilots' outer arms supposed to fit in to the wing roots, as in the Gövier). A different faster wing profile had been chosen and the Gövier's wing had been simplified with parallel chord centre section and outer sections tapering at a constant rate which encompassed the ailerons also. Clearly, it was now possible to move the pilots' seats to correct centre of gravity, which was not possible with immobile pilots with their elbows in the wing roots of the Göviers. However, it might still be possible to mistake this aircraft from a distance for a Gövier with modified wings. The KMOTR at Zbraslavice seemed well worth restoring.

Zlin Z.24 KRAJANEK. This restoration was the result of work carried on almost to the last minute before leaving for the Wasserkuppe and Zbraslavice by Mike Birch and helpers at Wycombe Air Park. The type was one of those of the above described types, which was to replace the large number of German sailplanes on Czech airfields after 1945, and thus helped to complete the first generation of post war Czech sailplanes on display at Zbraslavice. The communists encouraged Czech glider pilots to destroy the 1930's designed German sailplanes, as they would now be given new, faster and better sailplanes. Thus the KrajaneK was to replace the Grunau Baby 2b's and the Sohaj and Lunak were to be small, fast sailplanes to give the new pilots cross country experience, and, in the Lunak's case, also aerobatics. The Communists would give suitable young pilots free glider training so that they could be used for military, or agricultural, or airliner flying. However, if the young pilot did anything wrong, the communists had the power to take gliding away from him. Gliding for older pilots, unless they could be used for instructors, was not possible, as available funds had to be channelled into the youth so that could serve their Motherland.

Mike Birch's KrajaneK had been restored in the colours and markings in which it arrived in England, after Ladislav Marmol had bought it from the Brussels show in 1947. In 1949 Marmol had then flown the still existing single seat duration record of over 33 hours in it, over the slope at Dunstable. It is now the last KrajaneK airworthy in the world and is a triumph of perfect restoration.

JS WEIHE, BGA 1093. This is the result of many years' restoration by Andrew Coates in England. It has since been again restored by Keith Green at Lasham. It was the last built of Licence built JS Weihe in Sweden. It was finished in 1950 several years after the others and was hired to Paul MacCready of the USA to fly in the 1950 World gliding Championships at Orebro in Sweden. Paul MacCready flew it with such skill that he was in the contest until the last day, when he was only beaten by the Swedish pilot Billy Nilson who knew the country. Nilson's flight in a Weihe on the last day was 428 kms! MacCready's flight was 342 kms which was no mean feat over country which had almost no outlanding possibilities. So this too is also a very famous sailplane. There is no news of Nilson's Weihe which is believed to be languishing somewhere in the USA with no-one knowing what it has done. Actually, it won two World Championships ... that of 1948 in Switzerland as well. The final restoration of BGA 1093 (ex-SE-SHU) has

now made it in to a thoroughly airworthy aircraft worthy of the high standards of Lasham maintenance. With its new trailer, it should last for ever. At Zbraslavice, it was always aerotowed off its skid as its original Swedish wheels are rather large.

The HÜTTER H.17A BGA 490. This aircraft was built in 1947 by the late Don Campbell, the gliding doctor, using British plans which considerably modified the original 1934 design. These modifications included a longer cockpit for the tallest pilots and long-span ailerons, which as they are slotted as per the original design, give extremely sensitive aileron control. Actually, they almost give it a flick-roll capability like those of a Zlin 526. This H.17A weighs 230 lbs empty which is 60 lbs heavier than those two H.17 which have recently been built by John Lee. This means that the little sailplane is so well designed that it still flies very well with a 33¹/₃rd increase in empty weight. Normally, the H.17a can weigh less, or the same weight as its pilot. BGA 490 will soar very well in thermals when flown by a competent pilot at an airspeed of little over 30 knots. The 60 lb lighter versions fly in thermals at the same speed. Horizontal capability is clearly limited but it sometimes surprises everyone with what it can do. BGA 490 was restored by Southdown Aero Services about 15 years ago and it is still in perfect condition. Its last owner never flew it and stored it in his garage near Sutton Bank.

The KAISER KA-1. This small sailplane was the first design by Rudolf Kaiser after 1951, when gliding was again allowed in Germany. D-1484 is the result of Jurgen Doppelbauer building it new, much more recently. The little aircraft looks like the result of trying to create a high performance H.17 as it weighs about the same as the former. Kaiser used the fast Göttingen 549 wing profile on small span, parallel chord, strutted, wooden wings. The fuselage is of semi-monococque wooden construction. It was felt after 1953 that amateur builders might have trouble skinning the semi-monococque fuselage with plywood, and so a fabric covered steel tube fuselage was designed for it. Thus was created the Ka-3. It looks like the project for an aeromodeller, or for someone who has only a small garage for a workshop, and can not rely on large numbers of helpers for rigging, as were generally available in pre 1945 Germany, and much more recently in Communist countries. D-1484 is the result of many hours of patient work and we hope that Jurgen will have much pleasure with it in the air.

THURSDAY, August 5. There was rain and too strong a wind except for the American Bergfalke and the German Steinadler. Chris Wills wondered how far we would still have to go East to escape the Atlantic climate. We had a Ukrainian with us but he failed to make contact with Chris. Perhaps the Ukraine would be far enough? However, the weather was about to change for the better and the Atlantic weather just managed to peter out before it got to us, or miss us altogether, for the rest of the rally.

FRIDAY, August 6. This brought us the International Evening which was, as usual, a roaring success. There had been good weather during the day and the Steinadler had flown 3 hours 7 minutes from a winch launch. Its owner and pilot Jochen Kruse got a prize for Friday's best flight in thermals. Poor Vladimir Morava had had to motor 500 kms just to give us light for the International Evening. Such was one of the trials for our chief organiser. There had been a problem taking off in a fresh cross wind on short tow ropes behind the 330 hp Russian-engined Brigadyr and Cmelak and the overpowered aerobatic Zlin 526. The combination of the cross-wind and propeller wash created ideal conditions for ground loops. The Kranich 2, with its jettisonable undercarriage, ground looped

strongly to the left and broke its skid. Chris Wills in his Rhönbussard was the next to ground loop behind the Zlin but did not lose his skid. He was ensured that the "Yellow Monster", the Cmelak, would be more gentle. This was true. The Czechs said that they could not lengthen the tow ropes but the powerful aeroplanes would open up their engines gently and then reduce power. This worked and there were no more ground loops.

SATURDAY, 7th August. The weather was excellent with expected 10–12 metre per second thermals. Radio flying scale model sailplanes would be exhibited in the air and on the ground to the right of the runway in use during the afternoon and evening. There had been small clouds in the morning but later it became clear. Inversion was first at 4,000 ft but this went to 6,000 ft later. The Rhönbussard BGA 337 climbed to 4,600 ft above site in blue thermals, but failed to do the short prescribed out and return task to Kutna Hora. The Czech vintage sailplanes Orlik 1, Sohaj and Lunak all flew. Seven vintage gliders at least were sharing a massive area of lift over Zbraslavice airfield at between 5 and 6 o'clock. Marcus Lemmer gave us an aerobatic display in the Habicht in the evening. The longest duration flight of the day had been 7 hours 42 minutes by Werner Tschorn in his Weihe 50. The model gliders were really something with two Weihe's, one Meise, one Minimoa and as many as three Krajaneks etc. In the evening an old Czech gliding video film on the historic site RANA was shown until 01.00 hrs in the club house. RANA is the Czech Wasserkuppe and is situated to the west of Zbraslavice.

SUNDAY, 8th AUGUST. An out and return task of 44 kms Zbraslavice–Kolin–Zbraslavice was set. Symbols on the ground and times when seen would have to be noted from the air and given into the Rally Office. A front was expected late which might bring an increase in cloud cover. Winds would be light and variable. There are five possible fields to land in between here and Kolin.

Again there was a plea for longer tow ropes, but because of long tow ropes being blown about by thermals and the possibility of their fouling electric cables on the ground, this was not possible. The cross country Zbraslavice–Kolin–Zbraslavice was accomplished five times by Werner Tschorn in his Weihe, five times by the German flown Sohaj, three times by Jorg Ziller in his Meise, and once by C. Wills in his Rhönbussard. There were very good thermals and cumuli over the site and to the North West, but no clouds were on course to Kolin. Chris Wills approached cloud base at 5,700 ft above site and resolved to try the task. Dry thermals were occasionally found but were nothing like as good as those near Zbraslavice. One thermal was over the turn point where the letters A and later K were noticed at about 14.15 hours. The Sohaj came in below and quickly rounded turn point before setting off home to join some gliders thermalling over some small lakes near Kutna Hora. The lift was not strong here and so after a few turns it was decided to continue on course. During the approach to Zbraslavice there was good lift before some large woods and a small white glider, possibly a Specht, was observed successfully landed in a large field of stubble. So the return to Zbraslavice was made at a dignified height such that a respectable circuit could be made before landing. Chris did not know that the task was to be attempted more than once. To have done it once gave satisfaction. To have done it twice might have been boring ... if it could have been done. Josef Fecko and his son arrived in the evening from Poprad, Slovakia. Unfortunately, he was not able to bring his Lunak due perhaps to the new frontier's problems. To have had him with us even without glider, means that the VGC can bridge all frontiers.



Karl Heinz Kelleman prepares to fly the Habicht, looked on by Josef Kurtz (photo: D. Shrimpton).

The Americans are here in force with Mai Scott, Jan Scott, and Lin and Lee Buell. Lin is the Lady President of the Vintage Soaring Association of America. Al Uster and son as well as Daniel Dinucci are also with us as part of the US representation.

There are two very interesting Czech sailplanes on the site. One is the wooden VSB 62 Vega. This is an incredible Czech sailplane of 1968 World Championship fame. Its wings employ the NACA 66 profile used without success on the 1953 Kendal K-1 two seater. Apparently the Vega goes very well until it has to turn! Also on the airfield is the new World Class metal Czech mini sailplane, the 12 metre span 'Solo'. When presented at a comparison meeting at Örlinghausen last year, the 'Solo' was judged 2nd, to a Polish sailplane. We were informed that the Polish sailplane was not better, but the 'Solo' came second. Both machines were aerotowed away but the 'Solo' could be aerotowed 300 kms back if enough people wanted to fly it. Wednesday Evening was the CZECH EVENING. Roast pork grilled over fire, beer and two bands were danced to playing polkas, waltzes and popular songs. A good time was had by everyone. On Wednesday evening, further parties visited Prague by bus, which set the them down in the city's centre. Everyone was impressed by the 'Golden City' and the extreme beauty of the Royal Palace and the Cathedral with its incomparable stained glass windows. The new Vaclav Pavel Palace Guard made a major impression with its unique drill and music played from the Palace windows. Wenceslas Square and the Narodne Technicke (National technical) Muzeum with its very well displayed pre-war Czech sailplanes was greatly admired. We only wished that the Sedy Vlk (Grey Wolf) and the RACEK could have been taken back to Zbraslavice with us to be got into the air. The former two-seater and the latter gull winged sailplane had both been designed and flown pre-war (1936 the latter) in Czechoslovakia.

THURSDAY, August 12. The front from the Atlantic had passed north of us going N.E. It should miss us altogether. 3-5 metre thermals. Visibility Super. 10.30 Task Briefing before

the Tower. Distance flights are on today. Wednesday's prizes: Ingo Teegen from Münster (and passenger?) flew 3 hrs 39 mins from an aerotowed launch in their GÖVIER 2. Hans Disma won the first prize for flying the Rhönbussard BGA 337 for over four hours. Werner Tschorn received a prize for having flown his Weihe up until yesterday 17½ hours. Jan Vermeer had flown nearly 24 hours in his Prefect. Hugo Roth had had most launches up until yesterday. A towplane with engine throttled back rose from 200 metres to 1,000 m and the tow-pilot wondered if he should not get a prize too! The Czechs were thanked for the marvellous Wednesday evening. Today the temperature would be 24-26 degrees on the ground.

On Thursday, Hans Disma and Jan Vermeer had two flights in the Kranich 2 of 1 hour 40 mins and 1 hour 50 minutes. On this day the ANTONOV AN 2 biplane took two further parties to visit the Vojenske (Military) Museum Expozice Letectva a Kosmonautiky at Kebely. Landing was made on the field of the Prague Aeroclub, which was by the side of the large military airfield. The Antonov's performance was interesting. Landing speed 70 kph. Cruise speed 160 kps. Engine (over 1,000 hp) Russian radial. Four-bladed variable pitch propeller. Fuel consumption - 40 galls per hour. Both upper and lower planes, except the outer upper wing, had full span flaps. The only ailerons were outboard of the flaps on the upper wings. Pilots were always accompanied by an engineer, who by having to start the engine, switch on all systems, move the flaps and the throttle, etc., had more to do during take off and landings than the pilot. Our AN-2 was equipped as a small airliner. The Museum had on display besides a tremendous collection of Soviet military hardware, some German gliders and aeroplanes and all the early Czech sailplanes from 1947 until the advent of the fibreglass era.

On FRIDAY EVENING, August 13, there would be the closing ceremony as some members had to start to go home during the weekend. In view of the terrible weather over England, it was resolved to continue flying operations at Zbraslavice throughout the weekend. For having come third

during Sunday 11th's cross country out and return task, Chris Wills was given an aerobatic flight in a Zlin 142 by a Czech aerobatic champion at 11 o'clock. It was Friday the 13th but the flight was most enjoyable.

Lubomir Hodan's Briefing for Friday was as follows. A first cold front has just passed but another is coming in from the Alps bringing cooler weather behind it. Good thermals can be expected to 1,400 metres. The cold front may bring us large cumuli but no showers or thunderstorms. After this warm air will arrive, with temperatures from 30-35 degrees on the ground. On SUNDAY temperature is expected to be 32 degrees on the ground but a west wind will slowly bring in bad weather. We never ever experienced that bad weather.

Two seater sailplane crews were thanked for giving many young Czechs 2-seater rides on Thursday Evening.

Friday evening's prize giving ceremony was started by some tremendous aerobatics by aerobatic champions. The final moment of the demonstration was marked by the Zlin 142 making such a low pass that it almost removed all the prizes. Chris Wills collected the prizes having again made speeches in several languages. First prize, given by the Technical Organisations for Sport, was awarded to Jan Scott who had travelled furthest to come to Zbraslavice (from the USA). 2nd Prize was awarded to C. Wills for bringing the oldest machine ... the 1937 built RHÖNBUSSARD BGA 337. 3rd PRIZE was awarded to Mike Birch for restoring his KRAJANEK, which is the only one in the world which is airworthy. He had allowed many of the Czech pilots to fly it. Mike Birch was awarded a Tank Driver's Helmet which will at least keep him warm in the KrajaneK's open cockpit. Diplomas for attendance were awarded to all participants.

During the evening, a further pig was roasted and there were only eight barrels of beer to finish off. There followed spontaneous music until 3 o'clock in the morning.

It had been one of the best Rallies that we have ever had, with the weather supporting it right until the end. Outlanding

fields were readily available everywhere but these were not often used. These enormous out-landing fields are likely to become smaller within the next year or two because state owned land is being privatised. The Czech organisers had a tremendous amount of work to do and a lot of problems to solve. Packing the hangar each evening, and emptying it of our machines in the mornings was done always with the greatest tenderness and care, as if they loved them. That the meeting was such a success was due to the superb moral determination of the organisers to make it a success. This determination and happy spirit continued to the very end. We especially wish to thank Vladimir Morava and Lubomir Hodan. The former had so many problems and so much hard work but he came through with flying colours. The latter had learnt English in six months especially for our rally. Then there were the towpilots with their three vintage towplanes who succeeded in giving us gentle launches often into lift. The winch drivers also did well as did the tractor drivers, who continuously retrieved our landed gliders from the field to clear the landing area. Indeed we wondered what work we were supposed to do as the Czechs seemed to everything for us. Then there were the ladies in the restaurant who always looked after us and fed us with great kindness. We hope that when the above team have recovered from their tremendous efforts, they might allow us to come back again. Finally, there was the village of Zbraslavice with its central square, Old Empire architecture and newer supermarkets. The little village almost always gave off the most tremendous thermals, and none were stronger than those which came off the Hotel Charlie 24 hours Non Stop. The Proprietor of this small hotel is a fan of Charlie Chaplin. He never failed to make us welcome and to give us exquisite food and drink which helped to make our first visit to Bohemia unforgettable. We hope that the proprietor of the Hotel Charlie will read this.

Such good weather and ideal landing fields make the Zbraslavice area ideal for our cross country aspirations. We hope that our hosts will let us visit them again.



Winding up! Graham Saw and Colin Anson with Josef Kurz and other supervisors (photo: Colin Anson).

RALLIES

The annual Slingsby Rally from August 28 to September 6 started at Sutton Bank, Yorkshire with 16 Gliders being present as follows: Scud 3, two Slingsby Kite 1's, BAC-7, Tutor, Gull 1, Harbinger, Slingsby T.21, Olympia 2B, Slingsby Skylark 3F, Olympia 463, Capstan, Olympia 460, K8 (No. 2) and Rhönsperber.

The second day proved to be better on Sunday with good hill soaring into a gentle north west wind with some heights up to 3500 feet. Michael Maufe proved to be a popular contender with the BAC-7 which gave some good flights to the lucky P2. This Rally is always a good attraction with visitors, there being plenty of excellent local pubs to dine away the evenings with liquid refreshment and talk of vintage gliders and how it was all done. Due to this report going to press early a full report of the rest of the week is not given.

That Brooklands Motor Museum will combine a vintage glider display into the Aviation Section is good news. Mike Beach has been doing a sterling job with its presentation and it is expected to remain open until at least November or beyond. If you are interested in visiting, the best time is at weekends. Contact Brooklands on 0932-857381

At the London Gliding Club on June 20 the Historic Sailplane Group people invited some 1930's glider pilots to an informal lunch. Edward Mole, founder of the LGC, Laddie Marmol, 'Buster' Briggs, Ann Welch, Lorne Welch, Dan Smith, Geoffrey Stephenson (the first man to fly the English Channel from Dunstable to France), Beryl Stephenson, Charles Ellis, John Sproule and Constance Hervey. A fine day's flying enabled 1930's gliders to perform up to 3000 feet taking advantage of the good thermals. Many stories were exchanged between the special guests while we all listened in spellbound admiration.

1993 British National Rallies

THE VGC NATIONAL RALLY - Lleweni Parc - Sunday May 29 - June 5. This was held at the Glyndower Soaring Club, Lleweni Parc, near Denbigh, Clwydd, North Wales. The club is named after Owain Glyndower, a Welsh hero who fought the English in antiquity, and owes its being to the inspiration and energy of Rodney Witter, who runs the organization as a commercial venture. It is not a club in itself but caters for many private syndicates who keep their gliders at the site. The area is extremely beautiful and the club ground is, as it is called, a park. Nearby is ancient town of Denbigh which is situated on a hill dominated by a ruined castle. To the east is a long range of hills called the Clwydd, while to the north is the sea, and the great seaside resort of Rhyl with its beach of sand (a possible landing place should there be no

people on it). In the prevailing (we hope) westerly winds, it is possible to fly down-wind to the hill for hill, wave and thermal soaring, but it is not easy for a vintage glider to return to the site, should there be no hill lift. The slope is about two miles from the site, so that in a westerly wind, from a winch launch to 1,000 ft, it is possible to reach the hill slope with 700 ft. There should be sink on the way, unless a wave's down current is in existence ... and then a field landing could follow. There were possible out landing fields in between the slope and the site (as was discovered).

The charm of rustic Wales was quite captivating. The rally was started with the VGC's Annual General Meeting which was held after tea on Saturday in the dark vaulted cellars of Lleweni Hall. These added atmosphere. The cellars were initially built in the 13th Century. They were then filled in and the great building of Lleweni Hall was built on top of them between the 13th and 17th Centuries. The cellars were then excavated. There sat the VGC's Committee confronted by its trembling audience, and Chris Wills, who had only just time to put on clothes more suitable for the occasion. However, the AGM went off well and quickly and then most of the committee then hastened back to England. The area is even more charming as, compatible with the present sympathy for European Nationalism, the people of Wales have asked that special efforts be made to preserve their language, so that sign posts and notices are written in Welsh before English and, further in the centre of the country, Welsh is spoken before English. However, we were received with such kindness and hospitality that the Welsh Croeso (welcome) was more than evident.

For those of us who preferred more luxury than the Camping site, there was the splendid accommodation and food of Lleweni Hall which above all was a farm.

Those taking part in the Rally.

Geoff Moore - Mü 15 D-3, BGA 2267.
Earle Duffin - Hütter H.28 -3, BGA 3982.
Chris Wills - Rhönbussard, BGA 337.
Richard Abraham - Rhönbussard, BGA 2077.
Francis Russell - Weihe 50, BGA 2602.
David Kahn - Weihe 50, BGA 2602.
Peter Teagle - Slingsby Sky, BGA 686.
Richard Moyse - Slingsby Sky Prototype, BGA 685.
Brian Middleton - Slingsby Sky.
Chris Tonks - T.21B, BGA 782.
Bob Sharman and Austen Wood - Harbinger, BGA 1091.
Ted Hull - Moswey 4A, BGA 2227.
Ian Smith - Olympia 463, BGA 1373.
David Slobom - T.21B.
Dunstable Owner - Ka-7.
Tony and Michael Maufe - Kite 1, BGA 310
Bob Boyd - Kite 1, BGA 251.
D. Staff - Ka -6.
Ruth and Mike Skinner - Eon Olympia.

It should be mentioned that after the first weekend, some of the gliders returned to England. Among them were two or three of the Skys and the Weihe 50.

Monday, 31st of May

We were briefed by the Gliding Centre's CFI in the cellar that today's weather would be suitable for hill, thermal and wave soaring. The wind strengths were 25 knots on the ground and 40 knots at 1,000 ft, with the wind direction at an angle to the hill, so that only parts of the hill were working; and even these

Sample issues \$4 each 1 year subscription \$25
Overseas \$30



WW1 AERO (1900-1919), and SKYWAYS (1920-1940)
Two Journals for the restorer, builder, & serious modeller of early aircraft.

• information on current projects	• historical research
• news of museums and airshows	• workshop notes
• technical drawings and data	• information on paint/color
• photographs	• aeroplanes, engines, parts for sale
• scale modelling material	• your wants and disposals
• news of current publications	

Sole distributors for P3V, a computer program to generate a 3-view from a photograph.

Published by: **WORLD WAR 1 Aeroplanes, INC.**
15 Crescent Road, Poughkeepsie, NY 12601 USA (914) 473-3679



PH848 – An unusual view of a Minimoa in bits!

parts might not work should the *down* of a wave coincide with them. The CFI forecast that there would be hill, thermal and wave lift and that pilots without oxygen should not go above 12,000 ft (or was it 9,000 ft?).

Thus it was possible for gliders to reach the slope from 1,000 ft winch launches, and more easily, from aerotows. We were sharing the Site with a BGA course which had a £100,000 fibreglass two-seater. This is rather more than our vintage gliders have ever cost, and to think that most German gliders could not be built again after the war because of their cost. For that price we could now have 100 Weihs! Taking part in this course were gliders ancient and modern, but there was also an aeroplane for towing, which we could use also.

The strong wind was south of west which meant that not all the slope was working and that, from a winch launch, the right part of the slope had to be arrived at if a glider was to stay up.

There was also the slight possibility that the down current of a wave might annihilate even this lift.

Into this scintillating cocktail of possibilities, vintage gliders and their brave pilots were launched often by winch, and sometimes by aerotow. The awful story of a Rhönbussard which had arrived on the ground wing first in the lee of the trees by the site due to turbulence during the previous day (luckily without damage), and David Slobom's T.21 going in to a field below the slope and an Eon Olympia being put into a field in no uncertain fashion just before Llewenni Parc did little to improve morale.

Nevertheless wave was encountered by a brave few. The airline pilot Brian Middleton's SKY reaching 9,200 ft, Richard Moyses's SKY and Geoff Moore's Mü 13 D-3 reaching 8,500 ft and Ted Hull's Moswey 4 reaching 6,400 ft and the Harbinger was also in wave lift. Someone said that he saw the Mü 13D-3 now finished brilliant red, proceeding backwards over a wave cloud! To put it all in perspective, it should be mentioned that a fibreglass sailplane reached 17,000 ft with its pilot using oxygen on that day. A fine effort was by Chris Tonks in his

beautifully restored T.21 (probably the finest restored T.21 in the country.) He bravely set sail for the hill from a winch launch. Once there, over the right part of the hill, the T.21 seemed to remain stationary at height, unable to move forward towards the south or towards the site. There were many who thought that he certainly would not get back. Nevertheless, after a flight of several hours, the T.21 did majestically return to the site with height to spare. On this day, the superiority of the four Sky's performances did become apparent. We believe that this was the greatest number of Sky's seen together since the national contests of the 1950s. We think that there are six Sky's still in existence in Britain. One of these is the Sky, XA876, that used to belong to the Empire Test Pilots School (ETPS). (Editors note: This aircraft was delivered to Farnborough on August 8, 1952. It was transferred to CGS (incl. 644GS) at Spitalgate on December 12, 1974, the next move was still with CGS, this time to Syerston, in April 1977, when Spitalgate closed. It was noted in the storage hangar at Syerston (still in its overall red colour scheme) by August 1979. The glider was sold to the RAFGSA at Syerston on October 10, 1980, but still 'borrowed' by HQAC. The date that the GSA sold it is still unknown, but in mid-1992 it was reported to be owned by J. E. Mead). Then followed several days of cloud cover and sea air. We believe that it was on the 4th of June that Tony Maufe landed his Kite 1 after a thermal flight at the North Wales Gliding Club which is close to Llewenni Parc and received a most hospitable reception.

It was on June 4 that a sea breeze front arrived unexpectedly at about 1800 hours. Suddenly, there was abundant lift beneath the almost 10/10ths cloud cover to about 3,000 ft. The lift continued into cloud but cloud flying was thought not to be safe because, apart from our gliders not being cleared for cloud flying, there were others there as well. Chris Wills's Rhönbussard ascended to cloudbase straight off a 2,000 ft aerotow and Chris was surprised to see Tony Maufe's Kite I also there, which had climbed away from a winch launch.

Chris was able to fly in front of the clouds to near Rhyll on the coast, and then to return for further soaring over the hill nearby where there were thermals, before landing back at the site. It could have been that there was wave lift mixed in with the sea breeze front.

The final weekend dawned bright and clear and we were briefed to expect lift under cumuli over the Clwydd hills. This was certainly so during the first part of the morning but sea air soon came in to dampen all but the most meagre lift. Chris Wills discovered that the top of the mast on the Clwydd Hill was exactly 1,900 ft above Llweni Parc and it was better to watch this rather than the variometers to discover whether the Rhönbussard was ascending or descending.

It was on this day that three gliders from Lleweni Parc were crashed. Two of them were part of the BGA course. Tony Maufe mustered VGC members to go to the rescue of a Skylark 4 which had proceeded through a fence into a ditch. Its nose had followed the contours of the ditch and was decidedly bent upwards. Its pilot had previously been airlifted to hospital with back injuries by a police helicopter. Also down was an Open Class Cirrus which had done an incipient spin in to a tree, which had prevented sudden contact with the ground, in a field filled with bulls.

Of the seven gliders broken during that day over Britain, none were vintage club gliders and this was the only comfort that could be extracted from the miserable situation, insurance and otherwise. It was we believe felt that Lleweni Parc was a delightful site but that the wind might be more steadily on the hill for hill and wave soaring during late August, September or October. Rodney Witter has created a beautiful site for a holiday and we hope that we shall go there again.

Owing unfortunately to last minute problems, the Rally at Middle Wallop, the site of the Army Air Museum, did not take place on June 12-13.

DUNSTABLE HISTORIC PLANES June 18-20. This was a Rally to which not only vintage gliders, but also veteran pilots, were invited.

The rally was graced with fine weather with the wind on the hill on Saturday the 19th and good thermals, sunshine and not so much wind on the hill on Sunday the 20th.

We were pleased to welcome Lorne and Ann Welch, Geoffrey and Beryl Stephenson, Mr and Mrs Ladislav Marmol, John Sproule, John Ellis, Group Captain Edward Mole, Ron Clear, 'Buster' Briggs, Frank Costyn, Dan Smith, Charles Ellis and Constance Hervey.

Vintage Sailplanes taking part were:

Falcon 1 1931 (RRG Falke 1927) Mike Beach.

Mü 13d-3 BGA 2267 (1956) Geoff Moore.

Scud 3 BGA 684 (1935) Ted Hull.

Scud 2 BGA 231 (1932) Mike Beach.

Moswey 4 BGA 2227 (1950) Ted Hull.

Kranich 2B-1 BGA 964 (1944) C. Wills, Peter Chamberlain and Vernon Jennings.

Kite 1 BGA 394 (1938) Ted Hull.

Rhönbussard BGA 2077 (1934). David Woodage.

The Rally was organised by Ted Hull and Geoff Moore.

During Saturday evening a fantastic buffet supper was organised for rally participants. On Sunday the guests arrived, and after mandatory photographs before the Falcon 1, were entertained to lunch in the club house. Meanwhile, flying was

pursued in the fine weather with the utmost fervour and our guests were able to view the gliders of their youth soaring overhead. In fact, the Falcon 1 was flown for six hours on that day by various pilots, thanks to the generosity of its owner, Mike Beach. This was almost more time in the air than it had flown during its entire previous life. All who flew it were staggered by its excellent handling, its light controls, its stability about all three axes and its performance, especially when trying to land it, when it floated forever. Everyone agreed that for 1927 it was an incredible glider and that there should be more of them, except that they would be expensive to build. Its circling speed is a genuine 25 knots, and its stall speed is 21 knots (perhaps?). The incredible cold of the midsummer day at altitude had to be experienced to be believed as its pilot is exposed from waist upwards. Such was the old-time flying and everyone should have a chance to experience it in these days of fibreglass and canopies. Alexander Lippisch knew what he was doing when he designed it for the Rhön Rossiten Gesellschaft (RRG). In 1927 he was also designing flying wings with a similar wing to that of the Falke. So the Falke can be considered as one of the ancestors of the 1941 ME 163B Komet of 14 years later. The Komet was the flying wing that had perfect handling qualities but had a less than perfect rocket motor. Mike Beach also allowed other pilots to fly his Scud 2 and Ted Hull allowed other pilots to fly his recently restored Scud 3, which was having its first real outing. We thank them all for giving us that day, which clearly some of us will never forget.

BRITISH NEWS

At first we had perfect Spring easterlies; then the weather became less good, and at last, during the second half of June, it became good again. Many of us did not have much opportunity to fly due to having to prepare our gliders for the great event of the year, the International Rally in the Czech Republic (Bohemia), after the warm up Rendezvous Rally on the Wasserkuppe, by kind courtesy of the OSC Wasserkuppe.

At time of writing (July 10), we have the greatest pleasure in announcing the first flights after building of the new Huetter H.28-3 of Earle Duffin. This is the result of 2½ years work, more or less full time, due to him being retired, and the expenditure of much money. Only one H.28-3 has ever flown before. It was built by the Akaflieg Stuttgart, where Wolfgang Huetter was working, during 1938/39. It was brought to the 1993 Rhön Contest, being towed by one of the first Volkswagen Beetles. It flew at the Rhön under an experimental C of A, and did not gain a full C of A due to the outbreak of war in which (or after which?) it was destroyed. We are happy to announce that its first flights, two of them being soaring flights, have revealed that it has no real problems and that a programme has now been initiated to gain for it a BGA C of A. We congratulate Earle on bringing his project to fruition and we hope that it will give him many hours of pleasure in the air. We are very glad that it has worked, as the VGC distributed its drawings which had been sent from Norway by the late Bjarne Reier.

A second "new" old glider to have flown again after many years of being grounded, is the 1935 Scud 3 BGA 684. We believe that this is the aircraft which C. Wills saw crash at Dunstable in 1938, when a power pilot tried to take it off into wind, which was unfortunately blowing down the hill. It spun during a last minute turn to try to avoid the hill. Ron Clear and friend repaired it during the war and, as the weather was fine, decided to test fly it. After a beautiful flight in superb weather, they were both arrested first by the military, and then by the

civilian, authorities and thrown into prison for breaking the law created after Easter 1940, that made it illegal for civilians to fly gliders in Britain. We warmly congratulate Ted Hull on finally getting this aircraft, now without its engine, flying. It is now the second airworthy Scud 3 in Britain. The other, BGA 283, is owned and flown by Martin Garnett at Duxford.

A third "new" vintage glider to fly over England after many years of being grounded has been the Zlin 24 Krajanek. This has been beautifully restored in its 1947 Czech colours and markings by Mike Birch and his team at Wycombe Air Park. Painting of its original Czech registration and colours was very much assisted by a Czech Glider pilot from those times of long ago, George Izera. He also assisted with its restoration. Also, its original owner, the legendary Ladislav Marmol, who originally bought it from the Brussels show, was present during its first weekend of flying. In 1949, he set up the still recognised British single-seat duration record of over 33 hours. First reports indicate that it is flying better than ever. Thermalling speed is between 30 and 35 knots. Empty weight is 340 lbs. The restoration of this 1947 glider, which was one of the first Czech designs to be built in Czechoslovakia after the war, is a triumph for the team led by Mike Birch. The name "Krajanek" means a travelling entertainer who visited the villages of Czechoslovakia telling stories and singing songs. He was greatly loved by the villagers who fed him and gave him accommodation. Next restoration project for the Booker team will be the Petrel BGA 651, which has been bought from Mike Russell by John Goringe, who also owns an ASH 25, and Graham Saw. BGA 651 was the last of the three Petrels built and had the all flying tailplanes (of the Rhönadler) replaced by a fixed tailplane, which was to be a characteristic of the Slingsby Petrel Mk. 2. The Petrel was to have been built (but never was) after the war. BGA 651 received its first BGA C of A in July 1950. This perhaps indicates that, although it was finished in 1940, it was immediately swallowed up by the Military who did not release it until 1950. It was flown in that

year's National contest by the well known Newcastle glider pilot O'Grady. It spent much of its more recent life with the Dublin Gliding Club where it was registered EI-101. It is intended to restore it with its flying surfaces in transparent fabric. At the time of writing (July 20), it is believed that the 1950 built Swedish JS Weihe, formerly SE-SHU, and now BGA 1093, is about to become airworthy after its second restoration. This will be a triumph for Keith Green of Lasham, who has had his restoration work interrupted by domesticity (his wife had a baby). We congratulate them both. It seems that the Weihe is to join the Lasham T.31, and no less than six gliders from Booker (one of them is the Krajanek), and others, as part of the British Entry at Zbraslavice.

THE BROOKLANDS MUSEUM VINTAGE GLIDER EXHIBITION. Until July a conservative estimate was that 15,000 people had seen the exhibition, which is the first of its kind ever held in Britain. Other vintage gliders, such as Geoff Moore's SG.38 (Eon Eton) and Ted Hull's Scud 3 have joined the display. Its success has been so great that the museum has decided to allow the exhibition to continue into the Autumn. Meanwhile, it has been found possible to withdraw certain gliders from the display for flying or restoration. The rumour that the exhibition's hangar was to be pulled down as it is on land owned by a property developer, does not seem to be true. We congratulate Brooklands Museum and Mike Beach on their success. Believe it or not but John Lee, after building two Hütter H.17a's (and other light gliders), has now built and flown a new improved Penrose Pegasus. The improvements mean that this 1936 ultra light and small design can be aerotowed. It is flying under a BGA Permit to Fly and test flights promise that Pegasus Mk. 2 could be a great success. Its thermalling speed is faster by 5 knots than that of the H.17a which means its speed range horizontally will be improved. Its Max. L:D could be as high as 1:20 which indicates cross country flying potentiality. He has worked closely with Harold Penrose who has said that if he had built a second Pegasus, it would



Ted Hull's beautifully restored Scud III (photo: Ted Hull).

have been like the one that John has just built. John has written on September 8 that on Sunday last, he managed 3 hours 13 minutes in the Pegasus 2. It was a delight to fly and dashed along at a sharper pace than the H.17 – giving rise to quite good travelling prospects. Maybe you'll see it trotting along overhead one day, as he intends to see some distance next year.

A further superb restoration is that of a T.21b by Chris Tonks in North Wales. Not only is this the finest restoration of a T.21b that we have ever seen but he also has had built a very fine closed metal trailer for it.

He also has the very burnt remains of the Jaskolka from Ringmer which had been set on fire with white spirit last year. Chris has recently obtained many drawings from Poland through the efforts of Anglo Polish Sailplanes Ltd. These, together with some obtained from one of the aircraft's previous owners, have brought together almost enough drawings to give a hope of saving this Jaskolka. It is believed that only one other airworthy example exists of this famous 1951 design which once held 13 world records.

This other one flies from Lee on Solent. Chris has also obtained the remains of a German Grunau Baby 2B, which was damaged at the North Wales Club when it hit a tractor. To supplement this, he has also the fuselage, and one wing of the German Grunau Baby 2B-2 LN+ST (yes it still has its post June 1943 Wehrmacht Luft (WL) registration). A Charles Brown 1946 photograph of this aircraft appeared on the front cover of our No. 40 Summer 1983 VGC News. We had last seen it about 15 years ago as part of the RUSSAVIA Collection in East Anglia and could not believe what we were seeing. Since then, all trace of it had been lost ... and now it has reappeared in the extreme west of Britain. Chris Tonks found LN+ST in Conway, North Wales. The VGC News cover photo of LN+ST shows it being aerotowed by a Tiger Moth from Cranfield in 1946. We wonder if this was taken during the first air tests of a dive braked Grunau Baby 2B-2 in Britain? All Grunau Babies from before the war in Britain had only spoilers ... and some did not even have those.

BROOKLANDS

Latest news has been received from Mike Beach dated September 10.

1. First flight of a glider for over 50 years. Bob Boyd in his Kite 1, BGA 251 on July 25 1993.
2. Visitors to the Glider Exhibit: from April 31 until August 31 – 38,315!
3. Next major function. The Royal Aeronautical Society's Garden Party Sunday September 12. This will be held in the Hangar surrounded by Vintage Gliders!
4. Gliders at the Museum now on display are: – Scud 2 BGA 231, Scud 3 BGA 684, Hols der Teufel BGA, Gull 3 BGA Rheinland BGA 1711, Eon Eton (SG 38) BGA, Kite 1 BGA 251, Willow Wren BGA 162, BAC 7 BGA 2878, Falcon 1 (RRG Falke) BGA 3166, (at this moment being flown at RAF Halton.)
5. Brooklands have now got a Tiger Moth (with hook), which is being professionally restored to full airworthiness condition.
6. See *Aeroplane Monthly* due out next Wednesday for further coverage.
7. See enclosed article from *Gliding*.
8. Please remember that Brooklands had the first British Gliding School ... in 1910. (The LANE SCHOOL)

9. The Falcon had 5 flights during the period 1986–1990, and 43 flights between May and August 1993.

A visitor summed it up last week when he said "I have been in Aviation all my life, and this is the first opportunity I have had to see such beautiful machines, thank you".

A letter dated September 8 has just been received from Peter Philpot concerning vintage glider activity at the Blackpool and Fylde Club.

"The Blackpool Club had a visitors' day on August Bank Holiday Monday with a line-up of vintage gliders worthy of a VGC Rally. Tutor, Gull 3, Eon Baby, Swallow, Eon Olympia and T.21b. We had a glorious day and five two-seaters were hard at it all day doing 123 launches giving mostly passenger rides to the visitors.

As you can imagine, our treasurer had a smile on his face.

Having modified the rudder pedals, the new Gull 3 now flies quite happily, though the control co-ordination is to pre-war standards. We find that it flies quite smoothly down to 28 knots, but at 27 knots, it stalls with no warning. One wing drops, usually the right hand wing, but it easily recovers when the stick is moved forward. We have had to learn how to land it as, if you have excess speed when you flare out, the Gull will float the whole length of our field. The spoilers have negligible effect".

Regards ... P. Philpot.

Chris Wills comments that the original Gull 3 stalls at an indicated 10 knots faster than the new one. One wonder whether on one, or the other, there is considerable position error effecting the ASIs?

SCUD III FLIES AGAIN AFTER 33 YEARS

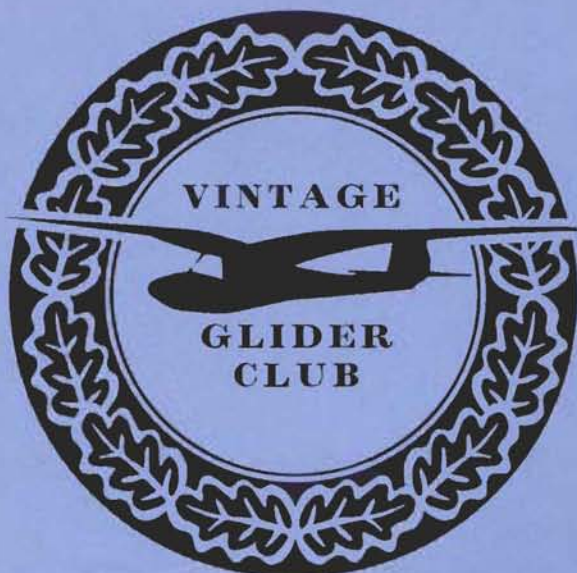
In 1935, L. E. (Baron) Baynes produced the Carden Baynes Auxiliary, a self-launching powered glider ordered by Sir John Carden, Design Director of Vickers Tank Division. With a 250cc Villiers motorcycle engine, the Auxiliary was flown successfully at White Waltham by Jack Dewsbury but before taking delivery, Sir John was killed in an airliner crash. A second Auxiliary also lost its future purchaser when the Duke of Grafton lost his life motor racing in Ireland and Baynes removed the engine and sold it as a sailplane – the Scud III.

The prototype, with engine, was spun in at Dunstable in 1936 and the remains were obtained by Ron Clear, later to be Airspeed's test pilot. Ron spent four years putting it back together with no drawings to help him. On completion in 1941, he flew it as a sailplane at Winchester. On landing, he was arrested for illegal flying in wartime and he and his crew spent the night in Winchester jail!

This Scud flew occasionally at Portsmouth under the auspices of 163GS ATC and eventually was sold to a syndicate in 1953 and allotted the number BGA 684.

In 1957, Les Collins of the London Gliding Club bought it and after 3 years decided to do a comprehensive restoration including re-skinning the wings. After 16 years work, it was just about to be finished when an empty glider trailer blew away, landed on top of the Scud and squashed it.

Les started work again, but retirement with four house moves in five years, slowed the work and after another 16 years, Les decided to let someone else complete the job. The Scud was brought back to Dunstable from Les's workshop on the South Coast and over the winter of 1992–3, the starboard wing was restored. Everything else had already been done with meticulous attention to detail and it only needed a wax



President: Chris Wills
Wings
The Street
Ewelme
Oxford OX9 6HQ

Secretary: Robin Traves
Rose View
Marden Road
Staplehurst
Kent TN12 0JG

Treasurer: Geoff Moore
Arewa
Shootersway Lane
Berkhampsted
Herts HP4 3NP

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.

Associate membership is available to those who wish to support the activities of the club, and Associate 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.

 CUT

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

MEMBERSHIP APPLICATION FORM (1994)

I renew/apply for Owner/Associate membership of the Vintage Glider Club, and enclose remittance for:

	£	
Initial Membership fee <input type="checkbox"/>	3.00	(payable only once on joining)
Annual subscription <input type="checkbox"/>	12.00	(Great Britain)
Annual subscription <input type="checkbox"/>	14.00	(Europe)
Annual subscription <input type="checkbox"/>	16.00	(Rest of the world to cover airmail postage)
Donation <input type="checkbox"/>	_____	

Total _____

Cheques should be made payable to the VINTAGE GLIDER CLUB. Overseas members are requested to pay by Girocheque, Eurocheque or in sterling drawn on a British Bank

For all members (block capitals or typewritten please)

Surname _____ Christian Name _____ Title _____

Address _____

_____ Telephone _____

Gliding or soaring club (or other aero club) _____

Your gliding and/or PPL qualification /Experience/Modeller _____

Trade or profession _____

please turn over

PLEASE NOTE:

- a) **Membership is individual (not by syndicate).**
- b) Owner membership is either sole ownership or ownership in a syndicate.
- c) Club owned aircraft are accepted as though the club were a single owner.
- d) Unless b) or c) apply, associate membership is applicable.
- e) The club reserves the right through the committee to accept or decline any particular glider for owner membership.

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)

Type of glider _____

Maker and date _____

Registration _____

Other 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 my VGC membership record being held on a computer file:

Signed _____

Please post with your remittance to:

Geoff Moore, Arewa, Shootersway Lane, Berkhamsted, Herts HP4 3NP

ORDER FORM

No req £

Adhesive badges @ £0.40 each.

Blue motif on silver 3" dia. Four types:

Front glued for sticking inside

windscreen

1 'Vintage Glider Club' ☐ _____2 'Vintage Glider Club
Member' ☐ _____

Back glued for sticking on glider etc.

3 'Vintage Glider Club' ☐ _____4 'Vintage Glider Club Member' ☐ _____

9" dia. PVC sticker, blue motif on

silver 'Vintage Glider Club' Back
glued for trailers etc. @ £1.50 each ☐ _____**Cloth badges @ £1.50 each.**Blue motif on silver-grey. 2.75" dia. ☐ _____**Metal lapel badges @ £1.50 each.**Silver-coloured motif on blue
enamel. 0.625" dia. ☐ _____**Brooches @ £2.00 each. Blue and**
white enamel. 1.125" dia. ☐ _____**Key rings @ £3.00 each.**
As Brooch on black leather fob. ☐ _____**Large Postcards**four different colour prints from original
paintings by H.K. Harwood of historical
and vintage glider scenes,@ £0.20 each, or £0.60 per set of 4 ☐ _____**Pom-pom knitted hats**

in different colours.

£4.00 each. ☐ _____**Beanie Hats white drill printed**VGC crest navy blue @£3.50 Med: ☐ _____Large: ☐ _____**Miniature wind socks 20 cms long**@£1.30 ☐ _____**Ball points @ £0.50 each.**

Light blue, with silver motif,

'Vintage Glider Club', retractable. ☐ _____**Sub-total**

iii

No req £

Sub-total b/f _____**Tee-shirts, white, with central blue motif 6.5" dia.**L £4.50 ☐ _____XL £4.50 ☐ _____XXL £5.50 ☐ _____**Crew-necked sweat shirts, red or yellow with
small motif on left breast.**L £12.50 ☐ _____XL £12.50 ☐ _____XXL £13.50 ☐ _____**Replica transfers of the original****SLINGSBY Emblem £2.50 each**Quantity ☐ _____**Mugs with VGC Crest**Blue strong plastic with white
motif @ £2.50 each ☐ _____White Pottery with blue motif
@ £3.00 each ☐ _____**Ties @ £5.00 each. White motif woven**
in coloured tie. Green (vert, grün) ☐ _____Wine (marron, rotbraun) ☐ _____Grey (gris, grau) ☐ _____Navy (bleu foncé, dunkelblau) ☐ _____**Please add postage and packing** (foreign rates in brackets):

Each sweat shirt or polo shirt £1.25p (£2.00) _____

Each T-shirt, mug, pom-pom or beanie hat 50p (90p) _____

Small quantity adhesive and cloth badges 25p (50p) _____

Small quantity other small items 35p (70p) _____

TOTAL _____*Cheques should be payable to 'Vintage Glider Club' in sterling, drawn
on a British bank, or Eurocheques payable in sterling. (No cash)*

I enclose the sum of _____

Name _____

Address _____

Please send to: Colin Anson**VGC Sales, 22 Elm Avenue, Watford WD1 4BE****Tel 0923 241 924**

The Vintage Glider Club – Technical Articles

	£
Manuel "Wren" Series – 2 sides. £0.30.....	<input type="text"/>
Kranich – 5 sides. £0.75	<input type="text"/>
Bolus Baby Albatros – 3 sides. £0.45.....	<input type="text"/>
Weihe – 5 sides. £0.75	<input type="text"/>
Mu-13 – 5 sides. £0.75	<input type="text"/>
Spalinger – 4 sides. £0.60.....	<input type="text"/>
Rhönbussard – 4 sides. £0.60	<input type="text"/>
Olympia – 6 sides. £0.90	<input type="text"/>
Grunau Baby – 5 sides. £0.75	<input type="text"/>
FVA Rheinland – 6 sides. £0.90	<input type="text"/>
Slingsby Cadet – 3 sides. £0.45	<input type="text"/>
DFS Reiher – 5 sides. £0.75	<input type="text"/>
Avia 40P – 5 sides. £0.75	<input type="text"/>
Rhönsperber – 4 sides. £0.60	<input type="text"/>
Harbinger – 3 sides. £0.45	<input type="text"/>
Slingsby Gull I – 5 sides. £0.75	<input type="text"/>
King Kite – 6 sides. £1.00	<input type="text"/>
Schweizer TG-2 – 6 sides. £1.00.....	<input type="text"/>
Elfe-I – 3 sides. £0.45.....	<input type="text"/>
Soviet Record Breakers – 7 sides. £1.00.....	<input type="text"/>
Oberlerchner Mg 19 – 6 sides. £0.90.....	<input type="text"/>
Sub-total	<input type="text"/>

	£
Sub-total b/f	<input type="text"/>
Kadet/Cadet/Tandem Tutor (1986) – 6 sides. £0.90.....	<input type="text"/>
Also: To help with Restoration Work plus Kaurite Glue – 4 sides. £0.60	<input type="text"/>
Ageing of Wood Adhesives – 4 sides. £0.60.....	<input type="text"/>
Colours and Markings of German Gliders 1922–45 – 7 sides. £1.00.....	<input type="text"/>
What's Washout? Watch Out! – 6 sides. £0.90.....	<input type="text"/>
Storing Vintage Gliders during the Winter. Free	<input type="text"/>
Scud Sailplanes 7 sides. £1.00.....	<input type="text"/>
Mü – 17 3 sides. £0.45.....	<input type="text"/>
The Mü – 15 4 sides. £0.60.....	<input type="text"/>
.....Total	<input type="text"/>

All orders should include postage.

For postage to Europe, please add a small donation.
For postage outside Europe, please add a slightly
larger donation!

*Cheques should be payable to 'Vintage Glider
Club' in sterling, drawn on a British bank, or
Eurocheques payable in sterling.*

From the Secretary: Robin Traves
Rose View
Marden Road
STAPLEHURST
Kent TN12 0JG

polish to give the finishing touch.

The Scud was test flown in June this year and after re-rigging the ailerons, was found to be a delightful glider to fly. Weighing only 340 lbs and with a Göttingen 652 wing section, it has little in the way of penetration but thermals very well and has a claimed L/D of 24. Although over 58 years old it has less than 100 hours in its log book so it is practically NEW!!

NEWS FROM THE NETHERLANDS

as sent by Hans Dijkstra on August 23.

The T.31B PH-797 (ex ATC WT909) has been sold to Germany and is now registered as D-1081.

The Kranich 2B-2 (ex. D-9019) which is now in the hands of Neelco Osinga is still undergoing its major overhaul, and will be registered as PH-103.

The restoration/rebuild of the NV Vliegtuigbouw 1939 built Grunau Baby 2A PH-102 is making good progress.

Nothing is known about the Snellen V-20 which was withdrawn from the National Museum (1984!) in order to make it airworthy again.

A Ka-4 Rhönlerche syndicate in Venlo has been formed. This glider is ex-German and will be registered as PH-104.

A Grunau Baby 2B ex D-9178/D-1447/D-8011 has appeared as PH-978 in the Dutch register of gliders.

A syndicate at Teuge has a Specht ex D-1383 registered as PH-950.

Hans Disma owns and is flying a Phoenix T ex. D-8354/HB746 /D-0738/OO-ZQD as PH-949.

The T.21B BGA 3121 FFG ex. WB920 needs a complete overhaul and is at present not airworthy.

The C.801, ex BGA 2693, was heavily damaged during landing. Future plans concerning this glider are unknown at this moment.

The Grunau Baby 2B PH-167 is now BGA registered.

The complete overhaul of the Gövier 3 PH-209 is now finished (after almost four years!) and the glider is airworthy again.

The Dutch National Rally was a great success. It was very well organised by the Slot family at the airfield of Hoogeveen from 20-23th, May. All four days were flyable and two of them were even very good. Small tasks were set and flown. In total, there were 200 aerotow launches. The rally was closed by a superb B-B-Q also organised by the Slot family.

EIRE NEWS

It seems that the Dublin Gliding Club has a substantial vintage section. Two T.31's, an Eon Baby, an Eon Olympia and a Mucha 100 are all flying. There is also the Kite 2, but this is still in store pending a decision on whether it can be ascertained if it has the wing tip washout modification to ease the spin problems.

Club members will be going to Kerry in the south west of Ireland to wave fly in late October, where heights of over 25,000 ft have been attained. The Dublin Gliding Club hope to enter one of their machines in the 22nd International Vintage Glider Rally at Lasham next August.

NEWS FROM FRANCE

We have only heard that the recently discovered AVIA 41P is probably going to be restored for static display at the Musée de l'Air et de l'Espace by the GPPA at Angers.

GERMAN NEWS

In a past VGC News, we mentioned that we thought that Gerhard Bergmann of Michelstadt/Odenwald, had passed away. Thank Goodness, this is not so. We imagine that his casein glued Spanish built Kranich 2B-2 must have been ready to fly for some time. If it has not, we suppose that problems have been raised by the LBA? We have heard that in the meantime, Gerhard is well on the way to building his new Minimoa 36 from drawings that the VGC sent him. So far as we know drawings for the latter mass-produced Minimoa version have still not been found. The situation is rather similar in Holland, where Neelco Osinga is having a Spanish built casein glued Kranich 2B-2 restored, and Bob Persyn is laboriously building a new Minimoa 36. As all these aircraft are to fly, we wonder whether the Germans or the Dutch will get their Kranich 2s and Minimoas flying first? We wonder if one of these owners would feel inclined to paint their Kranich 2s in Spanish colours and markings representative of the one in which Juez won the 2 seater Class of the World Championships held at Cuatro Vientos near Madrid in 1952. We would try to do this in Britain but we are sure that probably the Aviation Authorities of Germany and Holland would not allow it. Nor does the CAA in Britain ... in theory! We must do something to remember these heroes of the past.

Further news from Germany is that plans for the Moazagotl (Grunau 7) and Musterle have been found in Swabia. A replica of the latter is now being built. Wolf Hirth's great 20 metre

SCHOFIELD AVIATION

The Hangar, Lotmead Farm, Lower Wanborough, Swindon, Wilts.

We are pleased to quote for a glider trailer to suit any vintage sailplane, especially designed to suit your needs.

Recent trailers manufactured by us for Primaries, Rhönbussard, Kranichs, Doppelraab and Tutors.

Please discuss your requirements with David Schofield on 0793 790160 or 0793 822300 or 0831 450272.

span Moazagotl, the father of the Minimoa, broke world distance records in 1934 and was flown into second place in the 1937 Wasserkuppe International Contest by Ludwig Hofmann. It was ordered to be burnt in February 1945 at the Hornberg. The Musterle did more than any other glider to start gliding in America. It was flown by Wolf Hirth in hill lift off the banks of the Hudson River in downtown New York in 1930. In 1935, the British Pilot Eric Collins was allowed to have a flight in it as a special honour, after he had successfully taken part in an aerobatic course at the Hornberg.

Reports indicate the Horten 4A, registered from June 1943 as LA-AD, is now being restored at Oberschleissheim for static exhibition only. Siegfried Lorenz from Frechen near Cologne has told C. Wills that there are still not enough drawings of the Centre Section to build a flying Ho 4A. In the past Siegfried Lorenz has managed to complete sets of glider plans even if just a few of the plans are available for him to work from. A recent example has been the complete set of plans to build a Rhönsperber, which he drew up after receiving copies of the very few Rhönsperber plans that the VGC has in Britain (with C. Wills).

THE GERMAN GLIDING MUSEUM on the **WASSERKUPPE**. Theo Rack has ensured a continuous improvement throughout the museum. The Rhönsperber has now been withdrawn from exhibition so that its fuselage and tailplane can be made more original. Formally its tailplane had been that of a Rhönbussard. The canopy and nose of the Mu 13D-1 have now been built as original. Its canopy now resembles that of the Atalante which Kurt Schmidt flew to victory in the 1936 Rhön Contest. The window in the front of the canopy opens to allow a direct flow of fresh air on the pilot's face. It is thought that the "ATALANTE" may not have flown faster than 20 knots in thermals, as it was fitted with wing camber changing flaps! (As if the thermalling speed of a Mü 13 is not slow enough anyway.)

The museum also has the beginnings of a new 1921 Hannover Vampyr which will need finishing as our dear friend and member Bjarne Reier, who was building it, has died through heart trouble. Theo Rack told us that finance is to be allocated to increasing the museum's covered space to allow many more historic sailplanes to be exhibited. It is intended to keep all the sailplanes airworthy so that they can be got out and flown. Thus would be created a "living museum". A glider could be withdrawn from the museum for flying while another could be exhibited in its place.

Below the museum are very considerable photographic and written archives. There are also glider plans and the intention is to copy these plans for those who wish seriously to build the gliders again. There are also films which can be shown either in the museum, or in a special gallery.

The former **REICHSSGELFLUGSCHULE**. This is still occupied by the Bundeswehr. We don't know for what purpose but the soldiers are to be there until 1996. What will then happen to the buildings is not known, as they are rather too large for today's gliding operation on the Wasserkuppe. The complex is still surrounded by a fence and entry is by prior permission only.

The **OLDTIMER CLUB WASSERKUPPE**. This has the former small museum hangar as its hangar and headquarters. In it, during the beginning of August, we saw the superb creations of the team led by JOSEF KURZ. There stood the restored RHÖNBUSSARD, formerly BGA 395 from England, and the new Udet FLAMINGO, finished, ready for Luftfahrtbundesamt (LBA) final inspection. The 1926 "FLAMINGO" has been fitted with a 150 hp Lycoming engine, as its original Siemens radial engine was too expensive to buy. The speed at which Sef Kurz works is incredible as, last January, the Flamingo was just a bare airframe. There also was the SG.38 SCHULGLEITER. This is the finest primary glider that Chris Wills has ever flown. (He has not flown many). It did not even need ballast at either the rear or



No prop, but not a glider – Oldtimer Club Wasserkuppe's 'Flamingo' towplane nears completion (photo: Josef Kurz).

the front of the A-Frame, and handled as if it wanted to fly. Sef Kurz and his team have already built the superb HABICHT 1936 aerobatic sailplane. We were told how it soared well in thermals at 70 kph airspeed. This became very evident at Zbraslavice, where it was both thermal soared and aerobatted.

The PROJECT REIHER has been shelved through lack of drawings. HANS JACOBS thinks that they could have been taken to America?

We believe that Josef Kurz has managed to build some fuselage bulkheads, and parts of the tail surfaces.

ON THE WASSERKUPPE many Ultralight gliders were seen in the air and in their trailers. Most of them were ULFs, but one was even smaller than an Ulf. Our Spanish member spoke to its owner saying that gliders and gliding were too expensive for Spanish youth, but that ultralight gliders might be within their financial possibilities. He asked the owner whether he had any drawings for his little aircraft, "No", was the reply, "I only have two sketches!". It was obvious that microlight gliding was not administered by the same section of the LBA as that which administers full size gliding. Perhaps, it is a different organization altogether ... such as the Oskar Ursinus Vereinigung?

From all this, microlight, model and full size gliding, it is clear that the WASSERKUPPE is still the glider pilots' mountain. The slow flying microlights bring back memories of a far distant time of gliding ... that of the early 1920s.

The other news which we find exciting is that the young Peter Ocker has produced drawings which have enabled a centre section to be built for the Horten 4A, LA-AD (which was the fourth Ho 4A of the four that were built). We have heard that elevons have also been built for this Ho 4. We presume that now there is nothing to prevent this aircraft from being on static display with the other sailplanes in the hangar at Oberschleissheim. This historic 1912 Bavarian airfield has been partially restored to original state and is an offshoot of the German Museum in Munich.

We believe LA-AD was found in the American Zone by AC-2 Kahn from the BAFO Club at Örlinghausen. He persuaded the Americans to give it up as it was incomplete and even broken, as it had no tail!!! The other Ho 4, LA-AC, had already been taken from the RAF in Germany for experimentation at Farnborough. We believe that even in May 1945, LA-AD did not have its metal wing tips, which eluded discovery even after a considerable search for them. BAFO then required wooden tips to be built onto its wooden main planes. We only know that it was flown on C of G launch tests by Jock Forbes and Heinz Scheidhauer at Örlinghausen in 1947. We are glad that it is again complete with its built on wooden wing tips. We understand that there are no plans as yet to build another one for flying. Evidence has been produced by Wilhelm Heine, who has founded a group to research the life and achievements of Robert Kronfeld and has collected an archive of material on this subject, has known Ernst Trylus for years. He is now 81 years old and has worked in many fields of our wonderful sport. He had the reputation of being the best sailplane builder in the region. After the war, he worked for the Royal Airforce (BAFO) at the Örlinghausen Gliding School. From May 1943 until the end of the war, he was Chief Technician at the Örlinghausen School, and as examiner (inspector? CW), he was entitled to test his own products. Trylus did essential work when the metal wing tips of a Horten (4a LA-AD CW) had to be replaced by wooden ones." C. Wills suggests that the metal wing tips were never found by

the RAF in 1945 and that the wooden tips had to be built on before the RAF could fly it at Örlinghausen in 1947. At this time Heinz Scheidhauer and "Jock" Forbes flew it for C of G winch launch tests. Heinz Scheidhauer of course was flying it unofficially. Previously it was found that the Horten 4 only achieved low winch launches due to it having to be winch launched from a nose hook. Now, two release hooks were installed either side of its central gondola underneath its main wing spars. Its winch launch situation was completely remedied as it now attained winch launch heights at least comparable with those reached by conventional sailplanes.

THE GERMAN GLIDING MUSEUM on the Wasserkuppe. East Prussian veteran Glider Pilots (we imagine that East Prussia and Rositten must still be Russian Territory?) are wanting to install in the Museum, a monument to Ferdinand Schulz which weighs 25 tons!!! Such a heavy monument would have to have foundations, or it might sink in to the Wasserkuppe. FERDINAND SCHULZ had been a military pilot during the First World War. After the war, he was a school teacher and became fascinated with gliding. To this end, he designed and built rather basic gliders. The pilot sat in the open, as on a Zögling, but his feet were placed one behind the other on the central member. Steering was by his hands held high on a yoke which turned wing tips as ailerons and elevator. This unorthodox system of control was disallowed by the Wasserkuppe's Technical Committee. Undismayed, Ferdinand then flew his FS-3 for a World Duration Record 8 hours 42 minutes in the slope lift from the East Prussian coastal sand dunes on May 18, 1924. He had brought the French-held world duration record back to Germany. Inscribed in enormous letters in the sand by his comrades were the words "BRAVO FERDINAND" and these words echoed around the world's gliding fraternities (except perhaps in France?). On May 3 1927, flying a Westpreussen, he increased his world duration record to 14 hours 7 minutes, again hill soaring the East Prussian sand dunes. Then, on May 14, 1927, he flew along the sand dunes 60.2 kms distance from Rossitten to Memel and, on May 14, 1927, he gained 560 metres above launch height over Grunau. He thereby held all the existing world gliding records for that time. These flights were all flown in "WEST-PREUSSEN" sailplanes. Ferdinand Schulz was killed while flying an aeroplane on June 16, 1929. A strut broke while he was dropping a wreath on a memorial. It is sad for us to have to announce that our Norwegian member Bjarne Reier has died due to heart problems. He had been building a replica of the Hannover Vampyr for the German Gliding Museum on the Wasserkuppe. The original Vampyr of 1921 is in the German Museum in Munich, suspended from the roof. Bjarne had been able to get up to it, to measure it. It was while returning from this, that he felt ill. He died after three heart bypass operations in the Fulda hospital had failed to save him. He was 75 years old.

Alan Harris, Schleussenweg 39.44628 Herne, Germany, sends us the following exciting news from Achmer/Osnabruck. The airfield is used by the Osnabrucker Verein für Luftfahrt and the British Forces Germany Gliding Centre. Both these organisations who use this airfield would like to make a bid for the 1995 VGC International Rally. There is already a core of VGC members at Achmer, including Harald Kaemper, who now has the two wrecked Kranich 2s from England and has drawings to restore one of them from the parts of the two. He is currently restoring the Jochen Kruse Condor 4 from the Argentine and a Focke Wulf 44 Stieglitz and hopes to finish these in the first half of next year. After

that he is going to start work on making one Kranich 2 from the parts of the two. We also have a Kranich 3, Grunau Baby and T.21b all in flying condition. The Stieglitz and Tiger Moth based nearby have often been used as tugs for these.

Hermann Hackmann, who built the ex-Thoby Fisher Meise in the 1950s, has finished his latest creation, a Lo-100. 2,920 hours of work were needed in about 190 sessions in Hermann's workshop. Hermann himself worked 1,350 hours on it. It had its first flight on October 18, 1992. The two first prototypes of this small aerobatic sailplane flew first in 1936 in Brno (then Brunn) in Czechoslovakia with 10.5 metre wing spans. Its designer and builder was Lothar Vogt. It was not then built in any quantity but it was resurrected after 1951 with a 10 metre span and a different wing profile. It became, and still is, the most popular aerobatic sailplane used in Europe. The airfield now has four hangars which can be used for difficult to de-rig gliders. There is an enormous amount of space for winch launching and aerotowing. Four two-drum winches are available and camping space is almost unlimited. It has accommodated competitions with 70-80 gliders and was host to a large Grunau Baby Meet in 1992.

SWEDISH NEWS

Rolf Algotson reports the successful finishing and painting of their Eon OLYMPIA, in Poland. The aircraft was restored by members of the Kronoberg Segelflygclub Veterans' Group in Sweden, and now it has been finished and painted to better than new condition in Poland by workers who have had experience working on Bocians, Muchas, Pirats and Fokas. They have done a fantastic job and its owners all love it. The Eon Olympia, BGA 1422, was bought from England and was given a complete overhaul. It is now SE-SMH and it is finished, as almost all civilian Weihes and Meises were after the war, in cream with black registration letters and decoration. There were some problems satisfying the Swedish Board of Civil Aviation but thanks to C. Wills and also to Niels-Ebbe Gjorup in Denmark, they have succeeded. The Veterans Group of the club spent 400 hours working on it. They are now building a special trailer so that it can be brought to Vintage Glider Rallies.

MODELS

The following letter was received from John Watkins, 58 Hopton Crescent, Lyndale Park, Wednesfield, Wolverhampton, WV11 3JQ.

SPALINGER S10 "ZUERIVOGEL"

Originating in 1928, the Zuerivogel (Zurich Bird), was the first-Swiss built two-seater glider. Spalinger used it to give "guests" a flight and show them what gliding was all about. Over a period of two years, Spalinger made about 350 flights without any mishaps.

The top wing had a span of 12 metres, whilst the fuselage was some 6 metres long. Lateral control was achieved by warping the top wing. The OVL motif on the rudder was the symbol of the Ostschweizer Verein für Luftschiffahrt which translates to East-Swiss Club for Aeronautics.

The model is 1/4 scale with a wingspan of 3 metres. The wing area is exactly 2 sq. metres and with an all-up weight of 7.5 kg, the wing-loading is only 3.5 kg/sq m. (12 1/4 oz/sq ft).

I have tried to copy the original construction as much as possible, but since information on this seems to be in short supply, I have had to use "modellers licence" here and there. My thanks go out to Ian Tunstall, Willi Schwarznach and the Verkheers museum for their help in collating the information I required to complete this project.

The trailing edges of the wings and tailplane are wire and the wings are internally braced with wire. The top wing warps as in the full size machine.

Flying the Zuerivogel was an adventure in itself. The first two flights were very short in duration due to a distinct lack of lateral control which I first put down to insufficient warping. In the event it proved to be insufficient positive incidence on the tailplane, plus the centre of gravity being slightly too far aft. Once this had been corrected she flew very well. I was surprised to find she would do a very tight 180 degree turn without any tendency to lose a lot of height.

Finally, I must comment that when flying this aircraft, it is a different experience and there is no problem in identifying which model you are flying when there are several others up at the same time.



*'Zurivogel' model.
(photo: J. Watkins).*

LETTERS

From Dipl. Ing Hans Sander, former Chief Engineer and Test Pilot for Focke Wulf, dated September 14.

In answer to the letter from Steve Coates in VGC News No. 78, concerning Central Interpretation Unit (CIU); Interpretation Report L215, describing an aircraft with sharply swept forward wings which was photographed from above on April 19, 1944, and then on May 31, 1944. What was it?

Because I am not sure that the address of Steve Coates that you gave in VGC News No. 78 is sufficient, I have sent you the answer to the question.

I checked the problem with my friend Beauvais, who confirmed that there was a swept forward wing aircraft, or mock up, at Rechlin, which was never flown there, due to circumstances at Rechlin in 1944. From Holzbauer, the former Chief test pilot of Junkers, I heard that he gave it its first test flight on 16.8.44. When the Ju 287 project was discontinued, he was given other things to do. He advised me to check with Wolfgang Wagner who has written a book on the Ju 287. He does not know much more, but confirmed that the Ju 287 had a total of 16 flights and was afterwards (at least 4 weeks later?) stored at Rechlin. However, as usual, there existed a fully equipped mock up for the type, but he does not know if it could have been brought to Rechlin so early.

On the 16/16 June 1944, there was a flight test comparison at Rechlin, but nothing is mentioned of a Ju 287 mock up.

When on July 2, 1944, development of types was stopped, but NOT the Ju 287 ... by the "Jaegerstab" (fighter staff), which mentioned that 100 Ju 287s should be produced monthly, with a definite decision being made at the beginning of 1945.

From: Dipl. Ing. Hans Sander, Friedrichsdorfer Strasse 3, 61352 Bad Homburg, Germany. Tel: 06172 45545. to Steve Coates, 150 Uplands Road, West Moors, Ferndown, Dorset BH22 0EY, England.

We regret that Steve's address was not printed correctly in our VGC News No. 78.

From: Bert Hanwork, 1111 North Niles Avenue, South Bend, IN 46617 USA, dated June 23.

As a member of the VGC I thoroughly enjoy reading the VGC News. Recently I had the opportunity to fly what may well be the last remaining airworthy example of the Pratt-Reed training glider which was built for the United States Navy during World War Two. This particular aircraft was the original prototype, XLNE-1. The production series was known as PR-G1.

It is not often that an ordinary glider pilot can actually reach out and touch a bit of history. One can visit a museum and view historic aircraft, an interesting but somewhat mundane experience best reserved for rainy days; however to actually fly a sailplane that has made history is a very different matter. I had such an opportunity last May.

This special sailplane was the Pratt-Reed XLNE-1, the actual prototype for the seventy-five PR-G1 training gliders built for the United States Navy during World War II. These ships featured side-by-side seating (a rarity in American Glider designs) in a steel tube and fabric forward fuselage with the balance of the aircraft being of wooden construction with fabric covered control surfaces. The 230 sq. ft. wing was quite thick at the root and tapered only slightly toward the tips. The aerofoil was described as "GS-4, GSM, GS-II" designations which seem reserved to this aircraft. The long chord

and the span of 54.5 ft. (16.6m) resulted in an aspect ratio of 12.9, rather typical for that time.

The XLNE-1 made its first flight on October 1, 1942. After brief use as a Navy trainer it was then transferred to the Army Air Corps and later sold as "War Surplus". This ship is reputed to be the actual aircraft flown by Laurence Edgar and Harold Klieforth at Bishop, California when they climbed to 44,255 ft. (13,489m) on March 19, 1952. This flight set a world record for absolute altitude attained by a two-seat sailplane. This record remains unbeaten after forty years.

The current owner, Robert Dart, checked me out in the ship during two flights behind a husky Pawnee towplane. It had to be husky as Bob weighs over 20 stone and I tip the scales at 14 stone. Despite our combined weight of nearly 500 pounds, the XLNE-1 fairly leaped off the grass. It was the shortest take-off run I have ever experienced, even shorter than the Van Gelder winch launches at the London GC!! Though the wing is reminiscent of the Slingsby T.21b, the roll rate was much better. The ship climbed nicely in small, weak thermals. On approach the Schempp-Hirth dive-brakes (on both surfaces) were particularly effective. In short it was a joy to fly.

The XLNE-1 may be the last of the Pratt-Reeds still in active use. Certainly it is the only one now available on a commercial basis. The ship is now based at the Dart Airport and Museum at Mayville, New York. Visiting glider pilots are welcome to try their hand at flying this bit of living history. Enjoy!

From: Michael Russell, Peddars, Woodend Green, Henham, Bishops Stortford, Herts., CM22 6AY, dated June 13.

Dear Chris,

It was a sad moment yesterday to see my Petrel driven away from Chickney Farm, Broxted, where my friend Paul Rutterford has allowed entrained storage in his crop store for all but a few months each year for some time. Having closely examined everything and found her to be in fair shape, a deal was struck and she is now jointly owned by Graham Saw and John Gorringe.

It is thus a good time to review 21 personal years of vintage gliding involvement out of 46 in gliding, in which time I have owned one or other Petrel for a total of 38 years. Obviously, I am sorry to see her go. It has been a love affair since I first saw Espin Hardwicke's BGA 418 on the Mynd, cruising so peacefully in the then "evening thermal" as we called it. I was a RAF trade cadet from Cosford in early 1949 and I was captivated by her beauty and grace of line.

I will never forget the pleasures of later ownership of this first beauty BGA 418 brought me: 123 hours – by chance equalled almost to the minute by my friend and partner, Roger Bradford. We flew her at Dunstable, Lasham and Perranporth amongst other places, and possessed of our own bungee, flew spectacularly out of Bill Crease's top and bottom launch sites at Clwyd and from Aber, and Portmadoc beach. I flew her up over the Dee Estuary almost to an as yet still unattained "Gold" height and Roger flew her to over 4,000 ft to the far tip of Anglesey and back. She carried us through the 1961 Nationals by no means disgracing herself (with handicap!) in speed races from Lasham to Old Sarum and Nymphsfield. Flights reminded by photographs never to be forgotten. Ever imagined you could ice-up in a Petrel? We called her "Nelly" – the largest form of the Petrel sea-bird species – and we both flew her briefly out over the sea on our North Wales expeditions in respect of this.

Passed on after some years of sleeping partnership on my

part to Ron Davidson, his refusal to sell her back to me when my children were more grown up caused me some late night research ("No but I'll swop it with you for another") into past issues of "Club News" in "S & G". As a result, so came her sister EI-101 duly home from the Emerald Isle and the chore of building yet another vast mobile barn. And the memory of a dual "silent rig" in the dewy hours on the top of a sunlit and peaceful Mynd one summer morn – to be exact, May 26, 1974, for her VGC debut – the first time the sisters had ever met! I think it was Ron Davidson who said "Its a Nelly too" – so, "Nellytoo" it was, carefully painted on the nose. And memories of VGC rallies or flying displays at the Long Mynd, Old Warden, Tibenhan (where Ken Wallis showed us the engine he had fitted on her at Redhill – A "T-13E" – but she only made about three feet of height above the Redhill taxiway using a top and rearward facing Junkers Jumo jet engine starter motor). Husbands Bosworth, Duxford, Dunstable – remember the 1976 VGC International with her graceful gull-wings nudging into a thermal full of five Minimoas? – Long Marston, North Hill (Enterprise – where a flight in her was traded for one in a Kestrel!) Sutton Bank and Camphill, good times, all. But she flew us all only 70 hours in those years – of which I did about 40 odd but she was shared by almost countless others – probably 40 or so have flown her.

So end for me just over 160 hours of the most beautiful soaring flight possible above this green and pleasant Isle, and 38 years of the pleasure of caring ownership. Her hours – this second Petrel – were lower, though, because my life was much busier – flying the Boeing 737 and later the 767 with Britannia Airways, and devoting myself to building up a collection of gliders and the ill-fated "Historic Aircraft Flying Service" with the Dragon Rapide at Duxford in the mid-80's. For I believed that we should have a "National Collection" and my treasured sailplanes would be part of that collection – but it was not to be – and my declining fitness in the years before my by-pass op, and the subsequent recovery therefrom took toll of my time and effort, and it could not be achieved.

And now there is a fine Collection growing at Brooklands and a fine Vintage Centre at Lasham. The unique Willow Wren still in very sound condition and the Falcon 1 are there with

Mike Beach. Home for my Petrel is now at Booker, and the archive section is now at Lasham – so what remains? A complete set of "Sailplane and Gliding", "Gliding", and "Sailplane and Glider", many photographs, memories and friendships, and of course, the BAC Drone G-AEDB. She now rests at Top Farm, Croydon, near Bassingbourn (our local Croydon Airport!) awaiting the return of her overhauled and recovered wings from Peter Underwood. Maybe she'll come noisily to Lasham next summer and park alongside her silent predecessor the BAC 7, Michael Maufe's "creation from the past".

And still remains with me the Kranich, BGA 1147, ex-Luftwaffe and RAF. So nearly willingly sold recently until a "situation" prevented sale completion. But now she's alone in the farmer's barn – my last, and I think she must now stay awhile now my time is freer to see if my fingers may yet toil – for she is well on the way as so carefully stored. Maybe you will see her at Lasham next year ... Maybe ...

In the course of my dream of creating a worthy National Collection, I came to collect those many, many drawings. First had come those of the Willow Wren and then, inspired by Martin Simons and collected by him, myself and David Braham – the "Jewel in the Crown" – the Slingsby archive, from Type 1 Falcon 1 through to the Type 30 Prefect, we stopped there because from the Type 31 Tandem Tutor ("Blue Bricks Parents") onwards was still being supported by Vickers-Slingsby.

This generous gift by George Burton enabled me to inspire the building of the Falcon 1 and to encourage David Jones to prove "Sling" so nearly right in building his reproduction King Kite, and enabled the repair of more than a few other machines along the way. So also from Bob Ogden came the remains of the life's work of Robert Kronfeld and via Frank Irving the documentation for "Operation Sigma" – and somewhere I recall seeing in the vast heaps of paper the early BAC machines, the Peterborough Guardian, the Buxton Hjordis and the Baynes Bat – the half-scale tank-carrier prototype and finally from Norman Ellison, his complete archive including the Elliots of Newbury drawings.

Since my collecting efforts were not "officially recognised" and since I received several approaches from non-gliding (but nevertheless highly respected national) museums



*Pratt-read prototype XLNE-1 – May 17
(photo: Bert Handwork).*



Another view of XLNE-1 showing details on starboard side – 44,255 ft! (photo: Bert Handwork).

to house this archive, I claimed legal title to and ownership of all I acquired, and I did this for the *sole purpose* of retaining it where I believe it belongs – within our Gliding Movement; Certainly it was not done for personal gain.

For in those years I could not see within the movement a safe and suitable facility such as is now growing at Lasham where all this could be housed – so I simply stored it as best I could. But – particularly with the problems of health as mentioned earlier – I regret I caused some disappointment in declining access to this material in more recent years, particularly to owners of the Olympia series, including those of my very first gliding love, my Kemsley Trust aided Olympia 1 BGA 508, again needing help after another more recent “ding”, and to the Lasham owners of a Kite II. To them I apologise, to allow ready access to it all was simply not physically possible with much unsorted and in limited space.

So it was my pleasure recently to pass it on. Physically, on April 15, 1993, to Colin Street, to take to the Lasham VGC Centre and into entitlement of the Vintage Glider Club. Please will you therefore take this letter as confirming my renouncement by me of all that was collected that day by Colin Street, namely and in general terms the archive components of;

Slingsby; T.1 to T.31 (though not all types).
 Elliotts; Olympia series.
 Kronfeld; Unsorted and may include such as Wien.
 Sigma; Not complete, most plans went to Canada.
 German; Grunau Baby, SG38, Kranich, Weihe, etc.
 Buxton; Hjordis.
 Manuel; Willow Wren.
 BAC; Believed I to VII.
 Waco; Hadrian (As planned for Slingsby).

And others as may in time be found therein ...

Also included were numerous metal tubular Drawing Storage Cans and several wooden Storage Racks which are of historic interest in that they came from Fred Slingsby's

Drawing Office at Kirkbymoorside.

Please will you as President and with your Officers of the Vintage Glider Club therefore take note and please in due time acknowledge in writing to me acceptability of what I now write.

“The title to all material in THE ARCHIVE is passed at time of collection (April 15, 1993) to the Corporate Entity of the Vintage Glider Club as presently known, or as may be known in the future.

A condition of this gift of THE ARCHIVE to the Vintage Glider Club is that the Club shall not now or ever deny reasonable access thereto on request to its paid-up membership from time-to-time, and, at the discretion of Officers of the Club, to other persons not being members, but providing good reason for access; e.g. Aeronautical and Gliding Historians, Researchers, Journalists etc.

A condition of this gift is that should the Vintage Glider Club ever cease to exist, prior to such, it agrees to donate THE ARCHIVE in its totality to the British Gliding Association for that Association to retain for the benefit of the Gliding Movement for all time”.

*With my kind regards and sincere good wishes
 Yours Sincerely Michael Russell*

(Editors note: Only three of the conditions have been included in the above, should any member wish to read all the conditions please would they contact me, also is there any chance the current owners of the Petrels could send me a copy of the C of As please?)

From Bill Tonkyn, 90 Merton Way. West Molesey, Surrey, KT8 1PQ.

50 years ago on Sunday April 11, 1943, I had my first ground slide in a Nacelle Dagling. As a member of the Caterham School ATC, I had been very keen to secure one of the four weekend gliding courses which had started locally. Unfortunately though, the four weekends had only yielded four slides for me, the latter being on Daglings, struggling to

keep myself in place without whanging the rudder bar from side-to-side. Somebody broke the nacelle. Heavy bumps were of course very common and a nail was fitted as a weak-link attachment for the flying wires to the top of the A-frame.

The following summer I left school as an ATC Flight Sergeant with a second gliding course booked and I managed to add a third on to it. By now we had Cadet TX.1's and I progressed through ground-slides and low-hops to high-hops (25-35 feet up), 25 launches in all. On one hop I was trusted to release the cable and fly free, but in my enthusiasm for this new experience, I went a bit too high, found the winch bearing down on me and made a shaky right turn to escape. Nevertheless my instructor assessed the flight as "Above Average Plus"!!

No 162 Elementary Gliding School at Hamsey Green in Surrey was a small private airfield concealed from the 403 bus-route by a row of houses. The field is still there but the area of the little hangar and outbuildings (one of which dispensed tea, sandwiches and ground-slide pudding) was a riding school when last seen. Because of a slope up to the middle, the Packard Straight-Eight winch was stationed there in 1943 as its driver had an excellent view of what was happening to the glider, but the glider had to negotiate a snatch-block tied to a tree at the far end of the field. By 1944 a straight winch-run and relay signalling had been substituted.

The Commanding Officer was L. E. Hatcher, possessor of a severe squint and a Cambridge Sailplane. The former, the result of a pre-war accident, caused some embarrassment on parade when the Flight Sergeant at one end failed to answer to, "SERGEANT", apparently shouted to the other end of the line. The latter wore camouflage paint and was rigged on occasions for a little illicit soaring or for circuit practice for selected instructors whose fishtailing antics on final approaches struck awe into the pupils. (Editors note; was this Cambridge BGA 263 or the Mk.IIA BGA 279?) In 1943 the instructors had a BAC VI to fly (BGA 120 or 182?) and in 1944 a Tutor was acquired which lasted until August 6, when Geoffrey Dorman, a well known Aviation Journalist, spun it in and suffered a badly damaged thigh. At the back of the hangar was a BAC VII for restoration if Mr. Cross and Mr. Copeland ever found the time. (Editors note; whatever happened to the BAC 1, BGA 101 "Columbus" which was reported here and still around in 1953?)

Apart from Hatcher, my instructors were A. F. Copeland, L. E. Moyse, Eric and Geoffrey Everington, Geoffrey Dorman and Flying Officer S. Jones, then a senior officer to the Customs and Excise Service, but formerly "Taffy" Jones, distinguished fighter pilot on the western front in Sopwith Camels.

One more recollection is that of a lorry trip to Ottley Motors to pick up three Cadet TX1's. Only one was for Hamsey Green and we took the other two to 161 EGS at Burgess Hill.

After September I had to wait until July 1946 for my next six launches during Imperial College Gliding Club's camp at Devil's Dyke. That camp showed us the need for a more professional approach, and when our Cadet, (BGA 437, c/n MHL.RC3) had been repaired we were privileged to move in with the nucleus of the Surrey Gliding Club. The Cadet was trailed from I.C. to Redhill by our De Soto winch through a snowstorm on Saturday March 15, 1947 and rigged, the following day we did wing-balancing and our Easter Camp started on March 29, with hops in the rain across the water-logged aerodrome under Ann Douglas's eagle eye. From then

on, our joint operation built up rapidly, a new Tutor joined the fleet on April 12 and three Olympias and another Cadet followed. Three hops cost 5 shillings, a Tutor circuit 2 Shillings and a night in the "Snake Pit", 3 Shillings. I just managed to convert to the Olympia and have my first aerotow before being called up for National Service in September 1947.

Obituaries

BJARNE REIER – NORWAY. Very sadly we have to report the death of our Norwegian member Bjarne Reier on Tuesday the July 6, in Fulda Hospital after three unsuccessful heart by-pass operations.

He had been working in the workshop below the German Gliding Museum on the Wasserkuppe on a new 1921 Hannover Vampyr. He had been examining the original Vampyr which is hanging from the roof on display in the German Museum in Munich. It was hard to measure up the fittings when the aircraft was displayed high up. On his return to the Wasserkuppe, he was not feeling well, and so was admitted to the Fulda Hospital. On Friday July 2, he was feeling quite happy and was sure that he would be back at work on the Vampyr four weeks after his recovery.

He started his gliding when he came to Hamburg and bought a bicycle which he rode across Germany to Grunau which was over 1,000 kms away. Here he learnt to glide and first made his acquaintance with the Grunau 9. Shortly before the war, he was working in the Sportflugzeugbau Schempp Hirth at Göppingen. Here he got to know Martin Schempp, Wolf Hirth and the Huetter brothers. Bjarne showed me once some of the drawings for the H.20 motorglider's fuselage and engine installation. This was first flown during the war but Bjarne had returned to Norway by then.

After the war, he continually worked with gliders and became known as Norway's Gliding Pioneer.

More recently, he built himself a new Grunau 9, the type on which he had first flown. It could not be given a Norwegian Certificate of Airworthiness as no-one knew the type there, and so he eventually found a German Inspector who was old enough to know Grunau 9s and he gave it a C of A. He brought it to our Rendez Vous Rally at Dunstable before the 14th International VGC Rally at Lasham in 1986. Over the slope at Dunstable, he was able to soar it for over an hour in hill lift. It was clearly one of the best primary gliders ever designed. He soared it without instruments and without nacelle. As the G.9 could not be aerotowed, he had always to have a slope nearby if he was to keep it up. This was to limit his participation with his machine at many of our rallies, but he often came. He was so generous that we only had to mention that we hoped to find a practical design that could be built in small workshops or car garages for a possible project for our very skilled aeromodeller members etc., and there suddenly arrived from Bjarne in Norway, all the H.28-2 drawings. By working at the Sportflugzeugbau in 1939 where the Huetter brothers also were at that time, and he was able to obtain a set of their H.28-2 drawings which they had produced in Salzburg in 1936. He would not let us pay anything for them. Finally, there arrived from him a Norwegian Report on the strengths of various glues after 23 years of holding woods together. We can imagine him wryly smiling as said that this was a present for old glider owners. Casein Glue was the best after 23 years!!! Bjarne had so many contacts in Germany that he spent almost every summer there. He always liked to journey to the Wasserkuppe during the first week in August when the old pilots often came there. It was the period

of the Rhön Contests. When working for the Wasserkuppe Museum to try to bring the old gliders there more into their original conditions, he was only paid enough so that he could eat perhaps in the Rhöngestklause or somewhere.

It can only be said that he was struck down while working on old gliders which he liked to do best of all. He often helped friends with advice and worked on their vintage gliders. In May he had been with Jochen Kruse in Hamburg looking for the footfalls which would have been the Vampyr's undercarriage. He had been with Jochen together with their SG 38 and Grunau 9 two years ago at Grunau where he was able to relive the happiest time of his youth. (Grunau is now called Jesow Sudecki in Polish Slask – Silesia)

We can only say that Bjarne died while working for our movement and that he was never happier when he was with old gliders and their enthusiasts. He was 75 years old. We send our sincere sympathies to his family and to his many friends.

REIMAR HORTEN. During late August, he died in Argentina aged 80. He, and his brother WALTER, are known as the great flying-wing Pioneers not only in Germany, but throughout the Aviation World. THEIR AIM WAS TO CREATE AN ABSOLUTELY STABLE, PLEASANT TO FLY PURE WING WITH NO VERTICAL SURFACES AND WITH ITS PILOT ENCOMPASSED BY THE WING PROFILE. Such a goal is idealistic but they almost managed to achieve it. Reimar Horten was the son of a Bonn University professor and he was born in 1913. He and his brother built their first flying wing, the Horten 1, in 1933. Reimar was still at school but he and his brother were able to aerotow their Glider to the Rhön Contest on the Wasserkuppe. Due to unfamiliarity with the terrain the Ho. 1 was undershot and broke its skid. After its repair, it was able to be flown for the two remaining days of the contest. The Ho 1 earned a consolation prize of 600 RM. After this, Reimar telephoned Lippisch at DFS and suggested that DFS could have the glider for no money if they would send a towplane to collect it. This, Lippisch said he could not do. When the Director of the Wasserkuppe ordered them to remove their aircraft, Reimar and Walter could only think of burning in front of the RRG hangar.

Then followed the Ho 2 of 16 m span, and then in 1938, the first two Ho 3s of 20 m span. These enormous wings were found to have perfect flight handling characteristics and phenomenal climbing ability. What was not perfect was their handling on the ground, when they had to have two trailers each to transport them. Both were flown to sensational heights during the 1938 Rhön contest by Heinz Scheidhauer and Werner Blech. Both Ho 3s broke up in Cunitz and Werner Blech was killed. Heinz Scheidhauer, although beaten unconscious by the hail, survived, although frozen, having been carried up to great heights by his parachute in the very strong lift. In spite of this disaster, the Luftwaffe entered four Ho 3s in the 1939 Rhön Contest and Heinz Scheidhauer flew one of them, having recovered from his previous year's experience. Previously, it had been thought that with the Ho 3s very low wing loading (1.6 lbs per sq. ft, although this was actually more as the rear part of the wing was acting as a tailplane), it could only climb fast, and that horizontal performance was limited. Heinz Scheidhauer demonstrated with a 330 km distance flight, that it could also manage to fly distance.

Then came the war with its obligatory military service. Reimar found himself on the airfield of Königsberg/Neuhaus in East Prussia together with military glider pilots and service

crews, who had nothing to do. He persuaded them all to become expert glider builders. In 1941 they built the first Ho 4a. This aircraft had much higher aspect ratio and wing loading than the Ho 3s. Demonstrating a good performance, three more Ho 4as were built back in Germany. The Ho 4a was tested against Germany's best sailplanes, a Reiher, Condor 3 and Weihe at the Reichssegelflugschule Trebbin, North of Berlin in 1941. It demonstrated a clear performance superiority over all of them.

Performance has a direct relationship with aspect ratio i.e. the higher the aspect ratio, the higher the performance. The Reiher's A/R was 18.85, the Weihe's 17.85 and the Condor's 18.4. The Ho 4s was 21.4 and so it could be expected to be better. In 1943, tests were carried out between it and the D.30 Cirrus. The D.30's A/R was 33.6 and was the most efficient aircraft in the world. The result was that although the Cirrus was superior at high speed, the Horten 4 might have been better at low speed. Although the Horten brothers said that their aircraft was not properly worked up and that the one which had been prepared for the tests had been broken, they would not go on with the Ho 4a but would improve it in two ways: one, to give it a laminar profile ... and two, to stretch the Ho 4a to the same A/R as the Cirrus. Both projects were achieved. He it should be mentioned that Walter Horten, after a brief spell as a fighter pilot as Galland's wing man in 1940, became a Luftwaffe requisition officer, and he would travel around the squadrons and make out requisition notes for parts etc., that they would need. In so doing, he was able to channel unofficially many items to his brother who was still working on flying wing sailplanes and aeroplanes. The laminar flow Horten 4b used a Mustang fighter's wing profile that had no double centre of pressure. Germany had no laminar wing profiles, and especially none for flying wings. Therefore it was stabilised in pitch with ferocious tip wash out. The result was catastrophic, the wing stalling at 75 kph and having too much drag at 80 kph for any sort of performance. Characteristics after the stall were not pleasant as were those of a Mustang fighter. The young test pilot Hermann Strebel was killed during his first flight in it when he took it into cloud. The RLM forbade any more work to be carried out on the next five prototypes although they were well advanced. The Ho 4b however tried out a new construction technique. Three metre span sections of the leading edge using plywood balsa preformed leading edge D-box sections were glued onto the front of the main spar. Thus the Horten brothers also pioneered plastic construction, although some of this may have been used on the de Havilland Albatross and Mosquito. The second way forward was to design a stretched Horten 4a to the same A/R as the Cirrus. By so doing they hoped to prove that a Flying wing with the same aspect ratio as a conventional aircraft (with tailplane) would have a 15% better performance than a conventional aircraft with that same wing A/R. In the summer of 1944, it was only possible to try to build this fantastic flying wing of wood with a massive main spar, as there were no metalwork workshops available in Germany at that desperate time. It was realised that the D.30 Cirrus had used a metal/wood construction to the finest limits that were then available to aeronautical practice, and that it had taken 5 years to build it. Nevertheless, two Horten 6s were built and flown. It can only be said that test flights, finally carried out with the American Front only 25 kms away, revealed that the Horten 6 with its A/R of 32.3 had a performance that was that much better than that of the Ho 4a, than the latter had been against the Reiher, Weihe and Condor 3 in 1941. It was not possible at

that stage in the war, to compare it with the D.30 Cirrus.

It can be asked, was it a practical sailplane, with wing flutter from 100 kph due to its great wing flexibility? Was the Cirrus practical, as it had crashed during its first launch of the 1938 Rhön Contest, through a ground loop? At least it did not flutter. SINCE 1945, THE WORLD HAS BEEN FOREVER ASKING, DID THE HORTEN BROTHERS WIN? Was their flying wing better than a conventional sailplane of the same A/R? The case was unproved and the world will also ask why the Horten brothers were designing these sailplanes at a time of National Crisis. The answer is that they were also designing aeroplanes. Unknown to the German Air Ministry, a 9 ton jet fighter with two Jumo 004 turbojets was being built by a Sonderkommando 9, for which Walter was making out requisition notes (one was for the two turbo jets). Nobody dared to ask what Sonderkommando 9 was doing.

When at last Hermann Goering was shown the aircraft, he asked with amazement where they had learnt to do this. "In the workshop on the Wasserkuppe", came the astounding reply. Two young men, who had only experienced working on gliders, had managed to build a sophisticated jet fighter capable of 900–1,000 kph! Hermann Goering had never been to the Wasserkuppe and had probably never flown in a glider (as he was not light). He had been brought up through the fighter schools of the First World War and had only flown aeroplanes. There were certainly no gliders about at that time. The Horten 9 V2 jet fighter was destroyed during a test flight from Oranienburg in February by Erwin Ziller and so there is not much to substantiate its sensational performance claims. As its aerodynamics may have been similar to those of the perfect slow speed Horten 3, it may at least have been docile. It had wooden wings and a ply covered steel tube centre section as those of the Horten sailplanes. During those last days of the war, the Horten brothers' aim was "TO BEAT LIPPISCH TO 1000 KPH" and for this aim both they and Lippisch were designing Deltas. During early 1945, the RLM required the Horten brothers to design a flying-wing Amerika Bomber which would carry a bomb load at great speed at a great height to America, and thus they were not able to be at Oranienburg for the final test flight of the jet fighter.

After 1945, the Horten brothers offered their services to the British at Faireys but these were not accepted. Both of them managed to emigrate to the Argentine to continue their work for the Argentinean State Aeronautical Institute of Cordoba. The electrifying news got around to the gliding fraternity that they had got away to the Argentine and were still trying to produce their flying wing wonders out there. The primitive conditions in that country even went so far as them having to produce their own glue and plywood. The glue from the science department actually started to set before it got to the glider! Nevertheless, two Horten 15 single seat sailplanes were entered in the 1952 World Gliding Championships at Cuatro Vientos in Spain. Due to lack of experience in Contest flying and little experience flying the Hortens, one Horten 15 was broken before the contest started and the other was flown by Ricardo Bazet who had little contest experience. Heinz Scheidhauer told me "If it had been Cuadrado who had been flying it, it would have been a different matter". Wolf Hirth asked Scheidhauer, who had been the Horten's chief test pilot for years "Comrade Scheidhauer, why don't you show us what it can do?", but Scheidhauer at that time did not feel he could represent the Argentine as he had a dual passport.

Because the Horten 15s did not do well (or win) the Championships, the Argentinian Government would not

employ Reimar Horten any more, even after he had designed a four engined transport, a delta fighter, two tandem seated and one side by side seated sailplanes. Scheidhauer flew the latter, the URUBU, across the Andes into Chile. Reimar now found himself outside state assistance and designed ultralight Pianifero sailplanes, a Horten 1, single piece, flying wing, for the Argentinean gliding movement. He also designed a universal conventional sailplane which had three different spans. After all this work in the 1950s had not exactly been a success, he retired in his ranch out in the Pampas and sometimes more recently had lent himself as an advisory council for flying wing projects ... both ultra light projects using new, unreleased aircraft materials, and perhaps for the advanced high speed "Stealth" bomber.

The gliding world has forever asked why he could not have given us just one really practical and high performance sailplane. The Horten 14, 16 m span sailplane, that did not survive American capture in a wood, the Horten 16 Colibri that crashed in the Argentine during its first take off due to its C of G being along way out (according to Scheidhauer), the Horten 15s ... all may have been leading to a practical design but may have suffered in performance because of it. Now Reimar has gone, hundreds of questions will remain unanswered. Reimar has been survived by his wife, son and by his brother Walter, who is living the life of a retired Lt. Col. in Germany. It has been said that he would never let a design out until the aircraft had been tested first to find out if it was safe. He tried out hundreds of new ideas with them and so this was probably sound. New generations have been wishing to take his ideas further but have never been able to from the old plans which are not yet available in their entirety. After 1951, it was felt that the Horten designs had been taken to their final possible A/R and there was no way that their performances could be pushed forward with their (at that time) available wing profiles and the Hortens were expensive to build in the austere post war world. Certainly the Ho 4s and 6s were very prone to ground looping during launching and had to be started exactly in to wind. Once in the air, there were no problems except flutter at high speed. However, now there are new profiles, new technologies and wind tunnels. The Horten brothers never tried out their aerodynamics in wind tunnels, as perhaps during wartime there were other projects in need of them.

The last exciting news is that the Berlin Museum, wishing to regain its former grandeur, now that Germany has re-unified, has asked the Smithsonian Institute in Washington to loan them their Hortens 2, 3f, 3h and 6 for restoration. The Washington Museum has put out a call for all information and drawings etc., in order to give these projects a better chance.

Stan Haines told me that he had taken all Horten 4 and 6 drawings to Farnborough and that they then might have been sent to Northrops in the USA, or somewhere else in the USA, if they are not in the British Public Records Office at Kew. So Reimar may have gone but the legend of his fantastic wings lives on. We hope that the VGC will one day have some of them flying. We send our sincere sympathies to his son, wife, to Walter, and to all his friends and sympathisers throughout the world.

DOWN TO EARTH SOARING

by VGC Member John Lee

At the time I read Harald Penrose's compelling book "Adventure with Fate", I had designed and built seven Ultralight aircraft including a dual control Microlight and a dual control glass sailplane. I was presently engaged in building two Hütter H.17A sailplanes from 1934 (these had been built world-wide and were intended for garage construction – the longest item being 16 ft). Ironically, both the Hütter brothers died during the construction of these machines; and the experience left me with the desire to re-work specifically British one-offs.

Harald's brilliant 1935 Pegasus, mentioned in his book as the most enjoyable flying of his career, could not have been more appropriate. All the indications showed that it would out perform the Hütter.

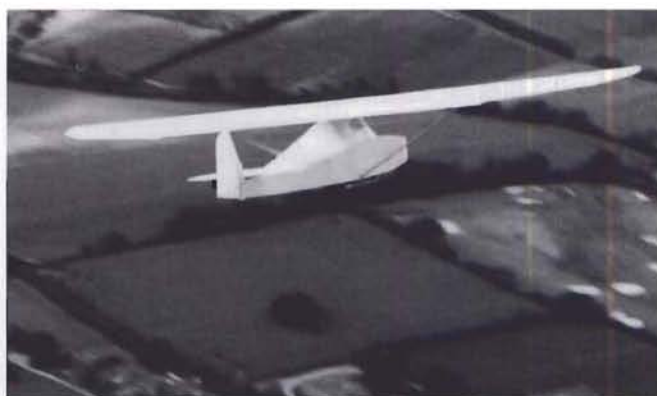
I began research, but construction detail had been lost in the mists of time. The sole original machine had been burned after a typically unsuccessful nose conversion to take a larger pilot, as Harald had weighed only 10 stone and thereby was also the sole pilot. Drawings had disappeared but Harald was able to provide some sketches. That was all I had to go on. I decided to apply my own detail whilst preserving the general appearance of the original, and this machine would have to be aerotowable to keep pace with the modern world. Thus, it was up to me to make the machine work, and hence, was more of a challenge to sustain my interest through 1,500 hours of hard work.

I studied the total concept long and hard, trying to see what might be possible. 35 ft became the magical span to keep down wing loading and yet provide aspect ratio – something that came only with a strut at this lightness ... The speed would have to be more variable than that in the Hütter, and this again would be limited by the struts and form drag. Hence tail surfaces and fuselage area would need keeping to safe minimums, to provide the essential manoeuvre envelope to make use of small thermals. I chose an 18% thick laminar flow section which suited the need for a 40% spar position, both to extend the ply further back and also to keep the pilot rearward to benefit from the use of very light all moving tail-surfaces. In the event all these things paid off handsomely, the Centre of Gravity coming in exactly the right place.

Because it was built inside a house, the original had a three piece wing. Because I had just acquired a 34 ft workshop, I decided on a two piece and moved the strut further out. I took the taper point further out as well, in order to get more undisturbed wing, though getting a shorter aileron for my trouble. In fact these look very small, and are a testament to the faster flying speed and all round manoeuvrability. All controls feel harmonised, and provide confidence to get the best from the sky.

After a confusing first aerotow providing a 40 minute flight, modifications involved a mass-balance on the elevator and a sealed canopy weighing a mere two pounds. The increased airspeed had proved difficult to judge by the normal sniffing mode. So, having marked up a flying speed on the clock, I felt happy about "flying indoors".

The second aerotow was like having a different ship – everything in its place, except of course the sky, which rejected me after 48 minutes. This was just long enough to make a serious comparison with the Hütter H.17A, which with its Göttingen 535 aerofoiled wing is a typical vintage one-speed sailplane. Pegasus 2, being of the same category and style, is a one-and-a-bit speed sailplane which can be forced along at what would be a cracking descent in the Hütter. In other words, penetration is slightly available though to be avoided if possible; and circling speed can be increased



Pegasus 2 in flight.

by five knots without any noticeable loss of climb, and a considerable increase in manoeuvrability and relaxation when tired. In spite of the small tailplane and short fuselage, there is no pitching going on, and speed control is accurate and readily maintained with slight stick load.

Approach control is by a combination of side slip and increased speed, which bring the machine down the machine handsomely and with a high degree of authority. It can also be flown on to the ground where the ash skid brings it to a halt without ceremony. A fifth aerotow on September 5, provided air photographs from the tug plane and a flight of 3 hours 13 minutes, going in to cloud at 4,600 ft by mid afternoon. All flights ensuing would become routine. Harald's dream had become my own.

Pegasus 2. Specification and dimensions

Pegasus 2 is an ultralight sailplane designed and built by John Lee of Lightwing. The original Pegasus was built and flown by Harold Penrose in 1935, but it was too small for other pilots. An attempt was made to increase cockpit size by first sawing off the front end. Typically, the job was never finished and the machine was later burnt. Penrose had long considered the design of a general purpose Pegasus but even this had been lost in the mists of time.

Because Lightwing is all about ultralights, and my sympathies had always been with the principles of Pegasus, I researched the available information and eventually decided to throw it all to one side and apply my own interpretation. I felt justified in doing this, being faced with at least 1,500 hours of hard work, followed closely by me needing to be the test pilot. Therefore, and from then on, my empirical decisions would be based on my own ideas of what I would be happy flying, and that would be based on what I had already built and flown (most recently two Hütter H.17's, midget sailplanes from 1934 plans!). The objective would never move away from Pegasus. This was to be a tribute to Harald Penrose and hopefully prove that he was cleverer than those abroad, and too clever to be taken seriously by those at home.

Pegasus 2 differs from the original mainly in that it did not need to be built in a small room in a small house. Therefore, after much consideration, I decided to do away with the three piece wing, and thereby I could move the strut further outboard. In order to gain the necessary increase in area, I moved the taper further out at the same time, taking the aileron with it to preserve a greater undisturbed proportion of the wing. I wanted the machine to fly faster than the Huetter H.17A and therefore had to find a wing section that would provide the best compromise without spoiling too much the docile

characteristic. I settled on NACA 643-618 which is 18% thick (2% more than the Hütter's). But I liked its narrow entry, and felt that the thickness would be necessary to generate acceleration to maintain lift in the essential small circles that justify Ultralight soaring. Anyway, it was the kind of section that I would have designed myself.

Two other fundamental changes were made ... one, to narrow the bottom of the fuselage so that the top fitted the shoulders and the bottom fitted the bottom (so to speak!); two, on the original machine the elevator was hinged at the bottom of the all moving surface. I felt considerably happier with this vital control hinged in the centre. Beyond these changes, I wanted the machine to look like the original when flying at a certain height ... perhaps around 2,000 ft ... ?

TEST FLIGHT PROGRAM

I arrived with the trailer at Parham on the Tuesday of a flying week, and parked at the end of the line ... not really expecting to fly. I put my name on the list to fly a club Ka-8. Having only recently joined the club, my check flights had only been completed at the weekend.

After much discussion as to the best way to proceed with the precarious business of "Trying For A Flight", it seemed logical to rig the machine when the time was right. By then, it was lunch-time and most of the gliders were staying up. Activity at the launch point had slowed to a point where I could gingerly suggest that I would like to fly? OK, that should be all right. So I sought out the Tug Captain who agreed to get the Super Cub from the hangar especially to give me one flight. Now, it was a race to the threshold to see who would be holding up who. I got into the glider in such a hurry that my jacket was left behind. The little Pegasus 2 lurched dramatically forward and, just as expected, tapped its wing on the ground from the prop torque. Full rudder. got it back in the air just as the machine leapt off the ground. things happen very quickly with light wing loadings, but pitching near to the ground was more extreme than in the Hütter. Once above the trees, things settled down, but the tug was puttering along at low revs and took quite a long time to get me to 2,000 ft. I thought that my altimeter had jammed. Feeling slightly apprehensive, I released from the tow above the centre of Storrington. Having performed only two hops previously, the machine sank rapidly, but I needed to try some turns, and certainly a side slip. 1,500 ft shot by, and I had to keep straight on in the hope of some rising air. Thankfully, the vario suddenly went up almost off the end of its travel and, pitching through the turbulence, I struggled around a few clumsy turns. The speed seemed unwilling to settle down, and worse than that, there seemed no obvious place to try to settle it. The vario wailed throughout and 3,000 ft arrived with no let up from the blast of airstream. My shirt was getting damp. Suddenly, we pitched in to the murk of a cloud. This surely was the time to execute the vital side-slip. Upwind of the cloud was plenty of air that seemed to be sinking. So, gently at first on the rudder with plenty of speed, and yes, another neutral ... no problem at all with full rudder. A landing was assured. I looked over to the field. Machines were landing from all over the place. The sky had gone dead. This was the last thermal and it was drifting me back too far. Begrudgingly, I set off upwind to survey the sky and to compare distance with that of the Hütter. The sky was falling mostly rather a lot and denied much in the way of comparisons. However, I was well upwind at 2,000 ft and concentrating on the arrival of most of the gliders from the morning tasks. The wind seemed to be

NEW! THE VGC CHRISTMAS/ SEASON'S GREETINGS CARD

Available from VGC Sales: prices as follows:

Qty	Price £	P&P UK	P&P O'SEAS
5	1.75	0.35	0.75
10	3.00	0.50	1.00
20	5.60	0.75	1.50
30	8.10	1.00	1.75
40	10.40	1.50	2.25
50	12.50	1.75	2.75



Season's Greetings

Meilleurs Voeux

Frohe Festtage

Prettige Feestdagen

Boldog Ünnepeket

strengthening, so I started a high square circuit, and side slipped all the way down the approach to finish up just beyond the trailer.

This had not been too much of a learning exercise, as everybody had been surprised by the sudden change of conditions. The Ka-8 which had gone off on a 5 hour attempt just before my turn, had its wing snapped clean off while attempting to land in a field, and many others had failed to get back to the site.

To evaluate the machine's performance naturally needs some still air flying, but, with some refinements to the elevator, there is no doubt some good prospect for cross country flying. The improvement in speed range is such to require a sealed canopy. Rudder/aileron harmony seems good, but elevator needs damping though it has adequate power.

TEST FLIGHT PROGRAM 25.8.93.

Since the previous alarming excursion, I found cause to take a serious look at elevator balance. The all moving surface

weighed only 7 lbs, and I had wrongly assumed that it must be nearly enough balanced through structural weight distribution. I was surprised and relieved to find that it needed $\frac{3}{4}$ lb mass balance at its leading edge. This was immediately overcome by lead horns securely fixed in to the leading edge at the point of taper.

I had also been concerned by the lack of speed-feel. At this higher speed than the Hütter – one was blasted at seemingly all pitches. To correct this I made up a plywood and plastic canopy which could be made airtight and weighed a mere 2 lbs (my flying hat and goggles weigh $\frac{1}{2}$ lb).

Now eight days after the first aerotow, there was a good Wednesday weather report, and a lot of people turned up.

As usual, I kept out of the way, and performed my single-handed rig at the end of the field. Once again, before I had the temerity to ask for a tow, it was lunch-time and I asked for assistance from a friendly member to get the machine in to the hangar for a precise Centre of Gravity check, to finally assure for myself that all would be well for further flying. The new position was perfect, with my new mass balance and canopy, and I felt that I had done all I could.

The aerotow finally took place at around 1400 hours, into a sky that was once again dying. All seemed wonderful behind the plastic screen, especially on tow when there was a certain amount of grumbling turbulence behind the struts, I think. Releasing at 2,000 ft, having noted air speed indicated, I headed onward watching for a new indicated speed from my new larger tube from the nose cone. The variometer grunted a couple of times and raised itself to the familiar shriek demanding a rapid turn. Wow! The machine handled beautifully – this only occurred to me as we shot circling skyward to 4,300 ft and into cloud – then cutting on southward with rapidity away from the airframe. The climb had been supreme, nudging and shunting to increase the wail from the instrument. Control response was well harmonised and there was no more pitching from the elevator. The grunting turbulence on tow diminished to a happy burbling, which would soon provide the only indication of speed needed. The whole project had suddenly come to fruition. This was now an easy machine not only to handle but more importantly to get the best from. Since the previous white knuckle flight, this was like a different aeroplane. Here, at 4,000 ft, I suddenly understood Harald's comment about it being his happiest flying time. This flight itself of 48 minutes would perhaps become my happiest, having realised a positive response from my efforts in the workshop, and having got beyond the doubts. veering off up wind to the west, I entered the stable air of a sky without sun, under high cloud. With nowhere to go but downward, I eventually found myself streaking in sideways between two landing training gliders, and flashing along through ground effect to pull up at the trailer. Not a bad day's work. I felt perhaps more elated than with any other project. Pegasus had returned for the duration.

PRIZES

VGC PRIZES are awarded each year as small tokens of our gratitude for prodigious feats by our members on the ground and in the air. For 1993 we have decided to award prizes for restoration of vintage sailplanes to the following members.

JOHN LEE for his **PENROSE PEGASUS Mk 2**. The original of this ultralight, small sailplane was designed and built by Harold Penrose in 1936. As its cockpit was small a friend sawed off its nose to build a larger one. This happened after the

war. It was never rebuilt and was burnt. This second version is designed for slightly larger pilots and can be aerotowed, unlike the original version. **TED HULL** for his **SCUD 3**. Ted has finished the restoration of this 1935 motorglider, now without its engine. **BGA 684** was the Carden Baynes Auxiliary prototype, it took to the air for the first time in 33 years from Dunstable at the end of a restoration begun by Les Collins. There were only two Scud 3s built. Both are now currently airworthy. The other one, **BGA 283**, is owned and flown by Martin Garnett at Duxford, which his father restored. **EARLE DUFFIN** for his newly built **HÜTTER H.28-3**. This is an incredibly achievement. He did it in two and a half years stretching the HÜTTER H.28 – 2's drawings. The H.28-2 has 12 metre span wings. This H.28-3 has 13.5 metre span wings. This is the only airworthy H 28-3 in the world. Only one other was ever built and it did not survive the war. **KEITH GREEN** for his **SWEDISH JS WEIHE**, **BGA 1093**. He has restored it in one year and built a new closed metal trailer for it. Andrew Coates had restored it initially. Now it has been brought up to Lasham's airworthiness standards. It is a famous aircraft, Paul MacCready of America having almost won the World Championships with it in 1950. Keith not only restored it but got it to our International rally in the Czech Republic last August. **RICHARD KILLHAM** for restoring a **SLINGSBY SWALLOW**. This aircraft had previously been in RAF use in Cyprus and was brought back in a Hercules. (Is this the old XS651 that was sold to Cyprus Joint Services GC on 29.8.85?) **JURGEN DOPPELBAUER** for building his **KA-I** again. This was the first type designed and built by Kaiser after 1951. It was felt that the reborn German Gliding Movement would only be able to handle small, light and practical sailplanes, in contrast to their pre-war giants. Not many KA-Is were built due to Kaiser thinking that semi-monocoque plywood fuselages might be too difficult for home builders to manage. He therefore designed a fabric covered welded steel tube fuselage for it, and it became the Ka-3. Jurgen Doppelbauer has built his Ka-I very recently. **MIKE BEACH** for having created under the auspices of the Brooklands Museum, the first British Museum for gliders. **MIKE BIRCH** for his **Krajanek** (see 21st International Rally). **ROLF ALGOTSON** of Sweden for his **EoN Olympia**. (see Swedish News). **SEF KURZ** for his German **Rhönbussard**. **R. JENSEN** for the Czech Republic **Lunak** (see 21st International).

VGC ANNUALLY AWARDED PRIZES FOR 1993

The following prizes were awarded at the VGC's Annual Dinner at the London Gliding Club on Saturday 23rd October;

THE RODI MORGAN TROPHY for the winner of our annual rally goes to Brian Middleton for reaching 12,500 ft in wave lift near Llewenni Parc in his Slingsby Sky.

THE ED HALL TROPHY which is awarded annually for the best flight in a vintage glider from Lasham goes to James Lyell who flew his T.21b from Lasham to Didcot cooling tower and back, 100 kms out and return, on August 17 1993. The flight took him 3 hours 30 mins and his passenger was Mr. Richardson.

THE FRANK REEKS TROPHY. This is awarded annually to perpetuate the memory of our late member Frank Reeks. It is awarded to the owner of the best restored Grunau Baby. This year it goes to Brian Douglas from the Dublin Gliding Club for his beautiful EoN Baby.

Classified ads

Kirby Kite 2A "Percy". VGC restoration award winning Silver C Vintage Glider. Best of only three flying. 500 hours total. Immaculate Condition. Full panel includes Ferranti A/H, T&S, ASI, Alt., Cosim, Cook Audio, 3-ch radio. New owner requested to maintain dedication to Percy Pilcher. £3000. Excellent trailer £500. Contact Peter Warren, Telephone 0785-48209.

Olympia 2, Towing out aids, Wooden Trailer, Parachute, C of A November 1993, £2750 ono. Telephone John 0722-325863.

Plastic Membership Cards and Business Cards. Comprehensive Range. Telephone Airprint for Free Samples and Price List. 0275-472271.

For Sale. Schleicher K4 Rhönlerche 2 BGA 2530. C of A expired September 1991. Basic Instruments - 2 ASI's 2 Altimeters, 1 Winter mechanical Vario. Stored at Carlton Moor Gliding Club. Offers - Telephone (Club) 0642-778234 or (Ken) 0325-720573

WANTED. A pair of T.8 Tutor or T31 Wings. Telephone 0507-450555.

WANTED. All information, drawings, photographs etc. for the Horten Flying Wing types:- Ho 2, Ho 3h, Ho 3f and Ho 6. by Russell E. Lee, Curator of Aeronautics Department, Room 3312/MRC 312, National Air and Space Museum, Washington DC 20560, USA. Tel (work) 202. 357. 2515. (home) 703. 525. 3217

FOR SALE

MOSWEY IVa: Unique 16 metre vintage gullwing with Ka6 performance and delightful handling. Built 1950. C of A until May 1994.

KIRBY KITE: Strutted gullwing from 1939 with clear fabric finish, open and closed canopies. C of A until May 1994. Telephone 081 449 9024 evenings.

Lover of old gliders seeks a Slingsby T.21 in flying condition or otherwise. It might be possible to exchange it for a French Glider! Offers to:- F. Trompier, 3 Rue Verte, 80670, Havernas, France.

WANTED. T31 Wing front pylon. Tel 0749 841084 (Somerset)

FOR SALE. Slingsby Tutor. Tel 0749 841084 (Somerset).

For Sale. Old "Sailplane and Gliding", approx 200, all in very clean condition. Dates range from late 50's to 80's. Some in matching hardback binders, some in loose binding, others single copies. Still fascinating reading. Buyer must collect (Heavy!) from Maidenhead. Reasonable offers please. Dick Sargeant Tel (0628) 823866. 7, Paget Drive, Maidenhead, Berks. SL6 3PT

FOR SALE. Rhönlerche for sale in Switzerland. HB-1245, built in 1955. Equipped with some instruments, without trailer. Price SFr 2000. Offers to Richard Schneider, Oberstieg 30. CH-8222, BERINGEN, Switzerland.

WANTED

1. Replacement Cosim Balls to repair members Cosims Variometers that have failed, or complete serviceable Cosim units.
2. 4.00 x 3.5 Tyres and inner tubes.
3. Surplus New Ottfur Spares.
4. Surplus New Slingsby or Elliott Spares.
5. Olympia Main Pin Extractor Tools.
6. Winter Barographs.

Contact Colin D. Street, 7 Sharpthorne Close, Ifield, Crawley, West Sussex, RH11 0LU. Tel (0293) 543832 or Fax (0293) 513819.

Books for sale

La Musee de L'Air et de l'Espace and the Commission Historique de la FFVV present the second edition (15 March 1993) of HISTOIRE des PLANEURS AVIA.

The book offers text, photographs and three-view drawings of all the glider types produced by AVIA during the 1930's. The book is full of photographs of the gliders and motorgliders, which we have never seen before. An enormous amount of research has been done into the histories of each different type and that is why so much effort is being put into discovering everything about the three Avia 40P's that came to Britain from Germany in 1947.

This book is offered to British Members for £20.00 incl. p&p. C. Ravel, GPPA, Aerodrome Angers/Avrille, 6 bis Avenue Pierre Mendes-France, 49240 Avrille, France. Telephone 41 34 26 49.

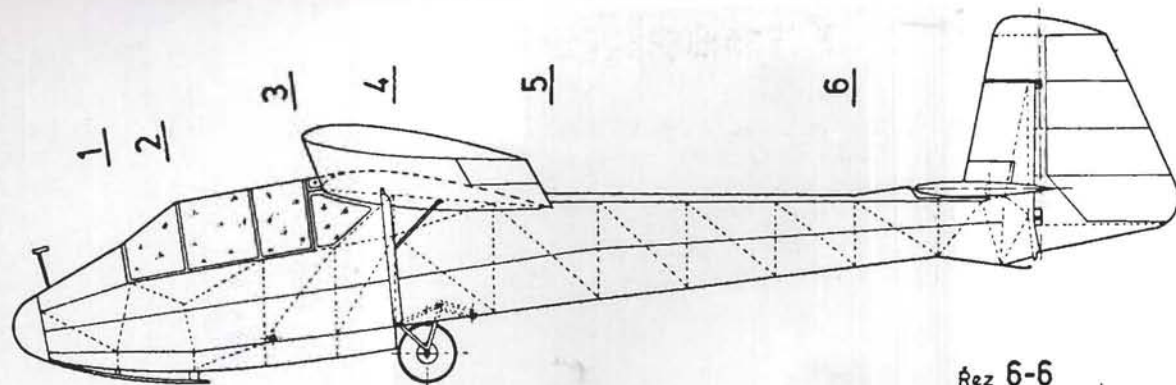
CHANGE OF ADDRESS.

Frederick V. HEFTY. P.O. Box 3159, Big Bear City, CA Zip and 4 Code. 92314-3159 USA.

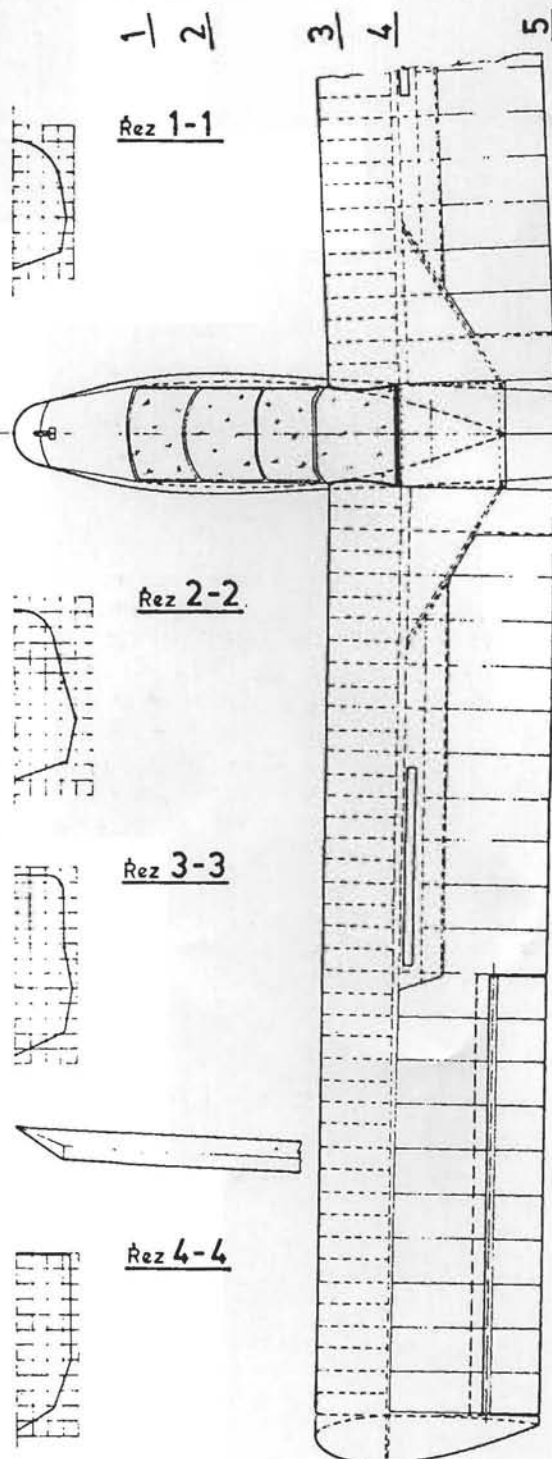
Published by: The Vintage Glider Club
Wings
The Street
Ewelme
Oxon OX9 6HQ
Tel: 0491 39245

Editor: Neill Rush
67 Felton Lane
Winford
Nr. Bristol BS18 8AF
Tel: (0275) 472271

Disc conversion, text massage, page assembly, black and white halftone production, design and consultancy, by Roger Booth Associates, Half Moon Chambers, 10 The Bigg Market, Newcastle upon Tyne NE1 1UW.
Tel: (091) 232 8301 Fax: (091) 261 9745.



Řez 6-6



Řez 1-1

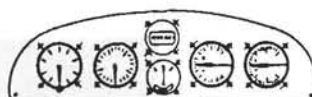
Řez 5-5

Řez 2-2

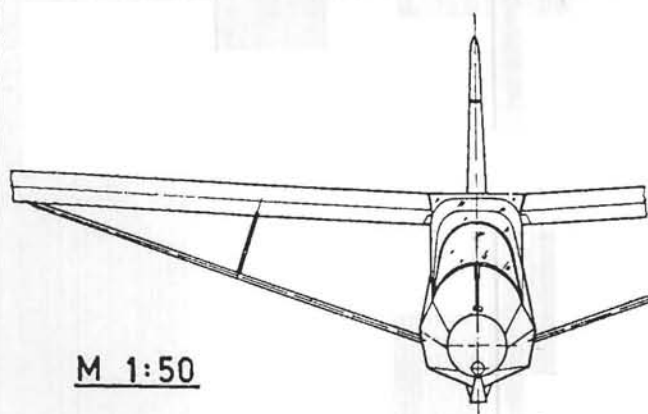
Řez 3-3

Řez 4-4

Přední palubní
deska M 1:25



LF-109 **pionýr**



M 1:50



Kb

