VGC News

No. 73 Summer 1991







ABOVE Heini Dittmar, during his visit to Dunstable in 1935, informs Philip Wills about what he thinks of the Hjordis. Towcar was Talbot 105. His visit was a Rhön contest prize.

BELOW Cockpit of T21b ZS-GSO at Parys, South Africa. The T&S has since been removed, and a mechanical vario fitted, more accurate than the Cosim.

Cover Photograph

The 1934 "Green" Scud 2, BGA 231, which is being restored in its original colours by Mike Beach. He is now working on the wings. The photo reveals his meticulous work.

VGC News No. 73
April 1991

President:	**C. Wills**
Vice President:	Paul Serries
Vice President:	Willi Schwarzenbach
Vice President:	Hans Dijkstra
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Rally Secretary:	G. Moore
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Colin Street:	Britain
Didier Fulchiron:	France
Angus Munro:	Norway
Hans Dijkstra:	Holland
Firmin Henrard:	Belgium
Imre Mitter:	Hungary
Willi Schwarzenbach:	Switzerland
Rainer Karch:	Germany
Jan Scott:	USA
Franz Havlicek:	Austria
Hans Erik Magnussen or Stig Eldov:	Denmark

EDITORIAL

As during our last AGM, members seemed to indicate that they wanted the VGC to be organised along more formal lines, a steering committee was formed to draw up a Constitution for the VGC. This steering committee having met four times, has now done just this and so, it is now up to VGC members to accept (or not accept) their Constitution, and to elect a Committee which, it is hoped will be able to take on some of the work which has for many years been done by a small nucleus of dedicated staff.

Meanwhile, the VGC continues to flourish in more favourable environments now prevailing in different countries. We can now happily report that Sweden, Denmark, Holland, Belgium Switzerland, France, the USA, Australia, Hungary and now Czechoslovakia have all formed their own Vintage Glider Clubs and organisations. These put out their own newsletters and magazines, which cover their National Scenes.

Vintage Glider Clubs in Austria and Germany are notably absent and Austria has disposed of nearly all its vintage gliders.

We don't know why but we imagine that it could be because of a very strict glider inspectorate which fears that the very turbulent conditions over their mountains might break up old gliders. Also, there must be the possibility that they have very limited space in their hangars.

Due to its environment, i.e. surrounded by sea, Britain has always been considered to have an insular outlook. However, we are glad to say that the VGC organisation has striven over the years to maintain a broad outlook and to cover, with its VGC News, the scene concerning vintage gliders all over the world and, by so doing, to foster a competitive spirit between nations to produce the best vintage gliders. As can be noticed at our International Rallies, we believe that we have succeeded in this.

This year, especially the Germans are celebrating the centenary of flight by man. Otto Lilienthal's flights, from 1891, are being widely celebrated at the German Gliding Museum on the Wasserkuppe, at the Lichterfelde near Berlin, where Lilienthal had his Fliegeberg, and at the Rhinower Berg where he was mortally hurt. There was also a great show at Friedrichshafen in his memory. It is true that there may have been other flights by pioneers before this but we can honestly say that Lilienthal's over 5,000 flights demonstrated man controlled flight such as had never been achieved before. To a German from Berlin, the Capital of Prussia, must go this honour.

ANNUAL DINNER

The VGC Annual Dinner and Prizegiving will be at London Gliding Club, Dunstable, on Saturday 14th September at 8.00pm. There will be an excellent four-course dinner with coffee for which tickets are now available at £10.00 a head from the Rally Secretary. Seating will be limited to 90 persons, so you are advised to book early, as demand is always oversubscribed. Accommodation should be booked direct with the LGC. Tel: 81 663419. Camping and caravans free. **"Platypus"**, of Sailplane and Gliding fame is to be the guest speaker.

This event is the culmination of the Historic Sailplane Group fortnight at Dunstable. Should you be tempted to bring along a vintage glider as well, it will be welcomed. So make it a pleasant weekend to relax and meet up with old friends.

During the National Rally Week at Lasham tickets will be available, and by post, with cheques payable to VGC, from **Geoff Moore, Arewa, Shootersway Lane, Berkhamsted, HP4 3NP, Tel: 0442 873258.**

AUSTRALIAN NEWS

When the Vintage Glider Association of Australia began

holding Regattas, they were usually held in the Spring (October and November) but so many were marred by showers and cold winds that the time slot was changed to the Summer, usually the week after Christmas. But after the latest Regatta, some members feel that we might be better off to revert to the Spring. The week from Saturday 29 December to Sunday 6 January, we had six consecutive days with maximum temperatures between 36 and 44 degrees (i.e. 97 – II0 deg. F! But despite these trials, those who attended the regatta enjoyed themselves and had some good flying – well, most of them had good flying.

Thirteen sailplanes came to the Regatta, though only 11 of them flew. Taking part were:

Golden Eagle GFC	Alan Patching.
Grunau 4 GHK	W. Wolf, G. Gifford.
Pirat GXL	J. Ashford & partners.
Kookaburra GRX	Air League GC.
Kookaburra GLE	Swan Hill GC.
Cherokee GQE	Doug Cameron.
Olympia (Yellow Witch) GFW	Keith Nolan.
Arrow GPK	Roy Lumb.
Boomerang GPN	T. Gould, G. Hollands.
Ka-6 GNP	Ralph Crompton.
Kingfisher GLQ	Fred Foord.
Ka-6 GNN	Bob Mc Dicken.

The Regatta was held at Nyah airfield, home of the Swan Hill Gliding Club. During the Regatta week (and the week after) about a dozen sailplanes of the Geelong Gliding Club and its members shared the airfield and the resultant crowd of pilots made for a really enjoyable time.

Most of the vintage sailplanes were launched by winch but some had aerotows behind the GGC's Super Cub. A second winch had been loaned to the VGA by John Anselmi and Harry McInnes of Stawell but it did not have to be called upon as the Swan Hill winch handled the task admirably. All the same, the VGA is grateful to John and Harry for the generous loan of their winch. Mike Burke, CFI of the Swan Hill Club, did a fine job arranging the accommodation. VGA members were spread about a little, some at the West Nyah Hotel, some in the local caravan park and some in the Road Construction Authority's camp site adjacent to the airfield. The RCA Camp was well equipped with powered caravan sites, camping grounds, showers, toilets, laundry, an air conditioned kitchen and air conditioned recreation room. The latter became the focal point of the VGA and GGC club members when not flying. It was a lifesaver on the very hot days.

No detailed record was kept of the individual flights at the Regatta but VGA members made many flights of note. Among these were cross-countries of 300km and I77km by Crompton in his Ka-6, II0km by Terry Gould in the Boomerang, 106km by Garry Hollands in the Boomerang; 100km by Keith Nolan in his Olympia and 96km by John Ashford in the Pirat. There were no outlandings by vintage sailplanes during the Regatta.

Subject to confirmation, Gold Height legs were won by Terry Gould in the Boomerang and Spiro Mallia in the Pirat. With cloudbase often around 15,000ft, many VGA members achieved the 10,000ft level. They included Alan Patching in the Golden Eagle, John Ashford – Pirat, Ralph Crompton in Ka-6 and Spiro Mallia in the Pirat. Other high flights included 9,700ft by Ralph Crompton (Ka-6), 7,300ft by Gary Hollands (Boomerang), and 7,000ft by Ged Terry (Cherokee). And these flights were not all made on the same day!

To mark the New Year, the citizens of Nyah held a carnival in the local sports ground which included foot racing, horse racing and camel racing. Since the sports ground is just across the road from the airfield, the gliding fraternity was invited to put on a show. With the temperature around 40 degrees, many of the sailplanes went off across country, but, at the appointed time, Alan Patching flew the Golden Eagle to the Sports Ground, found a reliable thermal source and used it several times over a period of half an hour or so, to go up and down between 1,000 and 2,000ft. It gave Mike Burke, on the public address system, a great opportunity to describe thermal soaring. While Alan was doing his stuff in the Eagle, Mike Durrant of the GGC raced across the crowd in his Open Jantar at about 100 knots, with water ballast streaming behind it. This gliding segment was a big hit with the crowd and was talked about for weeks afterwards. As well as doing some soaring in the Golden Eagle, Alan Patching did some instructing in the Swan Hill Kookaburra and some tugging in the GGC's Super Cub. A number of pilots of both the VGC and the GGC took the opportunity to gain, or to regain currency in winch launching. The prolonged heat had its effect on both the people and the operations on the field. There were daily warnings to guard against dehydration and heat exhaustion but, despite precautions, some people still reported giddiness and nausea. All pilots were required to carry drinking water in the cockpit and more than one flight ended prematurely when the pilot used up his water supply. On one day of 44 deg. Mike Valentine estimated that the density altitude at ground level was about 4,000ft.

Most evenings saw the gliding people gather at the West Nyah Pub for the evening meal. The proprietors did an excellent job of catering for the hunger and thirst of about 30 people each evening. Barbecue, Smorgasbord and a la carte meals were available at very reasonable cost. On Friday evening, 4. January, the annual meeting of the VGA was held at the pub.

Visitors to the Regatta included Ged Terry of the Newcastle Gliding Club in England and Bob Bell and Carol King of the Champlain Gliding Association of Montreal, Canada. Bob and Carol were spending a holiday in Australia, visiting clubs and gaining experience in winch launching which they hope top see introduced to their club during this year. Other visitors included VGA members Dick Duckworth and Leo Dowling of Melbourne and Walter and Ruth Herrmann of the South Gipsyland Gliding Club. Walter owns a Ka-6 but did not bring it to the Regatta. I suppose one could count as visitors a group of keen young members of the Air League Gliding Club with their Kookaburra, under the fatherly eye of their instructor, Mike Valentine. They flew on several days during the Regatta.

The success of the Regatta is due not only to the participating pilots and their crews, but to the willing and friendly assistance of the members of the Swan Hill Club, to whom hearty thanks are offered.

A Horten in Australia?

Ann Welch has kindly given us the extraordinary news that Bill Moyes (475 Bronte Road, Sydney 2024, Australia. Tel: 387 688. Fax 3874492), has been for the past year flying a 15 metre wingspan, foot-launched Horten flying wing sailplane. The flights have been going well with a few problems only concerning the take- offs and landings on the pilot's feet. We will try to obtain further information concerning this aircraft and its operation.

BRITISH NEWS

(as of 23 March)

The very cold weather which came to us from Russia during February must have stopped almost all restoration projects. However, **Mike Beach** has continued to work on his Scud 2, which is needing a total rebuild. He is now working on its wings, having finished the fuselage and tail surfaces. He now believes that it is possible that, after being owned by Kit Nicholson and Phil Cooper in 1934, it may have been broken badly by someone and then partially repaired and stored by Eric Collins near Dunstable before his fatal accident, while attempting a forward loop in a Grunau Baby at an air display. The Scud 2 may then have gone to Slingsby's for completion of its repair. After becoming involved in this repair, and the completion of the Dessouter Grunau Baby 1, Fred Slingsby is said to have vowed never to become involved in finishing someone else's project again.

Mike Birch, Graham Saw and others did continue working at Wycombe Air Park in spite of the cold weather, on a Tutor which now must be ready for fabric covering. Graham Saw has bought for Brian Spreckley in France, one of Ian Hodge's AV.36s. At time of writing, this machine is in the Wycombe Air Park glider hangar on its open trailer, and it does not seem to be bad condition. It is one of three AV.36s which are in Britain and this one was built in Germany.

Mike Birch has continued to work on his Condor 4 to make it more original. Research into its history has revealed that it was the second prototype, which was built by Heini Dittmar himself near Augsburg. While the first prototype Condor 4 was built by the Flugzeugbau Ferdinand Schmetz, which had a licence to build the type, for the German team to fly as a two-seater in the 1952 Spanish World Championships and was a special production, the V-2 was also built as a special Condor 4 to be flown only as a single seater by the Egyptian Hassan Kamil and, as such, it had a special canopy. As it was to be flown solo, Heini Dittmar incorporated extra fittings which, adding to the weight, would allow the pilot to open part of a dive brake on one side in sympathy with up aileron. This experiment was successful, in that by destroying lift on that side, rate of roll was increased by almost 100%. The extra maneuverability was thought to be a good idea for mountain flying, or for when the lift was narrow or broken. The very high standard of Heini Dittmar's workmanship in evident throughout. At a later date, it seems that the machine was converted as a two-seater, and the extra fittings necessary to open part of airbrakes were removed. Because of it having been built by Heini Dittmar's own hands as a Special Condor, its performance may be better than that of other Condor 4s.

While the British designers were putting their faith in the new NACA 6 series wing profiles, the performance of this glider with the old Göttingen 532 profile highly loaded is very interesting and would be worth comparing with that of the contemporary Slingsby T.42 "Eagle". with its NACA 63 wing profile. It is worth remembering that Heini Dittmar first used this profile for his 1935 Condor 2, and that, during that year's Rhön Contest, he started late on the day when the first four 500km flights were made to Brno (Brunn). In 3½ hours, Dittmar flew 267 miles which represents an average speed of of 76mph (ground speed). As one would expect, much of the flight was spent flying along cloud streets but Dittmar said that he did do a certain amount of circling. Of course the long distance flights were all done downwind, but we consider that such an average speed would not be out of place today. As a reward for this achievement, Dittmar was given a free ticket



Eustace Thomas in his Condor 2 during the 1938 British National Contest at the London Gliding Club. Photo: Tim Hervey.

to England and back as a prize from a German shipping line. Thus, he visited the London Gliding Club and was able to fly both the Scud 2 and Hjordis, which he did expertly.

He had so much of interest to say that he was never left alone.

The quoted average air speed of 140 kph for Dittmar's 267 mile flight into Czechoslovakia must have been his inter thermal speed (at which the Condor 2 is said to have a sinking speed of only 2 m/sec.). An average ground speed of over 76 mph was sensational at that time. (and still is now). Heini Dittmar flew full aerobatics with the new Condor.

This information has come from the November 1935 "Sailplane"



Eustace Thomas and his Condor 2 at the London Gliding Club.

Heini Dittmar departing in his newly-built Condor 2 during the 1935 Rhön Contest.



In 1937, a Condor 2 was imported into Britain by the elderly Eustace Thomas. Evidence now very clearly suggests that this must have been the best sailplane in Britain during the prewar period, having the same max: L/D as the Minimoa but being much easier to fly, and it had a considerably better L/D than the Rhönsperber. This sailplane was handed to the military in 1940 and, after having first been at Ringway for experimental purposes, it was owned by an ATC Unit somewhere in the North of Britain, which may well have had no idea what to do with it. In ca. 1947, this aircraft was "struck off charge" by the ATC after it was found to have glue failure by Slingsby Sailplanes. It seems to have been another example of a potential world record performance sailplane never being given a chance in Britain.

The Condor 2 had a max. L/D of 1:26, which was the same as that of the Condor 1, but, because of its much thinner in depth wing section, and reduced washout at the tips, the Condor 2 was able to keep its good performance at higher speeds, which is more than the old Condor 1 could do. The Condor 2's wing tips did not bend down until a speed of 112mph was reached. Its min. sink was 0.5m. at 55kph, but when flying at 140kph, its sinking speed was only increased to 2 m/sec.

Let us hope that the relatively much higher wing loaded, Göttingen 532 profiled Condor 4, now in the hands of Mike Birch, will put up performances worthy of the old Condors.

The BAC 7. We have heard that this machine's woodwork is complete with undercarriage installed, and that now all that is needed is a final rigging at Rufforth to make sure it all works, before fabric covering.

Ted Hull has now retired from Civil Service employment and is now giving much of his time to the Vintage Gliding Movement. He is currently working on his 1934 Rhönbussard BGA 2077 to change its ailerons back to original form. They had been modified by Herr Siebert (of SIE 3 fame) to short-span single pushrod operated ailerons which lacked the efficiency of its long-span originals, each of which were operated by four cables. The alteration to the wings is already well advanced and ribs have been built for the new ailerons. Work is proceeding in the London Club's private owners' workshop.

The ME 109 G-2, of which a photograph was revealed in VGC News No.69 Winter 89/90, was given its first flight after being restored by RAF voluntary work during 15 years, at RAF Benson on Sunday the 17th of March, by an RAF Officer who had previous experience flying Spanish Merlin powered "Bouchons". In spite of not ideal weather conditions due to a crosswind, the aircraft performed brilliantly. Its Daimler Benz 605 engine gave tremendous power and a positive effort had to be made to reduce speed. There was a problem due to no fault of the aircraft but the ME lives to fly again soon.

It has a converted "F" airframe and, as it has no underslung wing canons or "bulge" for supercharger, which the later "G" versions had, it is probably the best ME 109 version ever designed. It is the last airworthy original ME 109. It is planned to paint it in "Afrika camouflage". It will be test flown at RAF Benson before going to Duxford. Later, it will be permanently grounded and on exhibition in the RAF's Museum.

Vintage Glider Rally during March 29, 30, 31 (Easter Weekend) 1991

This was held at the Cotswold Gliding Club at Aston Down and was kindly organised by Brian and Pat Gilmore of that club.

Bad weather, with worse coming in, meant that the Rally was poorly attended by members and their aircraft. However, warm hospitality of club members and the (very rare in Britain) hangarage for our aircraft offset what could have been a disastrous situation. It is clear that Aston Down is a very good thermal site and that only a small amount of sun heating would have created thermal lift. As it was, the crosswind reverse tow wire launches did allow gliders to soar in weak lift during the first two days. The third day gave us almost no sun and the last day was a gale of wind and rain which came in from the West.

Gliders taking part in the Rally

Only three vintage gliders were brought to the Rally from other clubs. These were: Grunau Baby 3 BGA 1747. This was aerotowed over from the Bristol Club at Nymphsfield by one of its restorers Rupert Wasey of: 5. Bittern Avenue, Abbey Dale, Gloucester GL4 8NG, and we hope to soon be able to welcome him as a VGC Member. The RAE Farnborough based Ka-2 BGA 2274, belonging to Peter and Jill Harmer, and the Rhönbussard BGA 337 based at Wycombe Air Park, belonging to C. Wills. Already at Aston Down, where they are kept, were: the Hütter H.17a BGA 2647, which is immaculate and kept in this condition for Bim Molineux by Brian and Pat Gilmore, who flew it at the Rally; the Grasshopper Primary XP 493 which is syndicate owned; the two T.21bs, BGA 3245 and 3238, which are owned by John Lake and others. They are kept rigged in one of the two fine Cotswold GC hangars. Apart from the above, and not flown, could be seen the Ka-4 Rhönlerche BGA 1873, another Ka-2 and a Bergfalke 4 which were part of the scene in the two hangars.

Chris Wills was very impressed by how the Cotswold Club had converted the old Airfield Control Tower into a very civilised and livable in Bar, Kitchen, Bunkhouse, washing facilities, and instruction room ...and the two hangars! The Ministry of Defence owns many other superb ex-military hangars on the airfield which are under guard ...but the Gliding Club is not allowed to use any of them. This is a normal state of affairs for civilian gliding in Britain. The Gliding Club has been able to set up its own operation and has excellent relations with the M.O.D and its police. What has happened at Aston Down is a real credit to British Gliding. We hope that the VGC will be allowed to visit them again and we thank Ruth Housdon the CFI for allowing us to come this time. It was a real pleasure to meet the Cotswold Club's members, and our own members, including Peter Woodcock, Sally Shepard, Earl Duffin, Franz Josef Wondrak and his wife, and the Presslands and others at Aston Down. What a holiday it was! No aerotowing is allowed but reverse tow wire launching can achieve 1200ft. launches in a 90 degree crosswind, and far higher launches should they be into wind. The prospect for a rally there in summer would be appetising.

The National Rally

During the cold and wet Easter weekend, our members at Lasham, and our Rally Secretary Geoff Moore from the London Club, worked on the VGC Centre at Lasham, to prepare it for our National Rally which is to be held there during the week of May 25 – June 1. Already, during the first week of April, we have heard that there are 35 entries for this Rally. Our members have done good work on the VGC Centre and we thank them for their efforts on hard, and sometimes unpleasant tasks. If we have good weather, this Rally should be the best National Rally that has ever been held. Our members at Lasham are trying their best to make it a success.

Help for the East

Chris Wills says that he wishes to start a fund to help members in the Eastern countries, who have little or no hard currency, to pay their VGC membership fees. The money would enable them to receive our VGC News and contact would be maintained between them and us. Chris suggests that any donations for this fund should be sent to Robin Traves. Chris hopes that this idea would be acceptable to our members.

CZECH NEWS

Jarka and Petr Hanackovi have written on the 15.3.91, that they have started forming Czechoslovakia's Old Glider Club. Some 40 people from all over Czechoslovakia who like old gliders have been got together, and already Sohaj 25, Pionyr and Orlik have been obtained for restoration. They are trying to obtain recognition of their club by the Supreme Aviation Authority in Czechoslovakia. Specialists have been approached who will draw up requirements for restoration of old gliders so that they can be accepted by the SLI (Supreme Aviation Authority). The Czech Vintage Glider Club hopes to bring at least one vintage glider to our Rendez Vous Rally in the Black Forest and to our International Rally at Schaffhausen on the 13th July. The Czech club wishes to become affiliated to the International VGC, and we welcome them with open arms. During the week following the 15th of March, representatives of the Czech Vintage Glider Club went to Prague to visit Mr Vladimir Remek (he is Czechoslovakia's first and last Spaceman) who is now director of the Historical Aircraft Museum and they hope that he can help them. They mention also that a Mr Stanek has good contact with them. He has built an H.17 in Czechoslovakia.

DANISH NEWS

Niels-Ebbe Gjørup sent this news before Christmas 1990.

The "Danish Vintage Glider Club" Da.S.K. now has 137 members which includes 14 Gliding Clubs, which support us with their membership.

The 1990 Loenstrup Rally turned out, as did the 1988 and 1989 Rallies, to be extremely successful. In 1990 we even had 91 year old Jens Eriksen back in the air over the dunes of Loenstrup. He had not been flying the slope lift there since 1939 when he set up a new Nordic Duration record of 12 hours. The 1939 flight was performed in a modified Stamer-Lippisch Zögling which was built by Jens and his companion Gunnar Christiansen. During the Saturday evening of our weekend Rally, Jens held a combined speech and slide show telling about how he started gliding in 1932. This was told with remarkable humour causing great entertainment.

Our syndicate is still struggling along with the restoration of our 1943 Grunau Baby and has the fuselage almost finished and we are now facing the prospect of having to renew approximately 50 nose ribs in the wing's D-box due to water damaging the casein glue and the wood in the leading edge. Anyway, this work is proceeding well in my new workshop.

Please note my new address: (Niels-Ebbe Gjørup, Seglen 69, DK- 8800 Viborg. Tel: 86 6760 68. Hope to see you in Switzerland in 1991.

The Danish Mü I3d. This seems to have been a very well travelled glider. Evidence suggests that it was bought before the war from Germany by an owner or organisation in Lithuania. When Russia claimed Lithuania, the Mü was taken to Russia and flown there until it was captured by the Germans, who took it to Denmark and flew it there. In 1945, it was left behind in Denmark by the Germans and so it was claimed by the Danes. In its original log book can be found the words: "Russisches Beuteflugzeug" (Russian booty aircraft).

FRENCH NEWS

Info. ASPAC No.22 – February 1991.

We have printed hitherto much news of the GPPA (Groupement Préservation Patrimoine Aéronautique) at Angers, which, under the leadership of the airline pilot Christian Ravel, has been entrusted by the national Musée de l'Air, which exhibits aircraft at Le Bourget airfield, Paris, with the restoration of some of its aeroplanes and gliders to airworthy condition in two new hangars on Avrillé airfield near Angers.

ASPAC (Association de Sauvegarde du Patrimoine Aéronautique en Charolais) is also an organisation under the benediction of the enlightened councils of the Musée de l'Air, and has as Chairman Yves Soudit. As such, it is dedicated to saving the aeronautical heritage of Charolais and is based on the airfield of Paray le Monial.

We had heard until now that they had several Nord 2000s (French Meises) which they had restored or were restoring and that they had recently restored to flying condition last summer a Castel C 30IS.

We now discover from their Info Aspac No.22, a small magazine, that they have no less than 22 gliders and are expecting soon the arrival of three Breguets i.e. the second prototype Breguet 901. a Breguet 901S and a Breguet 904 two- seater. These were built during the years 1954, 1955 and 1956. Not only does it restore and fly old gliders but ASPAC is running a flourishing gliding club with its members participating in courses during the winter at Autun, during May in Germany, so that winch launches can be experienced while another course is planned together with the CVVSL at Aspres/Buech in the Alps.

Let us quote Yves Soudit's own words. "At the finish of a very full year (1990) I send everyone my best wishes for 1991, which I hope will be excellent. This time last year, when sending out my best wishes, I stated the objectives of this Association. These ambitious objectives have for the most part been achieved thanks to the work of you all. The Castel 30IS F-CRJM flew in August. The Pou (de Ciel) (Flying Flea) is nearly ready and should fly in Spring. The next project for the workshop is imminent. We have been equipped with VHF radios. The hangar has been repainted; T-shirts have been produced upon which there is an effigy of ASPAC, wheels for the AV.36 have been made., we have rescued a Nord 2000 (Meise), a Nord 1300 (Grunau Baby 2B) and an AIR 100. Restoration work has started on the C.800 F-CAPF. Finally our work has been recompensed with 117

hours of flight in these marvellous old gliders! We must not forget the contacts we have made with the Ministry of Culture, the Army, regional businesses, and the Press which has never failed to give publicity to our activities.

1991 has already indicated that it will be a fundamental year for ASPAC with contact with the other clubs on the aerodrome. Our activities will increase as the importance of ASPAC grows.

1991 will also be a very full year. Work on the restoration of the C 800, already well advanced on the fuselage, will be pursued in such a manner that it will replace the C 25S two seater as airworthy, when the latter is put in to the workshop for refabricing in 1992. I wish to thank finally those who have worked without pay for the whole year to restore the aircraft to get them into flying condition, especially those young members of the Charolais model club and those of the Charolais Aero Club."

Breguets at ASPAC? The whispers and rumours are confirmed concerning the imminent arrival of Breguets at Paray le Monial. In spite of a glider park of considerable consequence (22 machines today) ASPAC has never had the occasion during these last years to lay its hands on representatives of the celebrated Breguet family. Rather, efforts have failed to rescue a Breguet 901 S at Charolles in 1985, at Challes les Eaux in 1986 and at Roanne during the same year. Then, during the last attempt, a team from the GPPA led by Pierre Plane, were quicker in capturing the Breguet 901S F-CCCU from the Monts de la Madeleine. ASPAC found the nest empty. The Dédalian Jungle is hard! (Be assured Pierre, ASPAC did not want it.) Without being discouraged, ASPAC continued to search long and fastidiously in the shadows during the years! In recent times, things have started to move along three different paths which gave chances of results, with clues for a Breguet 901, two Breguet 901S and a Breguet 904. The first path, which was certainly the oldest, concerned the Breguet 901S belonging to Hugues Auchere only 10 little km from Paray le Monial. The owner had always refused to be separated from his glider but recently he has decided to restore it and therefore he has called on ASPAC. An agreement has yet to be come to but everyone is serious about it. The second path is much more recent. Yves Soudit has had scent (because one does not know from where he obtained the secret) of two Breguets in the care of the Armée de l'Air. These pertain to the Breguet 901 No.2 F-ZABX and the Breguet 901 No.4 (?) of which there are added a few pieces. ASPAC then immediately made contact with the Armée de l'Air and many organisations pertaining to rescuing the aircraft and their restoration. The excellent relations ASPAC has with the Armée de l'Air give every chance that the operation shall succeed.

The last path concerns simply the purchase of the Breguet 904S No.13 F-CCFX from Issoire by one of our members Michel Roudy.

Concerning the delicate question of hangarage of a 20 metre machine in a well filled hangar of 20 metres width, this should not pose a problem because of a decision on the 21st January 1991, by the General Assembly that we should be allowed to use two hangars!!!

In any case, everyone at Paray is ready to welcome a sailplane of the rare Breguet family, which is still absent in the Aspacienne Stable.

During last year, Yves Soudit himself managed to fly a triangle of 140 km in the N.2000 (Meise) and a triangle of 100 km in the AV.36. Fauvel flying wing. (News extract from the Belgian Faucheurs de Marguerites Magazine of 15 Feb 1991).



Breguet 900

Fire at the Musée de l'Air. As we have already reported, last summer there was a fire in the Musée's storage and restoration facility at Le Bourget, which resulted in a disastrous loss of unique aircraft. A reliable source has reported that among the aircraft were six gliders. These were Breguet 906 Choucasse, Breguet 905 Fauvette, Castel C.25S, Weihe 50, Ka-2, and what may almost certainly be the last Kranich 2b-2 in France.

The fire was probably started by some welding repairs which were being done to the roof. As the building was not on the airfield, the airfield's fire brigade could not go to it and the Municipal fire brigade was delayed in rush hour traffic. We send the Musée all our sympathies. It is another lesson that not too many eggs should be kept in one basket. Many unique aeroplanes and engines were destroyed; the engines becoming liquid metal in the heat. However, the museum does not keep all its eggs in one basket as witnessed by the activities with the museum's aircraft at Angers and Paray le Monial.

A reliable source (Len Redding) reports that he has seen the remains of the Fouga CM-8-15 in the hangar at Challes les Eaux. This aircraft, an ancestor of the Fouga Magister, was once at Pont Saint Vincent (where Len saw it) and then it became the hottest ship in the ancient fleet of La Ferté Alais where it was known as "le Sputnik". It had been the sailplane flown by Gerard Pierre in the Spanish World Championships in 1952 and he finally came second in it having been leading for most of the championship. He later became World Champion flying the prototype Breguet 901 in 1954 at Camphill, England. At La Ferté, it was said that it was the best machine for closed circuits, although they had Breguet 901s and Breguet 904s. This may have been because it had rather inefficient air brakes for outlandings! Whether it can be saved now is questionable, but at least we thought that we ought to let Dédale know where we think it is.



Breguet 900.
Photo: P.P.

French Calendar
28, 29, 30 April – May 1st. The 7th French National Vintage Glider Meeting has taken place at the former National Centre of Pont St. Vincent with its huge hangar.
25, 26 May. Days of Sport for all. Aerial Baptismal flights.
21st June. The Longest Day at Monceau les Mines. 29–30 July RSA at Moulins. 21st September. The second Model show at Paray le Monial.
October. The 3rd Gliding Salon at Nevers.

More particulars can be discovered from: Dédale, Rames Moulis, 09200 Saint Girons, France. Tel: France 61.66.05.59.

Publications
"The Rescue of German Gliders in 1945" by René Bouvier. Edited on the initiative of the Historic Commission of the FFVV. Price: 60 Fr.
Send to: FFVV, Commission Historique, 29 rue de Sèvres, 75006 PARIS, France.

Eole. Revue of the Gliding Modeller (Revue Modéliste Vélivol.
Eole, 23 Rue Décamps, 75116 Paris, France.

Ailes Anciennes Anjou, Memorial Flight, 6 bis, avenue Pierre Mendes-France – 49240 Avrillé, France. Tel: France 41.34.26.49.

On the 1st December 1990 was held at the Musée de l'Air et de l'Espace at Le Bourget, the 3rd session of the Congrès Historique de Vol à Voile Français (the 3rd French National historical gliding congress). The programme this year was "French Gliding between 1925 and 1930" by Robert Pechaud and Pierre Vaysse; "The DECAL gliders" by Charles Rudel; "the Renewal of French Gliding after the Liberation" by Jaques Lerat; "The Gliding Centre of the 2nd R.A. at Evreux in 1948."

The end of the afternoon was dedicated to the final of the historical congress organised by the French Gliding Federation and reserved for licence holders of less than 25 years of age. There were few candidates for this first contest and the four finalists had to reply to Jaques Lerat's questions. One deplores the fact that the contest was won by those from the vintage glider milieu and that the majority of the young pilots for whom this contest was destined, had little chance. The objective of this contest did not seem to be achieved.

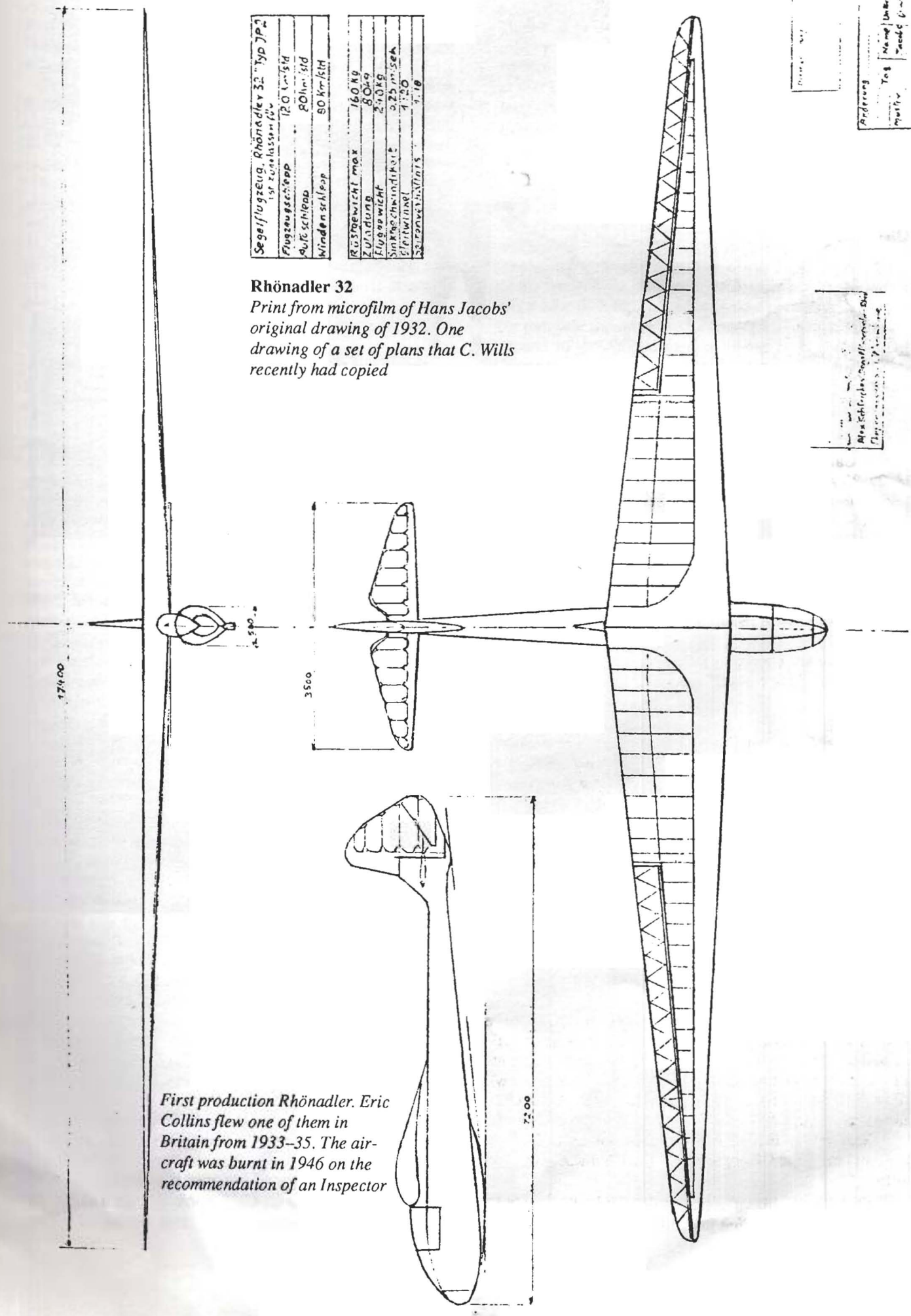
The 3rd Historical Congress was also the occasion for awarding a prize to the best restoration. The candidates were presented: The GPPA's Weihe, the AIR 100 from Nancy, and the C.25S of Jean-Paul Robin. There was consternation among the ASPAC team when their C.301S was not considered by the jury, simply because it was so recently restored that it had not taken part in any of the rallies. The conclusion was that it was better to submit an aircraft that had been seen at the rallies than the most recent restoration of the Association.

As at the preceding editions of the Congress, there was a room reserved for exhibitions. This year these were: Dédale, The Association for Aeronautical Documentation; Eole, a stand for model gliders, and a stand for books. Those who were able to extract themselves at midday were able to sit round a table in the restaurant and to talk "old gliders."

1990 had been a full year for the Historical Commission. In March, it had organised an extraordinary reunion on the history of the National Centre of Saint Auban and then there was the annual general assembly of the FFVV. The production of an excellent brochure on the rescue of German gliders in 1945 followed. Finally, the Historical Contest and the Jean Marie Lebris Cup were created. This commission is absolutely full of interest for the Vintage glider movement in France.

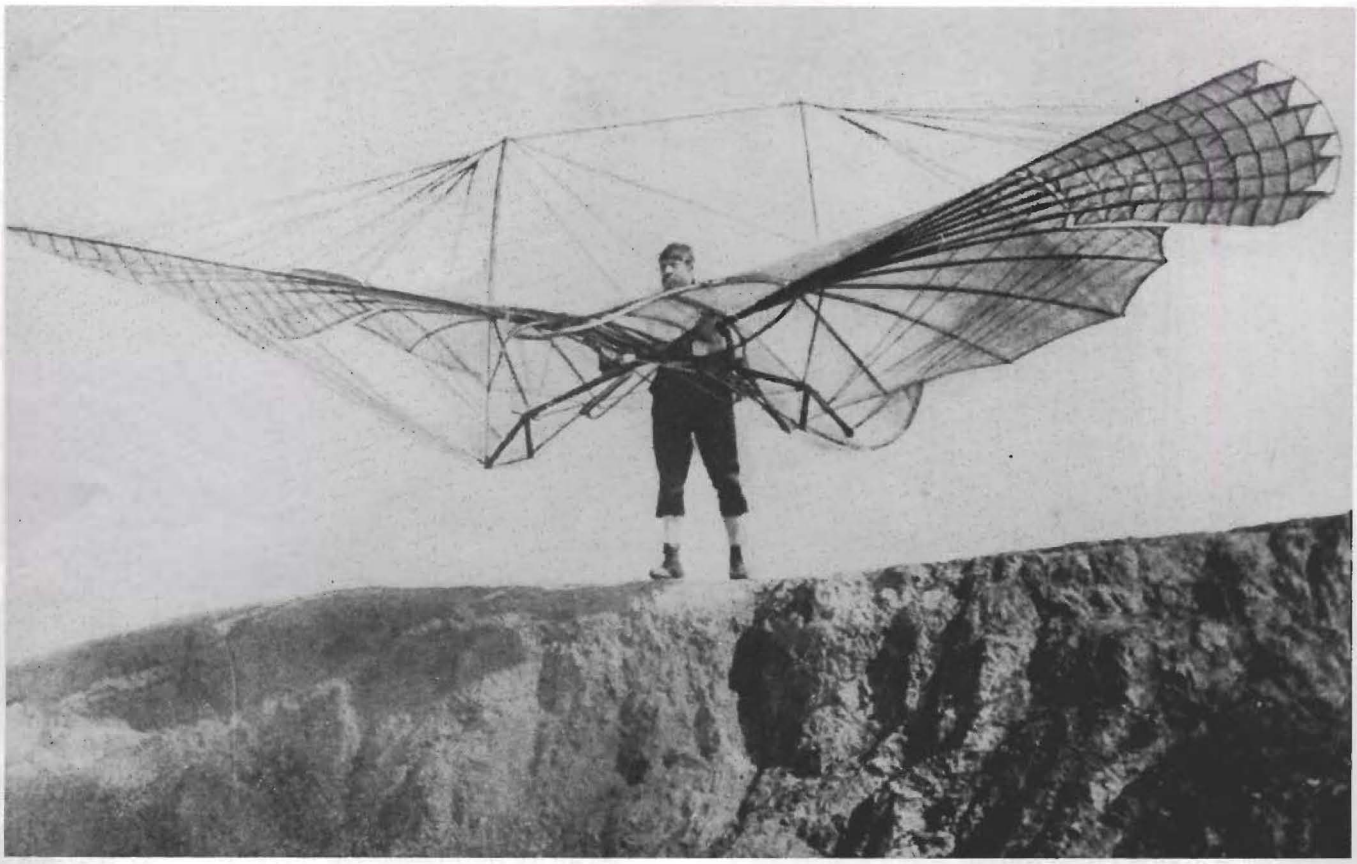
Robin

Peter writes from Angers on the 30.3.91, that the Fouga CM-8-13's wings are now restored and that restoration of its fuselage is well under way. Also in the museum at Angers is the WA 26M No.3. As can be noticed in our exchange column, Christian Ravel is still wishing to exchange a C 800 for a T.21.



Rhönadler 32
Print from microfilm of Hans Jacobs' original drawing of 1932. One drawing of a set of plans that C. Wills recently had copied

First production Rhönadler. Eric Collins flew one of them in Britain from 1933–35. The aircraft was burnt in 1946 on the recommendation of an Inspector

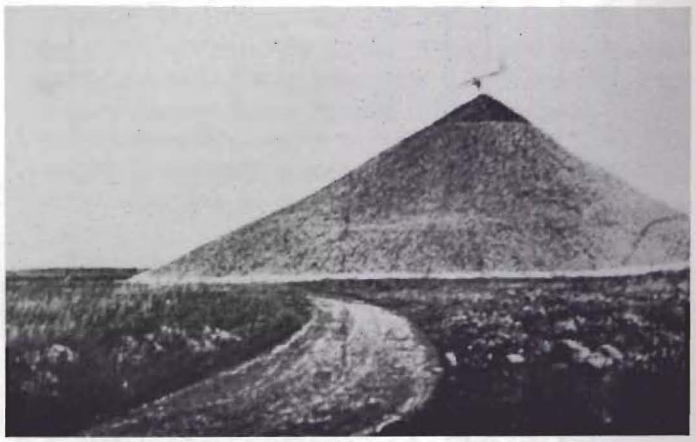


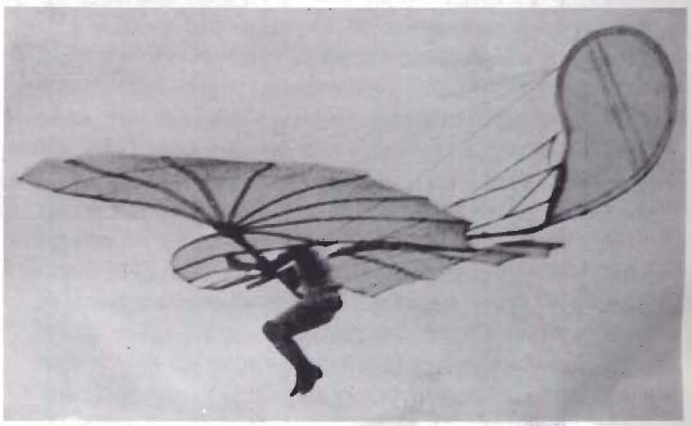
Otto Lilienthal about to fly on the Fliegeberg.

Otto Lilienthal 1848 - 1896.



Otto Lilienthal ready for flight on the Fliegeberg and ***beneath, Otto Lilienthal in flight.***





GERMAN NEWS
as from 21 February 1991.

Peter Ocker writes: The Mü 10 "Milan" at the Deutsches Museum will be soon finished. The fuselage is ready. Only the wings have still to be painted.

Jörg Pichler has formed a syndicate together with **Rudiger ("Rudi") Benz** and one other and have bought a Grunau Baby 2B from Austria. It is an Oberlerchner built Baby, Werk Nr. 33 and was formerly based at Timmersdorf. Let us hope that we can soon welcome them into the VGC. "Our Grunau Baby 2B Project will be completed this year. It is not yet certain whether there will be further cooperation with the Deutsches Museum and their aircraft.
The Horten 4 is currently more of a fantasy project but the possibility of realisation is growing as the experience with calculation and reconstruction is growing also. It is only a matter of time."

The Göppingen Weihe seems to have been sold to someone at Kassel.

The airfield of Stoelln at Rhinow is cordially inviting pilots from West Germany to visit. This is a traditional site near Berlin which was flown from by Otto Lilienthal. In fact, he crashed there from 15 metres height and died the next day in Berlin not knowing that he was fatally injured. The exact spot where he crashed on the 9th of August 1896 is marked by a little memorial upon which there is an "A" Badge carved in stone. A visit to Rhinow during this year is of particular significance as it is the 100th anniversary of Lilienthal's first flights and this is being widely celebrated as the first time that man had any control over his flight. The small "mountain", known as the Gollenberg is 100 metres high and it is possible to hill soar it in every wind direction.
Because of the Rhön contests, there was a search throughout all Germany for suitable gliding sites. The Berlin clubs remembered the site that Otto Lilienthal had used and because of this, many gliding enthusiasts came there including Willi Pelzner, who had won the 1921 Rhön Contest with his biplane hangglider.

After the seizure of power by the Nazis, the NSFK decided to use the historic site for its purposes. In June 1936, the Segelflugschule Rhinow was opened at the foot of the Gollenberg. It was built in the old farm style of that area (Märkischen Bauerstyl) to the plans of the architect Gerhard Hildebrand. The VGC has a film on VHS video, kindly donated by "Snow" Fenn in New Zealand, of the building and the site in action during the war. Certainly it will still bring back memories to old glider pilots. A special performance of that time was by Eric Vergens. He flew a National Distance record from there on the 24th of May 1939 in a Minimoa. He started by winch launch at 11.02 hours from Stoelln and flew 523km to Tiefenried, near Augsburg in Bavaria, where he landed shortly before 1700 hours. It was the longest distance flown within Germany's frontiers and caused a sensation at the time. This National record was not broken for years. During the war, the modern and well equipped Gliding School at Rhinow was mainly orientated towards training youth. In early 1945, the Segelflugschule was burnt down to its foundations. What remained of the aircraft hangar was taken by the local population for their survival needs.

On the 25th of April 1950, the first glider launch was allowed in East Germany, one year before it was allowed in West Germany. On the old hangar's foundations, a new smaller hangar was built. The first postwar start at Stoelln was made on the 22nd of March 1953 with an SG.38. In the summer of 1956, the second DDR performance comparison took place at Stoelln. After the building of the Wall in 1961, gliding at this site was limited to a height of 600 metres and many pilots could not continue their sport in case they were "drawn to the West". Many East German airfields were closed at that time as several pilots had flown to the West and this was unacceptable to the socialist system. However, Stelln somehow survived because it was the historic Lilienthal site, although there was a further decrease of max. permissible height to 450 metres.

However, after November 1989, pilots were able once again to take in hand their airfields. In February 1990, there was founded in Rathenau the Flugsport Verein "Otto Lilienthal Stoelln/Rhinow e.V." and the "Gollenberg inheritance" was started. Due to the creation of the Northern Air Corridor of the Allies from the former West Germany to Berlin which has a base of 2,400 metres, it is now permitted at the end of the past year for aircraft to fly up to 2,150 metres height above ground in the Stoelln area. With the newly won freedom, things on the ground will slowly improve with modest finance to improve the tired accommodation building 'the much too small aircraft hangar and the airfield itself. However, it will be hard to find sponsors to put airfields in order in the still perilous financial situation in Brandenburg.

Information translated from the February 1991 Aerokurier by C. Wills.

Minimoa HB-282. This has been hung from the centre of the German Gliding Museum on the Wasserkuppe above the other gliders. It was on display in the AERO 91 in Friedrichshafen from the 20-24. March next to a Nimbus 4. After the exhibition, HB-282, the unique Minimoa 36, will be permanently displayed in the Wasserkuppe German Gliding Museum... and so it will be flying no more. "Bjarne Reier also participated in AERO 91 with his self built Grunau 9 "Schädelspalter" (Skull Splitter) Primary Glider. After the three high wing Minimoa prototypes were built in 1935, Wolf Hirth took two of them to Japan (where they stayed) while the third went to Rumania. While he was away in Japan, the Minimoa was redesigned in Göppingen as a shoulder wing sailplane and there were other very considerable alterations as well. This was the Minimoa 36, as is HB-282. However, later in 1936, the Minimoa was redesigned again with more wing dihedral (and hence more gull) and with a larger rudder. This was the mass-produced Minimoa of which over I00 were built between 1936 and 1939. It is interesting that one of the first of the mass production run was sent in late 1936 to Argentina on board the Zeppelin LAIRS 129" Hindenburg", registered as D-Argentina. This very Minimoa is exhibited in the Museo Aeronautico, in Santiago, Chile.

However, back to the original Minimoa 36. As there was further considerable redesign in 1936, the original 1936 Minimoa drawings became redundant and were sent to Switzerland. It was from these that the famous Saegesser (who is still working on vintage gliders) managed to build HB-282 in the years prior to the war.

During the war, Switzerland was very short of petrol and so. for a National Contest in 1943?, gliders were taken to a mountain top launching site by electric cog railway, and then bungee launched down a trough along which water was flowing, by extending the bungee by simply pushing a weight on the end of it over a cliff, and somebody cutting through the

tail restraining rope at a judicious moment with an axe! Gliders were flung like arrows over the cliff, and the Minimoa unfortunately into cloud which was below it. There followed an alpine rescue which was adequately filmed in the film of the historic contest, to rescue the Minimoa and pilot. The former was wrecked on a steep mountainside. We don't know if the pilot lived, but the repair of the Minimoa 36 went on for many years. This we believe was also done by Saegesser, and it was then that many modernising changes took place, such as Schempp-Hirth (Hütter) airbrakes and a blown canopy. It has participated in many of our international Rallies including the one on the Jungfraujoch. We shall miss having this beautiful Minimoa at our events very much. However, as the drawings of the later production Minimoa have not yet been found, we have only the drawings of this early 1936 Minimoa which have been carefully kept by Werner von Arx.

We have heard that **Bob Persyn** in Holland, **Gerhard Bergmann and Jürgen Etter** in Germany, have all started building from copies of these drawings and so, at present, the only Minimoas that can be built again new, will be Minimoas from early 1936! Let us hope that this version will fly again one day.

At present only two production Minimoas are airworthy in Europe... that of Rainer Willeke of the Oldtimer Club Münster in Germany, and that of the KLM pilot Hans Disma in Holland. We hope that BGA 1639 in Britain will fly again one day.

Kranichs in Germany. So far as we know, there are seven but these include two very badly damaged ones at Flensburg, which came from England. We now hear that there has been a slight movement of Kranich 2s in Germany. That of Gunther Welzhofer is now being restored in Holland to be flown by Neelco Osinga. This is a Kranich 2, Spanish built with casein glue. The Kranich 2 from Hockenheim is now in the hands of Gerhard Bergmann, Friedhof Strasse 19A, 6120 Michelstadt/Odenwald, for restoration. This one is also Spanish built. The Kranich 2 at Augsburg has been restored to museum exhibition standard only. We have no idea which museum this will be for. This Kranich 2 was bought from Yugoslavia, but was built by MRAZ in Czechoslovakia. We don't know whether this is an indication of where all Yugoslavian Kranich 2s came from? The Deutsches Museum already has a Kranich 2, and also the German Gliding Museum on the Wasserkuppe has one which was Mraz built.

Klaus Heyn has sent information concerning the loss of gliders in the Berlin Museum, when the museum was hit by British bombs during a night in 1941. The gliders were:
The Fafnir 1, the Silber Schwan (Silver Swan) Flying-boat glider, Espenlaub's towplane, the original Darmstadt D's fuselage upon which the Starkenburg's wings had been installed, the resulting sailplane being called the Würzburg, the Hessler Villinger man-pedalled flight aircraft. Many of the museum's aircraft are said to have been evacuated to a forest in East Germany, where they were found by Poles who took them to their Aviation Museum on an airfield near Krakow. One of these was the Messerschmitt 209 air speed record holder. However, most of the gliders were not among them. Of course, the Dornier X was too large to be moved from the museum and so it was among the aircraft destroyed. The destruction of the Berlin Museum is now considered to have been the worst disaster to aviation heritage, almost equalled by last summer's disastrous fire at Le Bourget. However 1941 was during wartime when many other historic aircraft and gliders were destroyed.

A First International Gliding Meeting at Grunau (Jezov Sudecki)

Polish pilots have invited foreign pilots to an International Meeting at this historic site in the Riesengebirge (Giant Mountains) from the 31st of May until the 2nd of August 1991. The object of the meeting will be to bring back the old traditions of the site such as wave flying and the gaining of height diamonds. Silesian pilots discovered the site in 1920. They persuaded the Swabian Gottlob Espenlaub to come to them in 1923. Espenlaub brought with him Edmund Schneider, who built the gliding school. He founded his world renowned glider factory there in 1928. In 1931, Wolf Hirth took over the directorship of the school. Hanna Reitsch and other pioneers came from there. She was born in nearby Hirschberg (the town named Stag Mountain) which is now called Jelenia Gora which means the same thing. Erwin Ziller also came from there. He brought up his children Barbara and Jörg (who are known to us) in Grunau.

HUNGARIAN NEWS

Ann Welch has sent us the news that the Hungarian Aero Club has a new President. He is: Marton Odody, Martirok Utya 1, H-1027 Budapest, Hungary. He is very able and speaks excellent English.

SOUTH AFRICAN NEWS

(From a letter to Peter Woodcock.)

A few lines to keep you informed of the vintage gliders we operate in South Africa at Parys in the Orange Free State, about 130km from Johannesburg in the Transvaal.

Parys, pronounced "parace", is the Africaans for Paris.

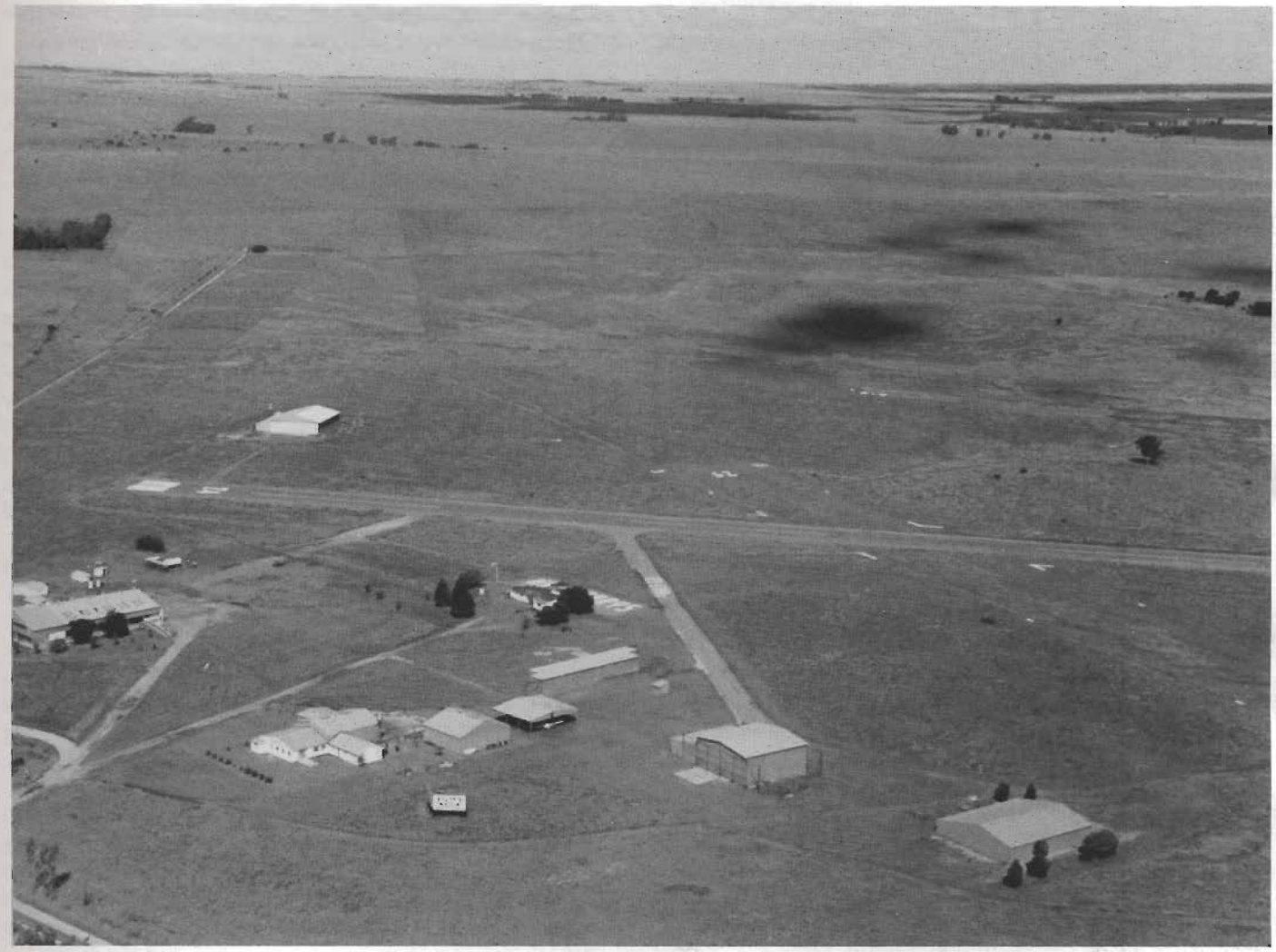
We operate two T21bs, ex-ATC, and one Blanik, which we use to train ab-initio students, after which they leave our school and join one of the local clubs to further their experience.

All of our gliders are to be found every Sunday, Public Holidays, and Saturdays, by arrangement at 10000 to 14000 feet above sea level, which is 5000 to 9000 feet above ground.

The T21s were originally imported by the Witwatersrand Gliding Trust from the UK, arriving in South Africa on 13/12/87. For reasons best known to themselves, WGT struggled to get the gliders removed from the British Register, and as a consequence were unable to persuade the Department of Civil Aviation in S.A. to add them to the S.A. Register and issue a certificate of registration. The foregoing is required before a permit to fly or airworthiness certificate can be issued.

The gliders sat in state of limbo until January 1989 when Bob Plane and myself acquired them from WGT, who at this stage were glad to be free of them. Within days, with the help of Barry Rolfe of the BGA, paperwork was cleared, and ZS-GSO was approved to fly on 14/01/89. ZS-GSP followed at the end of 89, as we didn't need her until then as hangarage was not available.

We operate a two-drum home-made winch powered by an eight cylinder 6 litre American Corvette engine, which will launch a Nimbus 3 full of water. This we know, because the winch has regularly launched Jean-Paul Castel flying the Nimbus, who until the last couple of years was Open Champion In S.A. for several years running. Jean-Paul was, and no doubt still is, a prominent French glider pilot who flies for Air France.



Parys, showing runways 24 and 29, and under the cloud shadow the end of our other runway 26.

Bob Plane driving the winch.



T21 Details to date

ZS-GSO	ZS-GSP
was WB 938	was WB 963
c/no.: 605	c/no.: 624
Launches: 14755	Launches: 21589
Flight time: 1251h 43m	Flight time: 1569h 24m

A study of our flight log sheets indicates an 80% success rate of soaring flights, which has to be excellent utilisation from a winch.

The gliders are in first class condition as you will no doubt appreciate from the enclosed photographs and we are continually inundated by qualified glider pilots who travel the length and breadth of S.A., who want to have a flight in our "gentleman's aerial carriages", as they have since been dubbed.

Although there are few gliders worthy of the description "vintage" in S.A., they have taken a back seat until now, and the resurgence of interest, we believe, is because of our activity with the T21s predominantly.

Passing sleek modern gliders use Parys as either an en-route or turning point, and have yet to out-thermal the T21s. This has ensured a steady stream of visiting fibreglass pilots who didn't believe what they had seen, and required to touch a T21 in the flesh, or should that be ply?

As you are aware, we were visited recently by Frank Thompson and David Grey of the Doncaster GC, who were somewhat impressed to be formation flying in the T21s at a half wingspan distance at 13000ft above sea level. We would be delighted to host visitors from the VGC and would welcome any approach. Summer is of course responsible for our best soaring weather, although we do fly all the year round. Flying in shorts and an open necked shirt in an open cockpit at 10000ft+ in midsummer has to be experienced to be believed. Why not think about trying it?

SPANISH NEWS

We received news at Aston Down that last year a Slingsby T.34 SKY was seen in a hangar roof at the Gliding School of Monflorite near the town of Huesca. It was felt that it could easily be bought. Enquiries should be directed to the: Escuela de Vuelo sin Motor, Monflorite, Huesca, ESPANA.
Huesca is in North Spain.

NEWS FROM THE USA

Robert Gaines, 308 Chase Lane, Marietta GA,30068 USA, has written saying that he now owns the following aircraft:

Ka-3... just completed in German registration and trim (D-7083). Mü 13d-2... just purchased from a Canadian in 1990.

Ka-7... needs recover (with fabric?). It's a one owner bird... never damaged.

JS Weihe... airworthy. This bird came from efforts of Philip Wills at the end of the war. German wings... English rebuilt fuselage... I rebuilt it once and it's ready to be done again.

LO-150. Airworthy. I believe that this is the only LO in the US.

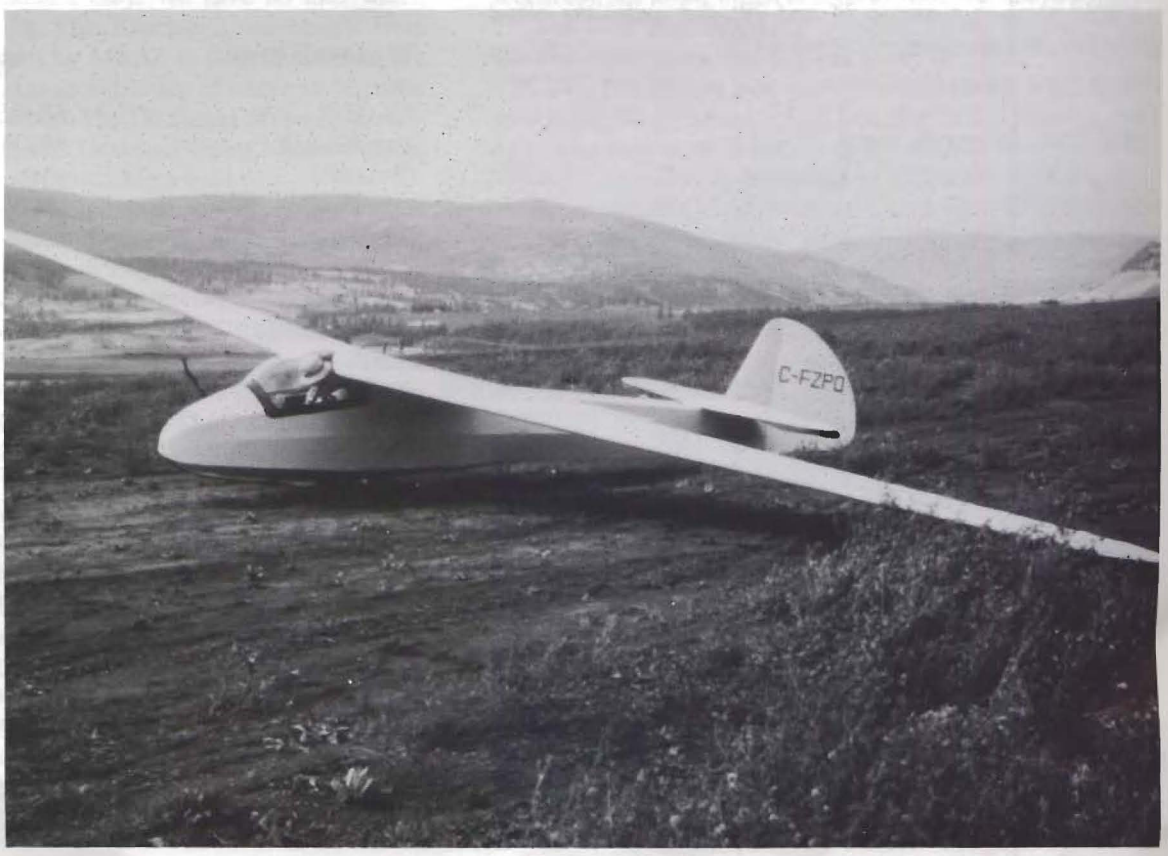
The Mü 13d-2 (We believe that the d-3 s were built in 1956 and that Mü I3d and d-2 s prior to this had to have their nomenclatures changed to after 1951 types to calm the nerves of the terrified clerics of the LBA.)

In 1945, during the rape of Hamburg by the Allies, this Mü 13d could be seen disappearing out to sea lashed to the external superstructure of a Canadian destroyer bound for Canada. For many years it was the property of a gliding club (Montreal?) being rebuilt after its exposure to the elements... i.e. salt water etc. etc. We are so glad that it has been kept so well since them. During the last years it attended a VSA Meet at Elmira where it amazed everyone with its ability to stay up. In fact, it won the height prize by getting to 7,500 ft in thermals.

A Bowlus Senior Albatross

J. Raul Blacksten noticed in the 1983 Soaring Directory that a Mr S.W. Baxter owned parts of Senior Albatross, that American sailplane of soaring legend, and on the 13th of October 1990, he was able to buy one of them, and hopes with Steve Lowry to be able to restore it in time for the possible International Vintage Glider Rally at Elmira next year. If they manage to do this, yesterday will really have arrived. For this was the most beautiful sailplane ever produced in America and has been referred to as the American Condor, because it resembled the German Condors Heini Dittmar designed and built.

J. Raul Blacksten phoned Stuart Baxter who informed him that there was some damage and so he did not expect much. The damage turned out to be far less than he expected. What Stuart had possessed for nearly 30 years was the fuselage of the Bowlus Dupont "Albatross 2" serial number 4. He also had the wings and tail feathers of a copy built by Langley and Gough in 1938. The fuselage, almost complete, was hanging from the roof inside his garage. The wings, which were broken, were hanging alongside. It was a sad sight. The fuselage had a big hole in the side and pylon. He was to find out later that Don Mitchell had cut the hole because Hawley Bowlus had wanted to make the glider a two-place. Other holes had been cut to provide access to allow removal of the controls. In a few places the skin was broken. The wings were

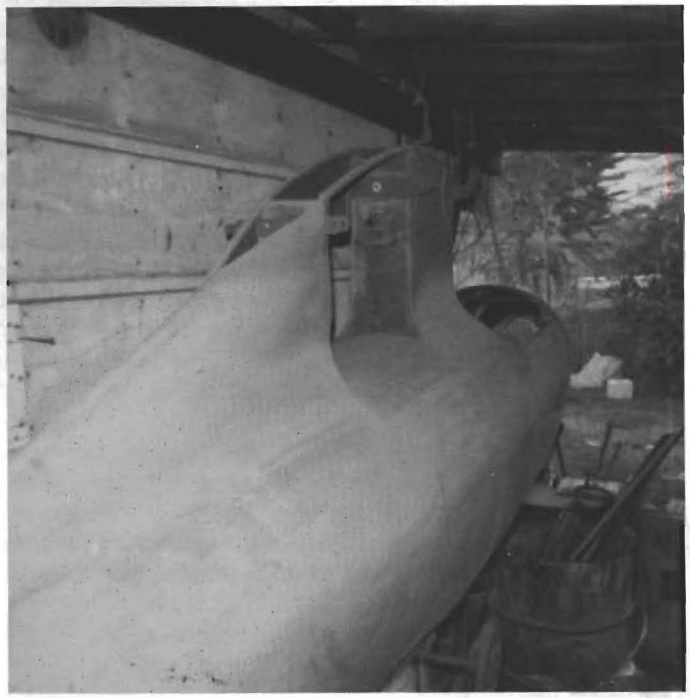


The Mü-13d-2 which was removed from North Germany secured externally to a Canadian destroyer. Now the glider belongs to our member Robert Gaines in Georgia, USA.

an even sadder sight. In 1948, the Langley Gough ship belonged to Bowlus' brother-in-law Harold Huber. While flying it, an aileron jammed. This forced him to bail out and the ship crashed. It was almost a total loss, but apparently not hopeless. The fuselage was gone from the pylon forwards (it is now missing entirely) The wings had lost 10 to 15 feet from each of the outer panels. The empennage was almost undamaged. Still, there was something about what he saw. He has a Master's Degree in History and the history of this glider pushed at him. He wanted to see it restored. Yet he did not have the experience to do something like that alone. So when Dan Pierson put him touch with Steve Lowry, he saw it as a chance. Steve is a well respected A & P and A-1 in Southern California based in Hemet. In a time when few people are willing to work on wooden gliders, he had no hesitation. In fact, at this time, Steve was finishing the restoration of, as far as he knew, the only flying Bowlus Baby Albatross in the country. The quality of his workmanship on this "Baby" is truly first rate.

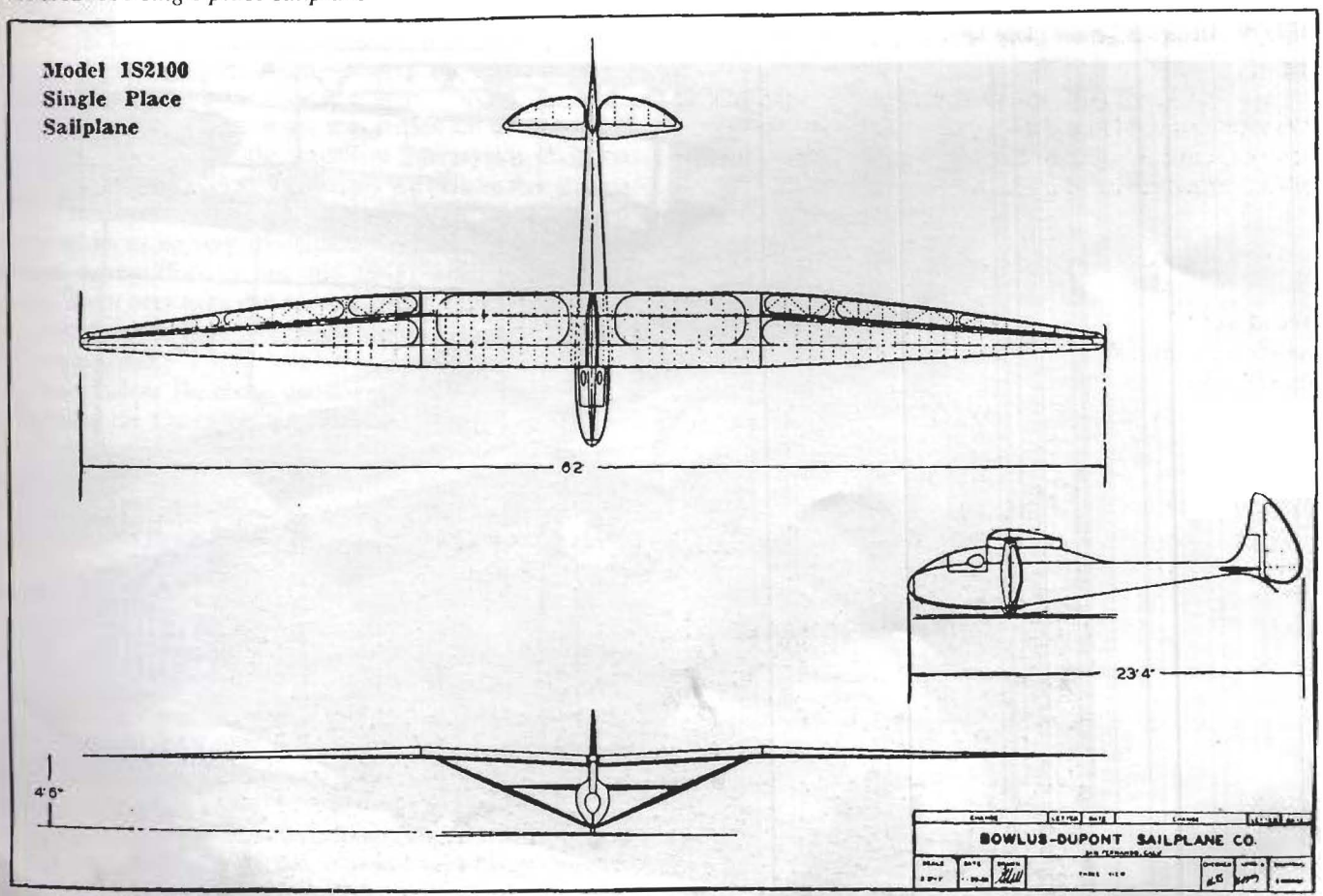
Steve and he went to see Stuart again and Steve impressed Stuart with his knowledge and skill evident in the "Baby" photographs that they had brought with them. He became worried when Stuart began talking about new cars and remodelling his house, but in the end, he surprised them by asking when they were going to come and pick up the two gliders. (technically two)

The 13th of October 1990 was a memorable day, when,



Fuselage of the Bowlus Albatross Senior, which is about to be restored.

Model IS2100 single place sailplane



The Bowlus-du Pont "Albatross," which has a span of 62 feet, an area of 205 square feet, and an empty weight of 347 lbs. Monospar wing, with light rear spar to transmit aileron and flap hinge loads to ribs. Differential ailerons: ratio approx. 2 to 1. Flaps are of split trailing edge type; they reduce the landing speed from 27 to 21 m.p.h. Gliding angle at 34 m.p.h. is given as 1 in 30; at 45 m.p.h., 1 in 20; sinking speed said to be 1.6 ft. per sec.

he, Steve Lowry, Dan Pierson and his brother Joe took a borrowed trailer to Stuart's home and carried off the "Senior Albatross". The wings went to J. Raul Baxten's place of business (he is an electrical engineer) and the fuselage went with Steve to Hemet. Also on the 13th, he, Stuart and Steve signed an agreement whereby they agreed to have the "Albatross 2" flying by its approximate 60th anniversary, on Memorial Day, Vintage Sailplane Association's Western Regatta in 1994. However, if there is a chance of there being an International Vintage Glider Rally at Harris Hill in 1993, they hope to have it ready by then.

He will write more later, as the restoration progresses. There is a lot of incorrect information written about the Bowlus Dupont "Albatross" which has been accepted as fact. For instance, the series is known as the "Senior Albatross" series, and it consisted of four airplanes. The "Albatross 2" is only the name given to the fourth and last of the "Seniors" built.

For 61 years, the "Albatross 2" has been in storage and forgotten. He and Steve intend to correct this. They have a long row to hoe but they are optimistic. If anyone has any information and photographs, Steve and he would be grateful if you could share them with them. Please write to: P.O. Box 307, Maywood, CA 90270, USA.

J. Raul Blacksten is the VSA's Archivist.

Extracted from Bungee Cord, No.1. Spring 1991



RIGHT Albatross Senior and H.17a on exhibition in the National Soaring Museum, Harris Hill, Elmira, New York State.

BELOW Albatross Senior close up.



Gliders recovered from Germany by the British in 1945.

Types of Glider	Quantity discovered (None discovered in Norway, Holland or Belgium.)			Method of Disposal		
	Germany	Denmark	Total.	Used in Germany	To UK. Cat"One"	Others
Grunau Baby	82	28	110	101	6	3
Hannover	1	0	0	0	1	0
Olympia	6	4	10	7	2	1
108/43	1	0	1	0	1	0
Kranich 2	14	6	20	17	2	1
SG 38	64	35	99	97	2	0
Rhönsperber	0	1	1	1	0	0
Jacob Schweyer	8	0	8	8	0	0
Minimoa	2	0	2	1	0	1
Rhönbussard	1	0	1	1	0	0
Schmidt Blaus	1	0	1	1	0	0
Weihe	6	0	6	6	0	0
Rhönadler	2	0	2	2	0	0
Wolf Hirth	2	0	2	2	0	0
Mü 13	1	2	3	2	1	0
Reiher	1	0	1	0	1	0
Unidentified	23	0	23	23	0	0
TOTAL	215	76	291	269	16	6

The above reprinted document was passed on to us by Phil Butler, who compiled the excellent Merseyside Aviation Society Publication "British Gliders". We believe that it came from a British Government Department. From the fact that it seems to us to be very incomplete, we imagine that it was written during 1945 (if not mid 1945) when the types of gliders taken over were still not recognised, although it would be difficult not to have recognised the two Horten 4 as, LA-AC and LA-AD.

Nevertheless, the above document does seem to ring true concerning the Cat "One" (written Off) status of the Reiher and Hannover (AFH-10?) Also, we think that the list may not include those sailplanes "liberated" by the Royal Navy (2 Kranich 2 s, Mü 13 and Meise, which were brought to Britain and flown), or those "liberated" by the British Army (which included a Rhönsperber and a Goevier, which were flown in Germany).

Remarks concerning the individual types on the list.

We have had confirmation from an apprentice of that time, working at the RAE, that there was a crate in a hangar, in which a German gull winged sailplane was rotting. This was never got out of its crate. No one ever seems to have asked what it was. However, from this siting, from the list, and from descriptions from other people, it seems very likely that this was the Hannover AFH 10 (D-9-826).

108-43. We have no idea what sailplane this was.

Jacob Schweyer might mean Weihes. No less than three JS Weihes were brought into Britain by Philip Wills. The list does not mention these.

We have no record of a Minimoa being brought into the UK at that time, and flown.

Schmidt Blaus means nothing to us.

Wolf Hirth might mean Göppingen 1 "Wolf"? We have no record of a MU 13 being brought to the UK and found to be Cat "One" i.e. a write off. We only have record of the RN Mü 13 which was very much flown until 1957.

The Reiher was Cat "One" through glue failure as it was brought to the UK on an open trailer having been kept outside by a Typhoon squadron in Germany. The squadron had kept it as mascot for a long time, although it was wanted at Farnborough.

Unidentified gliders should have included: 1 Habicht, 1 Rheinland, Mü 17, Berlin B.8, Condor 2 (with struts), 2 Horten 4as, Goeviers etc.

We are surprised that so many gliders (76) were found in Denmark. However, not all of them were found. These must have included the Mü 13d-1 currently being restored and the Dale Busque Hütter H.28-2, as well as Grunau Babies and one Rhönbussard.

Only six of the above gliders (2 JS Weihes,1 Meise Olympia, 1 Kranich 2b-2 and 2 Grunau Baby 2bs) were handed over to British Civilian Gliding Clubs (and P.A. Wills) in the Spring of 1946, when gliding again became legal for civilians in Britain. Only one of the above Weihes (out of the three brought over) were required (by the late Ken Wilkinson) at RAE Farnborough. All three of them were damaged and took some time to repair. One of them was sold to an American... as was the Horten 4a LA-AC, in May 1950. These do not include those "liberated" by the Army which is recorded as having a Rhönsperber, Hannover. However, the Hütter H.28-2 of Dale Busque (in the USA) and the Mü 13 d-1, currently being restored, were not discovered.

KRONFELD'S AUSTRIA 2

Any information on this type, or on Kronfeld's career, would be gladly received by Wilhelm Heine Sen., Archiv Luftsport in Lippe, Karlsbader Strasse 4, 4934 Horn-Bad Meinberg 2, Germany, Tel: (0)5234/99638, who is researching Robert Kronfeld's career, perhaps for a book?

We were beginning to wonder how many Austria 2s there were as Thomas, the oldest pilot at La Montagne Noire related how he had seen one crash badly on La Montagne Noire's slope in 1936 and felt that it could not have been repaired. We were then informed that an Austria 2 had been sighted flying over the French Banne d'Ordanche Centre in 1942, while another had been flying with the Schelde Meew Club in Belgium until the outbreak of war in 1939.

Herr Heine has written saying that there were probably five Kr (Kupper) Is built and that one of them, the Kr 1a was known as the Austria 3 which had a wingspan of 22 metres but could also have its wingspan reduced to 14 metres. Herr Heine is trying to discover who built this modified version and where. A photograph of the 23rd of December 1934 shows an Austria 3 being landed at Evere, during a demonstration by Kronfeld, the caption saying that it could be flown as a two-seater with a 12 metre span, or as a single-seater with 18 metre span. This Austria 3 was being used by Antwerp club members in the Scheldemeev" (Scheld Gull) gliding club up until the outbreak of war. Normally, the Kr 1a "Austria 2" was flown solo as a 12 metre span machine and dual with an 18 metre span. The 18 metre span version was suitable for high performance flying.

In trying to trace the fate of Kronfeld's "Wien", Herr Heine has received a letter from the Musée de l'Air, saying that before the second world War, gliders were not registered by the Buro Veritas. Therefore, consulting the registers of the 1930s years is useless. However, if as you say the owner was Monsieur Henri Lumière, the old Honorary President of the Aero Club of the Rhone and the South West, it is perhaps possible to obtain more precise details. The actual address of the Aéro Club du Rhone et du Sud Est is: Aérodrome de Lyon Beron, 69500 BERON.

CORRECTIONS TO VGC NEWS No.72.

On Page 4. Another Grunau Baby 2B-2. A photograph in Sailplane & Gliding has fairly definitely revealed that it is a Grunau Baby 3 at Nymphsfield. (The Bristol Gliding Club). We hope that its owners will join the VGC.

On Page 14. The caption under the photograph of the Soviet A-10 sailplane is missing. This was a back-to-back seated wooden two-seater which was developed from the single-seater A-9 record breaker, which itself came from the famous prewar Rot Front 7 sailplane of the 749km world record flight by Olga Klepikova in 1939. In an A-10, Viktor Iltchenko, with Petchnikov as passenger flew from Moscow to Stalingrad, a world distance record of 829.8km on the 26th of May 1953. For this flight, he was awarded the Lilienthal Prize, Gliding's highest award, for 1953. He attended the World Championships at Camphill in 1954 and related how he had done it. Like the A-9 and the Rot Front 7, derigging the A-10 was simply by removing the wings' outer panels, and nothing else. The aircraft was lifted onto an open lorry for the retrieve. Like the A-9, the A-10 had no landing skid... just a very strong keel and well-sprung seats. All three types were among the many glider designs of the famous Soviet aircraft designer Oleg Konstantinovitch Antonov. With two people in it, its wing loading must have been at least 8lbs/ft² which was twice the wing loading of contemporary sailplanes in the West.

On Page 15, the very detailed three-view drawing is of the G-9 which was designed in 1932 by Gribovski. It went into production in Russia and later in Turkey between 1932 and 1938 and was very probably the most built Soviet prewar sailplane. It took part in the Soviet National Contest at Koktyebyel in the Crimea that year after it had been aerotowed there, 1,600 km from Moscow.

In spite of its low weight (less than that of a Grunau Baby), it could do all aerobatic manoeuvres negative and positive. Thus, it was used in both Russia and Turkey to train military pilots in aerobatics. One pilot achieved 170 forward loops (bunts) during one flight. Another pilot performed 300 normal loops. The Russian for a normal loop translated into English is a "Nesterov Petal" after the famous Imperial Russian pilot Nesterov of the First World War. The Russian for a forward loop is a "Dead petal"! Another G-9 was kited up on a cable behind an aeroplane to more than 38,000 ft (without pressurisation) Another G-9 was dropped from a balloon at 12,000ft and soared even higher. 5 G-9s found themselves in Hungary during the war, where it was known as the "Dzunka". In Russia, it was named the "Flying Paternal Grandfather" but in Turkey it was known as the "Bantom". There is a small colour diagram with the three-view which will be of interest to our aeromodellers. Clear is aluminium paint. Black is red and letters and figures are black. It might be of interest that it performed its aerobatics best at 160 kph and these included a vertical figure of 8 with the bottom loop being a bunt! It also set up duration records being flown in hill lift. A VGC Technical Article has been prepared on this strong little glider.

On page 19, at the bottom right hand corner, the sentence should read: The OSC Aktuelle No. 2 has published the following production figures for Hols der Teufels and Anfängers built at Schleichers factory.

We feel that we made a great omission in not writing that we had used Frederic Fischer's beautiful drawing of the Italian sailplane "Borea" in our last VGC News. We ask Frederic for forgiveness and we hope that he would not have minded us using it.

On Page 21. To the list of video films held by C. Wills should be added one from the Bourges International Vintage Glider Rally, one from the latest Hungarian Vintage Glider Rally and two from the Rally at Keiheuvel, one of which was sent by Frederic Fischer. We thank him once again for sending us most valuable material.

The little jewel of a film smuggled out of Germany via New Zealand is called "Segelflug" and shows winter and perhaps summer gliding at Rhinow (where Lilienthal was

killed) in 1941. In the film can be seen not only the Hitler Youth with their morning ritual but also a genuine prewar DFS Weihe in the snow and in the air, and also a Minimoa. It is an amateur film to which music from the time has been added. The film was very kindly sent to us by "Snow" Fenn in New Zealand. It runs for about 10 minutes.

The Film "Test Pilot" is a British television film about Hanna Reitsch, which apart from the opening sequence, has nothing to do with gliding except for Hanna Reitsch, who gives a commentary describing her wartime experiences as a civilian test pilot testing military aircraft including the ME 321 "Gigant", the ME 163 "Komet" and the V-1. The film runs for about 45 minutes. The footage showing the Gigant take-offs and ME 163 in the air make this a most important documentary film, especially as the ME 163s were reserved for glider pilots.

On Page 20. This was written before we knew definitely what an Anfänger was. The three-view drawing sent by Paul Serries seems to reveal a cross between a Zögling and an SG.38, the Zögling being from 1926 and the SG.38 being from 1938; the wings being those of a Zögling and the tailplane being that of an SG.38 (Schulgleiter 1938).

We are sorry about the above omissions, mistakes, etc., and will try to avoid them again.

SOVIET ARTICLES ON GLIDERS SK-3 "RED STAR" AND G-9.

Extracts from the article "Aerobatics for Gliders" by Konstantin Gribovsky, Engineer, from Krilya Rodiny No. 1/89. Translated by C. Wills.

In recent times glider aerobatics have come into prominence. In the USA, GB, West Germany, special aerobatic sailplanes have been produced. In 1986 World Aerobatic Championships for sailplanes began. In this contest, 32 participants from 7 countries took part. It was a great pity that there were no Soviet entries as, in the history of our gliding, aerobatics were one of the most brilliant pages.

At the beginning of the era, gliding was used as foremost aviation propaganda and, until the end of the 1920, many gliders were designed for aerobatics, transport and scientific purposes. In 1930, in the aviation journal "Samoliot", V. Pishnova put forward theoretical suggestions that gliders could do aerobatic manoeuvres and now it was only necessary to put them into practice. This was done by the Technical Committee of the Gliding Section of OSOAVIACHIM and Sergei Koroliev carried them out. Later Chief Designer of cosmonautical projects, he designed and built his glider the SK-3 "Red Star" (Krasnaya Sviezda). His aim was to produce a single-seater sailplane which was suitable for aerobatics, and no small effort was put into producing a sailplane capable of forward looping (bunting... In Russian = "dead petals") The SK-3 took part in the 7th National Gliding Meeting, and the test pilot V. Stepanchenok became on the 28th October 1930 the first pilot in our country to execute three loops (Nesterov Petals), and thus introduced aerobatics to gliding. Ten lessons were then formulated for pilots to try loops as training for military flying.

Thus Koroliev and Stepanchenok introduced aerobatics to the military pilot and persuaded V. Gribovsky in 1932 to design the G-9 of which the design principles were constructional simplicity and rigidity for great speed, combined with maneuverability and docile flying qualities. As with the "Red Star", it was a cantilever monoplane but the G-9's wings were set on the fuselage in parasol configuration. After great care was taken with the design, the G-9 was 30 kg lighter than the SK-3 "Red Star".

In the second half of 1932, the machine was finished and Gribovsky was aerotowed in it by his friend Stepanchok in a Y-2 to the small town of Koktyebyel in the Crimea (now named Planierskoye – Gliding in honour of Soviet Gliding's pioneer time CW) for the 8th National Meeting. In September 1932, the magazine "Izvestiya" recorded that this aerotow from Tushino (Moscow) was of the greatest interest at home and abroad. During the meeting, the G-9 did excellently. During the three weeks, it was flown by fourteen different pilots, who accomplished 40 flights for a duration of 62 hours 40 minutes. The famous pilots Stepanchok and Koshitz carried out many aerobatic manoeuvres and tested the aircraft thoroughly. Among these flights was one of 13 hours 30 minutes which brought the machine to second place among the single-seaters. It was reported after the 8th Meeting that the G-9 was especially suited for towing and aerobatics and that, in spite of this, it had a good performance. The aerotow from Tushino to Koktyebyel was 1700km. It had accomplished 176 loops, 5 stall turns, 10 spins from 1.5 to 6 turns and four rolls. The glider was of straightforward construction and was comfortable for pilots. It became standard equipment for performance, aerobatics and aerotowing. Series production of the G-9 ran from 1933–1939.

Construction of the G-9 was also carried out in Turkey together with the US-4 and the PS-2, where our famous glider pilots S. Anoxin and S. Gaverish were training young people to fly. Thanks to the G-9 and to the later two-seater SH-5 designed by Sheremyetyev, gliding became an important part of our national aviation.

In 1933 began the great struggle of Soviet glider pilots to gain records doing aerobatics. During one flight, Stepanchenok in a G-9 executed 200 aerobatic figures which included 184 loops. A few days later, the pilot Borodin accomplished 216 figures, of which 209 were loops, in 3 hours 50 minutes. During the next year, the pilot S. Boruzdin increased the record to 227 loops in a G-9. In April 1935, this famous sailplane, which was now known as the "Gliding Father", with N. Simanov at the controls accomplished 300 loops and 10 barrel rolls in one flight lasting five hours. After one of these records, the poet Argo felt constrained to write: "Our Borodin – I saw him myself. His military work. He accomplished 170 loops. All forward loops; he is alive!"

In April 1938, from far away Ankara, there came a letter in the name of the designer Gribovsky, in which Anoxin wrote that he, together with Gavrish, after training in aerobatics etc., that the glider handled better at 160 kph than at 140 kph, while executing figures of eight half loops. The first, below. The second, above. A great number of G-9s were built in Turkey where it became known to the pilots as the "Bantom". Anoxin and Gavrish returned home and undertook further interesting experiments, including aerobatics on tow with the towplane at min. speed. Other experiments consisted of towing the glider off the ground by an aeroplane flying over it. This was used five years later. A G-9 reached the substratosphere by towed flight. On one of these flights, a G-9 reached 12,105 metres (39,462 ft)! During an aerotowing experiment, there were 11 G-9s behind one aeroplane. In 1934, N. Simanov flew a G-9 for 35 hours 11 minutes, setting up the National Duration Record. (The International Record set up during the year before over East Prussia by Kurt Schmidt



Olga Klepikova flew a world record of 749.203km in a Rot Front 7 designed by Oleg Konstanivich Antonov, breaking the German-held world distance record of 502km by 30%. Her record stood until Richard Johnson flew 861km in 1951. As a women's record it remained far longer. Here she is seen with Leonid Pilipchuk from the Ukraine in 1965, when they met at Dnepopetrovsk. He flew an A-15 809km in 1968.

flying a Grunau Baby in slope lift off the sand dunes was 36 hours 36 minutes. – CW)

During the postwar period, gliding aerobatics gained much from the thorough practical experience of our glider pilots and many new special aerobatic sailplanes were designed and built in our country. It should be remembered that from the ranks of our prewar glider pilots came many test pilots who survived tricky situations in the air because of their gliding experience and, in particular, because of their aerobatic training. It is to be hoped that aerobatics will once again receive great attention among Soviet pilots, as before it was such a praiseworthy part of our Fatherland's gliding.

The SK-3 Krasnaya Zviezda (Red Star)

This was a single-seat, cantilever shoulder-wing monoplane. Its fuselage was of oval cross-section with 15 bulkheads and stringers. It had a two-spar wing with a centre section of 2 metre span. Its wing profile was Ts.A.G.I. series A. Plywood covered surfaces were painted cherry red and fabric covered surfaces were transparent varnished. The letters CK-3 and No. 15 on the rudder were painted in black. At the 8th National Gliding Meeting, its contest number was 17. The fuselage was covered with 1mm plywood except in the region of the wing, where it was 2mm. The wing profile at the root had an 18 per cent thickness to chord ratio. It could be flown with, or without, canopy. The small keel and the tailplane were built in one piece with the fuselage.

Data for SK-3

Wingspan – 12.2m, Length – 6.79m, Aspect Ratio – 12.
Wing Area- 12.4m
Area of tailplane – 1.6m, Area of fin and rudder – 0.85m
Empty weight – 189kg. (407 lb)
Loaded weight – 269kg (592 lb)
Wing Loading – 21.69kg/m (4.45lb/ft), Max L:D = 1:20.

G-9

This was a single-seat parasol monoplane. Its fuselage was semi-monocoque covered with 1.5mm plywood. In the area beneath the wing, thickness of ply was increased to 2mm. It had a sprung skid with shock absorbers made from bicycle tyres. In the mass-produced version, these were replaced by circular rubbers. It had a two-spar wing consisting of two box sections carried on the fuselage by a low pylon. There were two struts each side. The wing was covered with 1mm thick plywood back to the rear spar. Behind this, the wing was fabric covered. Its rudder was aerodynamically balanced and fabric covered behind its torsion box. Its wing profile was Ts.A.G.I. P.11 with a thickness to chord ratio at its root of 17 per cent. The tailplane was entirely covered with plywood. The elevator was of the single spar type and was fabric covered behind its torsion box. The first prototype was only equipped with an A.S.I. Production aircraft had the standard instruments for that time, an ASI, altimeter and turn indicator. A venturi was mounted on the port side of the nose. The



This photo by Y.G. Sitnik is of the famous KIM 2 "Stakxanoviets" which was revealed to the West at the Paris Air Show in 1936. With a 20m span wing and rather better visibility from the rear cockpit than that of the German Kranich 2, it was the only Soviet Sailplane, other than those in Turkey and in wartime Hungary, that was ever revealed abroad.

production glider was basically silver (aluminium dope) coloured. There was a red line (flash) along its wing and tailplane leading edges. There was a red star on the fuselage's nose. Its contest number and the town names along its record aerotow course were painted in black on its rudder as also was the writing on its nose.

Data for the G-9.
Wingspan – 12.07m., Length – 5.77m., Aspect Ratio, 11.3
Wing Area – 13m², Area of tailplane – 2.4m²
Area of rudder – 0.84m²
Empty weight – 150kg (330lb), Flying weight – 230kg
Wing Loading – 17.69kg/m² (3.6lb/ft²), Max. L:D = 1:17.5

Translator's note: It is thought that the very great height of 12,105m was achieved by a G-9 being aerotowed to altitude and then kited up to a far greater altitude by releasing (letting out) the towing cable from a drum. After the war, no less than five G-9s found themselves being flown in Hungary where the pilots nicknamed it "Dzsunka". Had these G-9s been captured from the Russians? Experiments were also made launching G-9s from balloons. In 1936, one was lifted by a 2,200 cubic metre balloon to 4,000m. It was climbed even higher after release. (Information from Fececs Gabor).

Its staggering world records were:
Distance: *619km by Kartaschev and Savtov. Moscow to Oudnia 12/7/38*
Goal: *395.7km by Kartaschev and Goroxova. Moscow – Gorki 1/6/39*
499km by Kartaschev and Petroschenkova. Tula – Karkov 19/6/40
O & R: *416km by Kartaschev and Petroschenkova. Tula – Oklovo & R 12/6/40*
Women's Distance: *152.6km by Klepikova and Rastorgueva. Tula – Lomskia 10/6/38*
443.7km by Klepikova and Bordina. Tula - Konotop 19/6/40
Women's Goal: *223.6km by Velikosetseva and Zavialova. Tula – Lipetsk 31/7/39*

The above information has been made available through the excellent relations between Chris Wills and Ukrainian glider pilots. The VGC has 3-view drawings of both the Rot Front 7 and the Stakxanoviets which can be copied for any of our members.

As far as we know, all pre-war Soviet sailplanes except for those which found themselves in Hungary, were destroyed in the great battles in the west of Russia during 1941-43. (This almost certainly includes the very good Polish sailplanes which were taken to Moscow in 1939.) C.Wills.

THE FLYING WING AV 36

Flight Impressions

No, I was not enthusiastic about flying this machine. Rather I was reticent. This type of flying plank, not very good in flight, inspired in me only a mitigated confidence. Then, it was said: "Pay attention to porpoising during take off. You should land well held off, if not, it will turn over. Flying accurately is very delicate". In brief, there was nothing to give you enthusiasm.

Then, at Keiheuvel, at the 18th International Vintage Glider Rally, I saw the AV.36 from Pont St. Vincent which had been brought by Dominique Hagenauer and Christian Mathieu. Its wings were yellow, the vertical surfaces and fuselage – orange and its cockpit canopy was narrow and long like that of a long model closet. Inside, the instrument panel was of varnished wood, the instruments were outlined in brass in ancient nautical style. Its seat was of rosewood. It was a true jewel of finishing.

In turning around, during the drinking of several light beers (1.5 per cent), J.P. Robin, who owned an AV.36 at Gap, delivered a veritably intoxicating speech. "That —, it flies itself... I do the aerotow and, after that, I let go of the stick and trim the wing for undulating flight. It climbs better than all the others, etc." Dominique and Christian Ravel, more calm, said that it was easy.

Therefore, I was obliged to try. The results are there... the first flight lasted 57 minutes... the second... 2 hours 45 minutes. I had been seduced by the AV.36. Yes, it is true. One should not be too large to get into it. Yes, one should attach a 0.5kg weight to the rear of the skid. Yes, during the take-off, in the cloud of dust behind the towplane, I did dolphin a bit but it corrected this itself. Yes, the slot attached partly to the fuselage and partly to the wing did not get in the way and helps turning. Once released, it flies itself and one has to make a special effort to persuade oneself that there is no tailplane behind. One could believe that one is flying a modern fibreglass sailplane.

Downwind at 300 metres. I preferred to land far into the field rather than too short. The airbrakes are not efficient and are hypersustainers (they add to the lift). One should not close them two metres above the ground. It lands itself at a small hold-off angle on " three points" almost like an aeroplane with classical undercarriage but there is no risk of touching the tailskid first (because there isn't one). Interested, I tried again on the next day. There was a light crosswind and the lift was turbulent. There; one feels that the machine is light. It behaves like a little impetuous horse which does not want to turn left. One has to insist on it. Entry into lift is evidenced by a great kick in the pants. If one is not flying accurately, a mixture of whistling and growling vibrations manifest themselves. I truly have the impression of a little animal that needs calming by talking to it and I surprised myself by doing so. " Good, be calm now – not so fast... 80 is too much. Good, you wish to turn to the left now? It is there that there is lift". Effectively, it climbs very well. Again turbulence... 2 – 3 metres. One has the impression of being in an armchair, because one is very well seated. One has to pull oneself briskly upwards to get out of it."

"In straight flight, as J.P. Robin said, ...I let go of everything and, in effect, controlled it with its trim tab... The wing flew itself in a sort of pitching flight ... 80 slightly nose up... 70 slightly stalled, and this happened again and again. I did not try to set this up. It did it itself. There; 2 hours 45 minutes which had amused me. I am all the same slightly tired because of the flight, and the number of other gliders around me. I landed.

Thank you Dominique for lending me the machine. It is certain that we will bring Flying Wings to the next Rally (the French National Rally at Pont St. Vincent) i.e. Christian Ravel's AV.36.

The AV.36? A little jewel to discover.

Pierre Plane

Translated by C. Wills and reprinted from Bulletin No.28, September 1990, of the Ailes Anciennes Anjou. Memorial Flight of the Groupement pour la Préservation du Patrimoine Aéronautique (GPPA).

LETTERS.

Again the Hols der Teufel and Anfänger,

A letter has been received from Martin Simons (13 Loch Street, Stepney, South Australia 5069) dated 26th January 1991, addressed to Chris Wills and Mike Beach. Martin and his wife were in England during the Christmas period to attend the birth of their grandchild.

Dear Mike and Chris.

"An identical letter has been sent to you both, together with an enclosure that should clear up any confusion there may have been about the Hols der Teufel and Anfänger. I have access again to all my files.

I see my own book may have caused a small muddle, since when I wrote the section on the Hols I did not have all the information I have now. Moreover our German friends (ten years ago or more) were no wiser and gave some misleading advice at the time. Anyway, the enclosed extract from Schleicher's catalogue should resolve any doubts.

The Anfänger (as also drawn in Kronfeld's book on page 370) was a simple "primary", 10.2 metres span, and very similar to the Zögling except that it had struts instead of wire braced wings. The price quoted was 220 US dollars (Complett flugfertig, frei Station London, ausschliesslich Zoll, rein netto freibleibend). This seems to have been entirely Schleicher's own product and bore no relation to the Hols der Teufel. There were apparently three or possibly four distinct versions of the Hols der Teufel.

1. The Lippisch Hols der Teufel or "Javlar anamma" of 1923 was a primary glider with "skull splitter" strut and a fabric covered nacelle. It was a predecessor of the Zögling (Photos on page 221 and 258 of Peter Riedel's book Vol 1). Alexander Schleicher built one of these for himself and flew it in 1927 (see P. Riedel's second volume Page 56). Schleicher may have made some improvements and so approached...

2. There is a sketch on page 105 of Peter Riedel's second volume showing "Schleicher's Hochdekker 'Hols der Teufel' of 1929", with a span of 12.6 metres and well rounded tips. It is not certain if this was ever built but probably there was a prototype and led Schleicher fairly soon to...

3. The square tipped version of 12.7 metres "meinen eigenen Konstruktion". This version certainly was built in some quantity and features in some German photographs of the period (Export Price in 1931 291 US dollars).

4. In 1928 Hans Jacobs published the first edition of his constructional guidebook, Werkstattpraxis. In a pocket inside the back cover were plans for an un-named "Segelflugzeug". This design was, however, so similar to the contemporary Schleicher Hols der Teufel that it has to be given the same name and, I suspect, was identical in all except details such as the wing tips. It had moderately rounded wing tips and a span of 12.568 metres (as shown in my book), but was otherwise hardly distinguishable from the Schleicher type.

There is little doubt that the "Hols der Teufel" built in Bradford by Harold Holdsworth was the Jacobs version, as is Mike's current aircraft.

However, it is also sure that one or more Schleicher, square tipped Hols were flown in Britain. In particular, Dudley Hiscox's Hols was probably built from Schleicher plans, rather than Jacobs. There were photographs in Ashwell Cook's book, facing pages 46 and 68., which seem to show that it had square tips, but I have not yet found any clear picture of this feature.

I think the story is more or less complete, so I will leave it there until someone produces more evidence!

The Schleicher prospectus, (undated but presumably about 1930-31) is interesting in itself, with parallel text in four languages. The Anfänger was offered without boat, with handles, but no stretching tower. The "Hols" was offered for practising purposes in unions. In the same catalogue, incidentally, Schleicher was advertising the Poppenhausen two-seater and he offered to build any of the recognised RRG types to order – Falke, Zögling, Prüfling, Professor etc., and to supply plans, timber and parts for any of them. Meanwhile, Segelflugzeugbau Kassel was offering the same RRG types but the Hangwind instead of the Hols der Teufel, and the SK-3 Herkules instead of the Poppenhausen. Schneider was offering the same range of products, not very different, but not yet the Grunau Baby...

Martin Simons.

The following extracts are from a letter received from **Pete Teagle** addressed to Chris Wills. Letter was dated 12.2.91. Can anyone help?

Dear Chris.

Greetings for 91 – have your aircraft survived the winter OK?

I decided to have Speedwells refinish the SKY BGA 686; the wings with a two part colour scheme, during the winter – more in line with its original paint scheme 40 years ago – but some idiot had used silicon polish, so the new paint would not stay on! Result – I have stripped the wings complete, done some minor repairs (a cracked rib member or two) repainted metal fittings and started recovering with fabric, with Speedwells putting on the colour scheme. So, all the fabric will have been renewed, as, last winter I recovered the tailplane, elevator and rudder...

I have recently taken the plunge and obtained an inspector's ticket from the BGA...

I have recently taken an interest in the 1922 Itford Meeting (70 year's anniversary in 1992?) and in particular in the Handasyde glider. I have got reprints from the "Aeroplane" of the time, and, by a deal of luck, 11 unpublished photographs of the Handasyde which originally belonged to Frederick P. Raynham (test Pilot for Martinsydes and Avros in those days) who flew it at Itford and came second to Maneyrol in the Peyret "double winger" Raynham's best flight of 1 hour 53 minutes must have remained a British Duration Record for quite a few years after 1922. The glider was eventually used in a film in which the aircraft was ditched in the sea – and, sure enough, one of the 11 photos shows it floating in the sea off the beach from which the movie cameras were filming. A friend has enlarged this photo. A man is holding a film clapper board with the scene and take chalked on it and, on the top of the board appears what I think is possibly the title of the film "HAWK". Have you heard of any such film which contains such a gliding sequence?

Another point I would like to follow up is the wing profile. This is (at least at the root) a Göttingen 441. I have not been able to find out any information on this profile, except from Georg Brütting's book "Die Berühmtesten Segelflugzeuge" (1970) in which it shows the "Vampyr" of 1921 with the same profile.

In fact, a study of the "Vampyr" shows a number of features which appear on the "Handasyde of a year later ... i.e. an all moving tailplane and (identical) wing planform.

So Chris, if you can put me in touch with anyone who might have information on the Göttingen 441 Coordinates – CL, CD curves etc., I would be grateful.

Any suggestions on contacts concerning the Handasyde (George Handasyde and Sir Sydney Camm were involved in it) would be welcome.

Regards, Pete Teagle. Address: 28 Russell Avenue, High Lane, Stockport, SK6 8DT.

PS. Speedwells (Tom Smith and Alan Saviour) are closing down at the end of this year, with Tom's retirement. They still have things like broken sections (large) of EoN Olympia 2Bs, fuselage frames for EoN Olympias, and Slingsby aircraft including tailplanes and rudders for T.31 s and Tutors. Is anyone interested?

The Copying of Vintage Glider Drawings.

This has always been one of Chris Wills' tasks. He believes that he has satisfactorily copied the ancient blueprints of the Rhönadler 32, which were originally drawn and signed by Hans Jacobs in 1932.

Thus it should now be possible to send out copies of the plans of this superb sailplane to anyone who needs them, and who may wish to build one. He has also taken 35mm microfilm in positive and negative form (i.e. which will reproduce prints with either black or white lines according to requirement). He also had the Moswey 3 drawings microfilmed. These were from good quality drawings given to us by the Münster Mafia. The Rhönadler 32's blueprint plans, which are now in poor condition, must have come to Slingsby Sailplanes during the early 1930s. They could have been used for reference during the designing of the Petrel in 1938. The Rhönadler 32 was the first production Rhönadler and one of them came to Britain in 1933/4 and was owned and flown by Eric Collins for his records. (This was the only Rhönadler that ever was in Britain). Chris Wills saw it during the 1946 Easter Meeting at Rearsby, before it was burnt for glue failure. It had gained the height prize for the meeting, being taken to over 7,500ft in cloud. On the day afterwards, it had started to break in flight, when flown by a Cambridge University Student. It was still in original state when Chris saw it. Let us hope that the Rhönadler 32 will live on through these plans!

Martin Simons found the ancient blueprints in the Slingsby loft, together with other plans. Martin kindly passed them on to Chris Wills. The VGC thanks him.

Technical information concerning wing loadings of vintage sailplanes

Type	Wing Profile	Wing Loading	Date of completion lb/ft².
Rhönadler	Göttingen 652	2.78	1932
Rhönsperber	Göttingen 535	3.89	1935
Hjordis	"	3.88	1935
King Kite	NACA 23021	3.895 or 4	1936
Atalante	Mü Profile	2.92	1936
Mü 13d	Mü Profile	3.3	1938
Reiher	Gö 549	3.84	1937
Weihe	Gö 549	3.77	1938
Meise	Gö 549	3.48	1939
HannoverAFH-4	NACA 23014	5.535	1938
this must have had a lower wing loading when its Fowler flaps were out.			
Hannover AFH-10	NACA 33012	4.182	1938
D-30 Cirrus	NACA 2414	4.92	1938
Orlik		3.69	1937
PWS 101		3.84	1937
Horten 3		1.968	1938
Horten 4a		3.75	1941
Horten 6		4.89	1944
Kranich 2	Gö 535	4.205	1935
Kranich 3	Gö 549	4.92	1951
KIM 3	"Staxanoviets"	4.059	1937
GN-7	Gö 549	4.879	1937
Rot Front 7	TSAGI P-111	4.535	1939
Rot Front 7 with 120 l water ballast		7.535	1939
A-9		6.785	1949
A-15		6.475	1960
Condor 2	Gö 532	3.41	1935
Condor 4	"	4.98	1951

It will be noticed how wing loadings increase, still using the prewar profiles, after the war, for greater cross-country speeds.

The Russians were the first to increase wing loadings to break records in the very good weather conditions over their country. It will be noticed how low the Horten 3's wing loading was, and how much it was increased for the 1941 Ho 4a and the 1944 Ho 6.

Finally, one should remember that these wing loading figures should not be considered as definite, due to the quoted weights in books being sometimes 25% lower than they actually were. However, from this, it can be seen that the Horten 3 had less than half the wing loading of any other sailplane so that it could be expected to climb very well, but was very unlikely to go anywhere very quickly during a cross-country. Nevertheless, Heinz Scheidhauer was able to fly one 320km during the 1939 Rhön Contest.

FOR SALE

Slingsby Capstan with new C of A with open trailer. Offers around £6,500 will be considered. Alan Garside. Home Tel. 047 47 2502. Club Tel. 023 374 274

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Olympia Meise 51 with closed metal trailer. Offers to Thoby Fisher, 36 Worall Rd., Bristol BS8 2UE Tel: 0272 472606

Mü 13d-1 with closed trailer. DM 100,000.00 Ernst Walter, Altes Pfarrhaus, Sandstedt Wersabe, Germany.

Slingsby SKY possibly for sale: Escuela de Vuelo sin Motor, Monflorite, Huesca, Espana. (Probably without trailer.)

Slingsby SKY in original condition, fully instrumented, with closed metal trailer. Can be inspected at Lasham during the rally, May 25 – June 1. Phone either 034 282 2457 or 0797 252531.

Skylark 3b (with F mods) BGA 806. Complete with A/H, Oxy, 2 varios, metal trailer, Dart canopy, orange &white clour scheme, new C of A.

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EoN Olympia 1, BGA 508, wks No. 08. Damaged due to stalled dropped landing from about 6-8ft. Fuselage completely broken ahead of tailplane, underside of cockpit crushed. Aircraft is in closed wooden trailer. £500. At the Channel Gliding Club, Waldershare Park, Nr. Dover.

T31 perhaps less one wing strut. No trailer. At Kent Gliding Club. Basic instruments. Offers.

EXCHANGE

Exchange. Christian Ravel, of the GPPA Angers still wishes to exchange a C.800 for a T.21. It must be remembered that C.800 always have had fully enclosed cockpits which is an advantage in cold weather. Christian Ravel's address is: Aérodrome, 6 bis, Avenue Mendes-France, 49240 Avrillé, France. Tel: 41 34 26 49.

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STOP PRESS

BAC-7
Michael Maufe has started fabric covering at the end of April.

Schaffhausen 1991
This year's rally was heavily over-subscribed, and sadly not everyone could be accommodated. The British entry had to be reduced by five gliders. I would like to pay tribute to Francis Russell, Bob Boyd, David Khan, Alan Sparshott-Potter and Brian Bushell who very sportingly offered to stand down.

This year's rally had to be limited to 50 gliders at Schaffhausen. The Swiss do have a problem, in that they really do not have any big airfields in their country that can cope with the present size of our international rallies.

The Rendez-vous will be taking place at Wachtersberg Airfield near Wildberg in the Black Forest from 6th to 12th July, where happily due to the smaller entry we do not have a numbers problem.

Colin D. Street
International Rally Committee.

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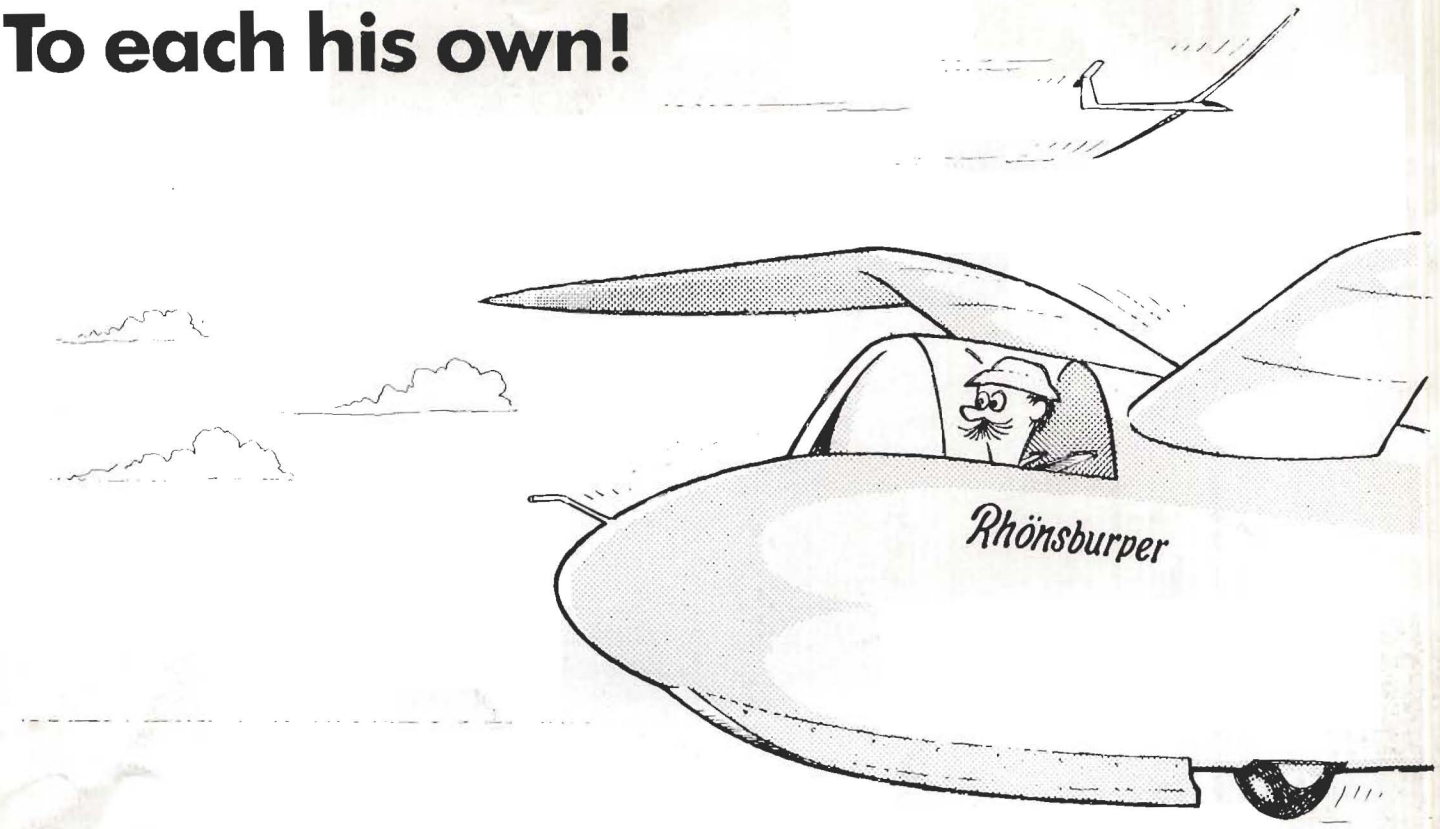
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