

# VGC News No. 77 Autumn 1992



#### THE VINTAGE GLIDER CLUB

#### **PRESIDENT**

C. Wills

#### VICE PRESIDENTS

P. Serries W. Schwarzenbach Hans Dijkstra

#### **CHAIRMAN**

#### D. Shrimpton

| EXECUTIVE COMMITTEE |            | INTERNATIONAL COUNCIL |                  |
|---------------------|------------|-----------------------|------------------|
| INT Council Member  | C. Street  | Secretary             | Nell Dijkstra    |
| Minutes Secretary   | M. James   | Belgium               | F. Henrard       |
| Sales               | C. Anson   | Czechoslovakia        | J. Hanakova      |
| Secretary           | R. Traves  | France                | D. Fulchiron     |
| Technical Records   | I. Smith   | Germany               | R. Karch         |
| Treasurer           | G. Moore   | Holland               | Hans Dijkstra    |
| UK.Rally Secretary  | J. Ballard | Hungary               | I. Mitter        |
| VGC. News Editor    | S. Mooring | South Africa          | J. Heath         |
|                     |            | Switzerland           | W. Schwarzenbach |
|                     |            | U.K.                  | C. Street        |
|                     |            | U.S.A.                | J. Scott         |



# VGC News

#### FROM THE CHAIRMAN

Once again despite some disappointing weather our International Rally was a success, particularly for those who measure success in terms of meeting old friends, making new ones and generally enjoying the sights and pleasures of a foreign country or new surroundings.

Our thanks go to the organisers of both the Rendezvous and the International Rally without whom there would have been no event at all. Thanks also to those responsible for the displays of models, parascending and aircraft which caused both interest and excitement.

The prizes awarded were well deserved by both the organisers of the Rally and the owners of the BAC 7 for the best restoration.

I heard an eminent member of the club express the view that our vintage gliders should be kept in museums where many more people would see them than presently do at our rallies. This view is not a popular one, fortunately: our gliders are airworthy and will remain so as long as we continue to fly them. Would they remain so if preserved in museums? Anyway, how would we decide which gliders to preserve? Come to that, how do we define "vintage glider"?

If the object of our rallies is to enable our gliders to be seen by more people then perhaps we should consider advertising our National or International events more widely, even to the extent of inviting television coverage. Then our gliders would be seen in their proper environment.

There would have been much more flying during the event had the weather been kinder to us. The more contemporary gliders had the advantage here. Had we decided that some of these machines were not eligible, as has also been suggested, the flying activity would have been even further reduced.

It was most reassuring to hear that the "Munster Mafia" have recently introduced several younger members into their Govier/Minimoa syndicate: an example that should be followed by others to ensure the continued growth of our movement.

Speaking to many members I gained the impression that one of the successful ingredients of the International rallies is the informality which makes them not just a gliding event but a holiday as well for most of us. This allows us to discuss issues and do our own thing in a relaxed atmosphere.

For example those who took part in the Dutch national pastime of cycling learnt a whole new meaning to the gliding expression "lead and follow". Indeed one young couple actually cycled from the UK to join our rally.

There cannot be many other International gatherings such as ours with the opportunity to partake in both our hobby and our holidays at the same time: we therefore look forward to Czechoslovakia next year.

The International council met at Terlet and agreed that Zbraslavice would be the next venue for the International Rally. It is for them to now negotiate and agree with our hosts the standards of accommodation and facilities required to ensure our well-being and enjoyment. Please return the questionnaire being circulated by the organisers to help them plan a successful event.

I look forward to meeting many of you again at future events and hearing more of your views.

David Shrimpton.

#### FROM THE TREASURER

This edition, the last VGC News before 1993, is a suitable time to remind members that subscriptions become due on 1st January. With ever-increasing incurring costs, we are not increasing the VGC subscription for the coming year. With the help of generous donations received it remains the same: UK £10.00, Europe £11.00, rest of the world £15.00.

As you will realise, membership is good value for money with the magazine and technical articles published. We are always seeking further to increase the membership of the Club – so spread the word about: there are many people who are interested in aviation, especially young folk, and they are all potential glider pilots of the future. Many of these will not yet have heard about the VGC, so do your part in introducing a new member by passing the blue application form around.

Currently the membership stands at around 700, with an 11% growth of new members in 1992. We warmly welcome all these new members and hope to meet many of you at some of the VGC events next year. A full calendar of events will appear in the next issue of VGC News.

To everybody, best wishes for Christmas and the New Year.

Geoff Moore

#### FROM THE TECHNICAL OFFICER

I have been asked by the VGC Committee to set up a database of vintage glider spare parts. One of the aims of the VGC is to get more vintage gliders back into the air, rather than letting them rot away in barns and hangars.

Many would-be restorers are thwarted by the lack of spare parts and technical information. If we can get together a list of "Who's got What and Where", then more un-airworthy gliders may get back into service.

I also intend to set up a technical library of manuals, drawings etc. at the Lasham VGC Centre, and would like to appeal to VGC members to send me lists of any spare parts they hold, and also any manuals or drawings (photocopies

accepted). Mike and Tony Maufe have already donated manuals for the Cadet 1, 2, 3, Prefect and Grasshopper. Once it is set up, members can contact me to obtain the information they need as to the whereabouts of the spares, as well as the technical information required.

I very much hope that VGC members will be willing to contribute to this new project which should in time provide a useful service to the membership.

Ian Smith

"Glenvale", 20 Kingsmede, Horndean, Waterlooville, Hants PO8 9TN. Tel: 0705 592839.

#### FROM THE VGC RALLY SECRETARY

Jane Ballard writes: Would all clubs planning to hold VGC events in 1993 please contact me by the end of this year so that I can establish a rally calendar? Please send details to me at 1, Manor Farm Cottages, Bradley, ALRESFORD, Hants. (Tel: 0256 289553).

It is proposed that in future we establish the Spring Bank Holiday as the fixed time for the VGC National Rally. We hope that this will give as many members as possible the opportunity to attend.

#### **BRITISH RALLY NEWS**

... during the Summer of 1992. 2nd - 4th May at North Hill. The good weather of late May had yet to dawn over this most beautiful site. Just to be there was a great pleasure and our member Ian King and the Devon and Somerset club's members did everything possible to give us great hospitality. The only VGC glider to be present was the Moswey 4a, BGA 2277 of Ted Hull. He managed to keep it up in thermals for about an hour on the Sunday, as did Bob Boyd, whom he allowed to fly it. On the Monday, Chris Wills and his mother visited the site which was the birthplace of Competition Enterprise, an event which was founded by Philip Wills, and now takes place annually. A Slingsby T. 42 Eagle, many Ka-6CRs and some Ka-13s, among which was the smartest Ka-13 ever seen, which had nose wheel, mainwheel and tailwheel, were all seen on the ground and in the air. We thank the Devon & Somerset Club for having us and hope that they will allow us to come again with, it is hoped, more vintage gliders.

HADDENHAM does it again! After the very successful Rally organized by the Upward Bound Trust last year in honour of the Forming of the Glider Pilots' Regiment in 1941, it was decided to hold another one there during the weekend of the 23rd and 24th of May. No words can describe the hospitality with which we were received. In spite of a very light cross wind, it was possible, from rather low winch launches due to the cross wind, for gliders to soar in thermals off Haddenham village. There were several long duration flights which turned into cross countries. During one such thermal flight, no less than four Kite 1s and the BAC-7 (flown solo) were seen soaring together. This was a very rare spectacle which was probably not often seen, if ever, in the old days. The Rhoenbussard BGA 337 had its first flight of the year by being soared for over four hours. It was landed at RAF Benson 20kms away after taking part in (over) the Ewelme Fete. The decision to land on Benson RAF airfield was not a good one due to the roughness of the grass landing area and the landing fee, but was influenced by the pilot's home and a car waiting for him below.

(Editor's note: guesses as to the identity of the above pilot are not invited!)

#### THE ELLIOTTS WEEK

by Jane Ballard

Several VGC members at Lasham who own Elliotts gliders got together one day and decided that Slingsby should not be the only English glider manufacturer to be celebrated by an annual rally.

The inaugural Elliotts Week was held at the Lasham Vintage Glider Centre from 23rd – 30th May 1992. It was astonishingly well supported with an entry list of 25 gliders, and a pleasant, happy week was had by all.

The Elliotts gliders in attendance were;

EON Baby BGA 629 Keith Emslie/Richard Darbyshire

Olympia 2b Derek Staff
Olympia 2b John Murray

Olympia 2b Di Spalding/A Kangurs

Olympia 2b Mike Skinner Olympia 460 BGA 2776 Denis Shepherd



Nautical influence can be noticed in this model of a British 19th Century glider. The builder of these models has six of his model masterpieces in a model museum near Lincoln in Britiain.

Photo: Chris Wills

Olympia 463 BGA 1373

Ian Smith/Ray Whittaker/Colin

Street

Olympia 465 BGA 1288

Mark Wills/Keith Green

Well supported by VGC members with old and beautiful gliders, including Michael Maufe's BAC VII, the Olympias flew on most days. Denis Shepherd's 460, all the way from Scotland, was our overall winner, but congratulations to Keith Emslie who landed in the smallest field and to Peter Warren who achieved his Silver Height and Distance by pointing Percy (his Kirby Kite BGA 689) at Salisbury, and getting

Good luck to John Murray and syndicate whose Oly 2b had its last flight before going into the work shop for a major restoration this winter.

Hopefully this will be the first of many happy Elliotts Weeks.

## RENDEZ VOUS RALLY Munster Telgte 1st to 4th August

As this is the home of the Munster Oldtimer Club, among whom are many of our founder members, we were assured of a warm welcome.

Vintage gliders present were:

Tutor BGA 1770 - David Shrimpton.

T. 31 BGA 3229 Ian Smith and Jane Ballard.

Moswey 4 BGA 2277 - Ted Hull.

Rhonsperber BGA 260 - Francis Russell.

T. 31 BGA 3487 - Richard Abraham

Olympia 2b BGA 795 - Susy Mooring and Richard Abraham

Kranich 2 B-1 BGA 964, C. Wills.

Capstan BGA Colin Street and partners.

Grunau Baby 2B-2 D-1658 Wolfgang Schaeffler, Germany.

Nord 1300 F-CRGN- Didier Fulchiron, France.

Doppelraab 4/7. Wiel Zillen - Holland.

Also visiting the Rally were Peter Molloy and Eric Couzens with the 1943 Swedish built Weihe BGA 1297, which they were taking on their annual excursion to Darmstadt, where they apparently experienced far better weather than we ever had. It looked very smart in its Royal Swedish Airforce markings.

On the 3rd of August, there was a strong wind which could have been 30 knots at 1,000ft. This did not deter pilots from flying during the afternoon. Rhonlerche, T. 31 and Grunau Baby 2 all flew during the afternoon. The Rhonlerche demonstrated near motionless flight over the ground, at times even progressing backwards, revealing the wind strength. The Kranich 2 gave rides to Germans who had not seen or flown in Kranichs since the war. Peter Molloy gave several joy rides in the Kranich but Wolfgang Schaeffler flew for by far the longest time in his immaculately restored Grunau Baby 2. During the last evening, there was a barbecue and the young German winch driver, who had only been driving winches for a few months, was congratulated on never having given us a bad launch. Everyone enjoyed their time at Munster, and we wish to thank our Munster members for their hospitality. Some of us wish especially to thank Paul Serries who took us in an aeroplane on an excursion around the Munster area.

#### THE 20th VGC INTERNATIONAL RALLY.

This took place as planned at Terlet, Holland's National Gliding Centre, from the 5th - 14th of August 1992, under the direction of Hans Dijkstra.

The following sailplanes and their owners had entered:

#### BELGIUM.

1. Rhonlerche. 00-ZEI.

Henrard Firmin.

2. Scheibe Specht. 3039.

Roland d'Huart, Jean-Charles

d'Huart.

#### BRITAIN.

3. T. 31. 3487.

Richard Abraham. Moswey 3. BGA2474. Max Bacon.

Condor 4. BGA 2292.

Mike Birch, Richard Martyn,

Simon Harrop. Bob Boyd.

6. Kite 1. BGA251

7. Fauvel AV. 22 SA. BGA 2344.

Ian Dunkley 8. Viking 1, BGA 416,

9. Grunau Baby 2B. BGA 2433.

Lou Glover. Mc Evaddy.

Murray Hayes. Laurie Woodage.

Ted Hull.

10. Moswey 4A. BGA 2277.

11. King Kite. BGA 2769. 12. B.A.C. 7. BGA 2878.

David Jones. Michael Maufe, Tony Maufe.

13. Eon Olympia 2. BGA 538. John Mead.

14. Eon Primary. (SG.38)

Geoff Moore. 15. Eon Olympia 2B.

AZR BGA 795 16. Rhonsperber, BGA 260.

17. Tutor BGA 485.

18. Kirby Cadet Mk.2

(Tutor) XZ 758.

David Shrimpton.

Francis Russell.

Graham Saw.

Chris Wills.

Susanna Mooring.

19. T.31B. BGA 3229. Ian Smith, Jane Ballard, Keith Green, Ray Whittaker.

20. T.49. Capstan, BGA 1204, Colin Street, Ron Tarling, John Light, Mark Wills.

21. Kranich 2B-1. BGA 964. 22. Prefect. BGA 701.

23. Harbinger Mk. 2. BGA 1091.

Malcom Wilton Jones.

Austen Wood, Bob Sharman.

#### CZECHOSLOVAKIA.

24. LF-107 Lunak, OK-0796. Josef Fecko.

#### FRANCE.

25. Nord N.1300 (Grunay

Baby 2B). F-CRGN. 26. AIR 102. F-CAGQ.

Didier Fulchiron.

Christian Ravel, Pierre Plane,

Daniel Clement and Christian Ravel jun.

27. Foka 4. F-AZKA.

C. Ravel, P. Plane, D. Clement, C. Ravel jun. as

above.

#### GERMANY.

28. Grunau Baby 2B. D-5457. Frank Konsek, Erich Wittstock.

29. Cumulus 3F. D-6059.

Christian Kroll.

30. KA-2B. D-7039.

Josef Kurz, Wolfgang

Magotsch.

31. Grunau Baby 2B. D-1658. Wolfgang Schaeffler.

32. Condor 4/2. D-5000.

Jchen Schmitz, Hubertus

Eversheim.

33. Minimoa D-1163. 34. Goevier 2. D-1080. Rainer Willeker, Paul Serries.

Ingo Tegen. Gisela

Dreskornfeld.



The last of the Teerosen op de Weluve. Our National flags can be seen in front of the building where the gliding centre has its offices. Teerose I is the sole structure remaining of the wartime German radar installations.

35. Weihe 50. D-7080.

36. Meise. D-1420.

Werner Tschorn. Jorg Ziller, Klaus Heyn.

#### HOLLAND.

37. Goevier - 3. PH-206

38. KA-2. 00-ZQC.

39. Grunau Baby 2B PH-801. Peter Deege.

40. Fauvel AV.36 H. 00-ZXB. Hans Dijkstra.

41. Minimoa. PH-848.

42. T.31B. G-FDQ.

43. Prefect. PH-198.

44. Caudron C.801. BGA 2693.

45. Govier 3. PH-207.

46. Grunau Baby 2B PH-214. Neelco Osinga. Maja Osinga.

47. Caudron C.800. PH-807.

48. Rhonlerche 2. PH-247.

49. T.21B. PH-911.

50. Prefect PH-192.

Camilla van Beugen. Piet de Crom.

Hans Disma.

Jan Forster.

Jan Grundemann.

Martyn Hoogenbosch. Martin Louwinger.

Bob Persyn.

George Slot.

Hans Smit, Egon Harteman,

Hugo Drijver.

Fritz Fahrni.

Max Ratz.

Evert Jan Vermeer.

#### SWITZERLAND.

Spalinger S.18-3. HB-458. Peter Egger. Sen. Peter Egger

52. Bergfalke 2/55. HB-690.

53. L-Spatz 55. HB-575.

54. Spalinger S.18-3. HB-510. Daniel Steffen.

55. L-Spatz 55.HB-732

Jurg and Willi Walty.

These entries break down into 2 from Belgium, 21 from Britain, 1 from Czechoslovakia, 3 from France, 9 from Germany, 14 from Holland, 5 from Switzerland.

It may be possible to draw conclusions from this. Some of our best known and most popular Swiss members had reserved their holidays for a very exciting French cross country vintage glider rally which was to be held South of the river Loire in the hoped for usual excellent weather of that area. This Rally would have added colour to the vintage scene and Chris Wills went there also after Terlet with his Kranich

The Rally was opened during the evening of Thursday 6th August with a magnificent air display in fine weather, which seemed to spell an especially warm welcome to all participants.

On Friday, there was a considerable briefing. The temperature was expected to reach 28 degrees. The wind would come from the east. There would be clear blue sky all day with thermals from 3-4 m/sec becoming 4-6 m/ sec later. Cumuli could be expected only over the Dutch coast. The High Pressure system was moving away quickly. On Thursday, there had been 73 launches. 39 aerotows and 34 winch launches. On Friday, a kindergarten for the children had been a success and C. Wills was presented with a present from the children. The Tutor from Wycombe Air Park got a prize.

On Friday, the International Evening was held and this was its usual success.

On Saturday, the 8th of August, there was a wind change of direction. Because of a possible thunderstorm, all gliders were to be derigged by 1600 hrs. There was an oldtimer Model exhibition and demonstration. These models of the Fafnir 2 Sao Paulo, Moazagotl, Horten 4a and others of older vintage were of the highest standard ever seen and it was a miracle that their owners had allowed them to be flown. In fact two of the masterpieces had actually won the Grand Dolomite Prize after they had been launched over a cliff. Had they not been able to be landed back on top, they would not have survived. They were flying models of two aircraft which were built early this century with obvious nautical influence. The original aircraft had not flown, but the models of them had. One of them was the Jean-Marie Le Bris Albatross. The builder of the models has six of his models in the new Model Museum at Goosedale Farm near Nottingham. We believe this museum would be well worth a visit by VGC members.

No thunderstorm had arrived then, and did not come during the following night. The bad Atlantic weather was still being held back by the European High pressure area. Sunday 9th of August. We were still lucky with the weather as bad weather was over England and Germany. There was a low pressure over England being followed by a Cold front with perhaps thunderstorms. The cold front would pass over us

during the evening bringing a strong South to SW wind of 15 gusting to 25 knots. There would be no thermals at first but would probably go to 500 metres. During the afternoon they would go higher to 900m. Lift connected with the thunderstorm would go much higher, but that would be not for us. Visibility would be not bad. During the morning the temperature was already 26 degrees but expected to rise later to 33 degrees. After the front, there would be cooler weather with remnants of the cold front. Perhaps there would be thermals during the afternoon.

Saturday's flying had produced 72 launches i.e. 14 winch launches and 58 aerotows. A Prize was given to Gisela Dreskomfeld who had given up flying two years ago, but had started again today in the Munster Oldtimer Club's Goevier. Mike Maufe had again surprised us. Another prize was given to Mike Maufe, as he has for year after year come to us, and yesterday he flew his BAC 7 for over an hour. On Saturday, 8th August, both the Condor 4s had been soaring together with the Kranich 2. Mike Birch's Condor flew longest with over four hours. 'Cassius' Ewald and a pilot from the former East Germany flew the Kranich 2 for three hours with the rear canopy removed. A Prefect had been flown for 1½ hours.

During Sunday night, there was a terrific storm but worst of all for the campers was rain driven horizontally by a high wind.

Tents were broken, destroyed, flooded. Beds and clothing became wet through. Hitherto thought to be dry tents suddenly had water within and sleeping bags became wet. Inmates ran for their cars or trailers. David Jones was clinging to his tent, half of which was gone. He thought: "If my tent goes, so do I." Marieyvonne and Christian Ravel, after spending the night clinging to their tent, which had broken, decided to return at once to Angers. There had been a bad road accident to their car and trailer on the way to Holland. Although the Fauvel AV22 was not damaged, the car and trailer were severely. The night's storm had been the final horror. One has to admit that the camp site was a little exposed being situated on one of the rare bits of high ground in Holland, a few feet from the area of what had been the wartime German Radar installation 'Anton'. During the night, rescue operations were organized by a British Airline pilot, and, during the next morning, a Dutchman came with materials to repair tents and dry bedding. It was a rather chastened group of vintage glider pilots who attended briefing during the next morning.

A Belgian registered KA-2 (we think it was Dutch owned,) had stayed out during the night and survived. It had been well tied down.

The NW Coast of Holland had been badly damaged by a wind strength of 150kph and there had been evacuations in Breda. During the Monday, 10th August, the max. temperature was only 24 degrees. Cumuli with their bases at 600 m with a westerly wind gusting to 35 knots indicated post frontal conditions. Tuesday was likely to have the same weather with no less than three more fronts, each following the other. And so it continued. Whereas a few days before, it had been very hot and dry, now some of us slept in our tents with our cloths on (until they became wet).

The Dutch evening organized by Dick and Marijka Jonge was a fantastic success with smoked eels, raw fish, alcohol and a group from old Dutch times (which probably are still to be found on the coasts) bringing us the ancient music and dances.

A Czech party arrived by bus from Zbraslavice. On

Wednesday, a video film of Zbraslavice was shown in the Restaurant for the whole day. The Czechs had brought large quantities of alcohol in their bus, but because the club had control over all sales in the Bar, a Czech evening had to be held on the upper camp site around their bus. Luckily the rain gave us a short respite. Chris Wills was able to produce his accordion and there followed a completely spontaneous evening around the bus, with Czech, Russian and Polish music, which left us in no doubt as to the sincerity of the Czech members to hold an International Vintage Gliding Rally on their airfield next year. By the morning the Czech party had disappeared in their bus, but Petr and Jarka with their dog Bobik and Josef Fecko, his family and the Lunak, were still with us.

On Tuesday the 11th August, there had been 100 launches... 35 aerotows and 66 winch launches. The longest duration flight had been by Jorg Ziller, in his Meise D-1420, of 1 hour 3 minutes.

On Wednesday the 12th August, the Swiss pilot Fritz Fahrni had the canopy of his Bergfalke 2 break through turbulence. Wednesday the 12th. Frontal system moving in rapidly. Cold Front. Showers expected. Rain expected at 1500 hrs. Warm front ahead of it. 35 knots wind expected. Area between warm and cold front expected during the night. Thursday. Previous front will have passed and thus, good weather could be expected but there would be plenty of wind.

Friday 14th August. Less wind. Thermals can be expected but, later on - rain again. During the afternoon, another frontal system is forecast. This would be the last day.

During Wednesday the 12th of August, an International Committee Meeting was held at 1500hrs, Chaired by Colin Street with David Shrimpton in support.

The first International VGC International Committee Meeting was got through without problems.

Thursday 13. 8. 93. Weather would be cloudy with bases at 500 metres asl. This might rise to 600 m. during the afternoon. A SW surface wind of 10-15 knots gusting to 30 knots was forecast. Thermals would be weak. Frontal system was waving again. A strong SW wind with a risk of showers was forecast. Better weather was hoped for on Friday as we should be still behind the front and the wind should drop. Because of members wanting to go home, David Shrimpton persuaded the organizers to have the final Prize Giving on Thursday evening. This was duly carried out and prizes were given to the Dutch organizers: Hans and Nel Dijkstra who had done incredibly well. Marijka Waalkens, our Meteorologist who also is a glider pilot (Doppelraab), George Slot, Camilla van Beugen, Jan Forster, Jan Grundemann, Toon Frishert, the tow pilots and the winch drivers.

The Grand Musée de L'Air Prize was given to Michael Maufe for his oustanding BAC-7. Cheering broke out from all present as he was the most popular winner. The second Musee de l'Air Prize was awarded to the Rally's organizers. We can not thank the French Musée de l'Air at Le Bourget enough for continuing to support our movement.

On Friday, the weather gave us hope for flying and, during the afternoon, the Kranich 2 and other gliders were taken to the launch point. Chris Wills' last remembrance of Terlet was a superb flight as passenger in his Kranich, which was flown by Petr Hanocek from Czechoslovakia, with his dog Bobik also in the front seat. The little dog had sprang from the ground into the cockpit, which was no mean feat as the Kranich had its wheels in situ. During the flight, Bobik was standing on the lap of the pilot looking out of the window, as



The last two Schmetz built Condor 4s. Here seen during the initial fine weather at our 20th International VGC Rally at Terlet. Mike Birch's Condor 4 is in the foreground with Matin Simons from Australia in the rear seat.

Photo: C. Wills



The Dutch owned French Caudron C.800 which was entered in our 20th International Rally at Terley. This was one of the two standard French training two seater gliders which were designed and tested in 1942. It was built in many hundreds after the war.

Photo: Chris Wills



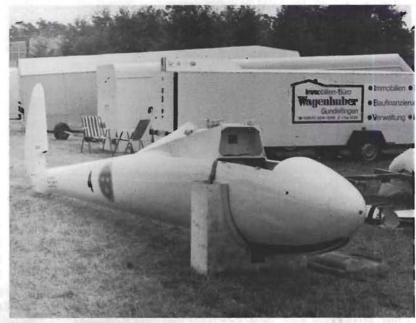
Scott Viking I 1938. It was brought by Lou Glover to Terlet. It is the only one in existence unless there is one in the Argentine.

Photo C. Wills



A fine model of the Grunau 7 Moazagotl. This was among the fine models that were seen at Terlet, during our 20th International Vintage Glider Rally.

Photo: Chris Wills



Peter Molloy's and Eric Couzens' 1943 Weihe's fuselage, in its original Swedish Airforce markings, at Münster Telgte (Rendez Vous Rally) on its way to Darmstadt.

Photo: C. Wills



Kranich 2 BGA 964 and Rhonsperber BGA 260 'Lofty Russell' and Eon Olympia – Sue Mooring, at Terlet.

Photo: C. Wills

the Kranich was soared at cloudbase near Arnhem. Yes, the bridge that was too far, was seen and much else also. The Kranich was landed after an hour to give others a chance to fly. Chris Wills had to be brought in for the Final Ceremony direct from the launch point, still in flying regalia. Yes, we were flying until the end.

During that morning's briefing, Marijka Waalkens said that she hardly could bear to tell us that Saturday would be a good gliding day. Her exact words "Tomorrow will be fine weather. Not much cloud... not much wind... high pressure influence"...!! She was right... Saturday was a superb gliding day with cumuli stretching from horizon to horizon. The Final Ceremony was over, all our gliders were derigged and most had already left. Such was our luck.

It had been a well organized and run Rally by our Dutch members whom we warmly thank. Such was the weather, that unfortunately some of our gliders had not even been rigged. However, we can congratulate our members for flying safely and above all, we are happy that none of our gliders were damaged during this Rally, or during any of the others during this year's VGC flying operations.

It was decided that our next International Rally should take place at Zbraslavice, a grass airfield about 70kms SE of Prague. This airfield seemed to have a suitable infra-structure but might not be over large for an unrestricted entry. Water, electric current (220 volts), toilets and a hangar for 10 rigged aircraft, are available. Hot water would be available for showers.

At 150 DM bungalows with 2 beds or 10 beds could be for hire. 2kms away are bungalows for 100 DM per day. The smallest is for 50 DM. Orders for these bungalows should be received as soon as possible. It is not known how many toilets there are but special toilets on wheels with water can be organized.

Three winches, and a four drum prototype now being built, will be available. One long grass runway is available and winching and aerotowing can take place at the same time. The village of Kutna Hora is 20kms (12 miles) from the airfield. In the village is one large hotel which costs 80 DM for one person per day. The village of Zbraslavice is 2kms from the airfield and here food, drink and other items can be bought. Above all, the area should not be influenced by the Atlantic Climate, as we were now. At the moment of the meeting, the weather was fine over Czechoslovakia.

It was foreseen that Zbraslavice might not be as far as Budapest for the British members, and that we hope that we shall be able to hold an International Rendez Vous Rally on the Wasserkuppe. For direct information concerning the 21st International Vintage Glider rally in 1993, members should write to: VGC RALLY 1993., Aero Club Zbraslavice, 285 21 Zbraslavice, Czechoslovakia. Entry Forms can be obtained from this address although Chris Wills (Wings, The Street, Ewelme, Oxon OX10 6HQ, England. Tel: 0491-39245) has some. Entry forms and requests for accommodation etc. should be returned to the above address before the 1st March 1993. Dates of Czech International Rally are 4th – 15th August 1993.

#### **RENDEZ VOUS 1993**

Exploratory negotiations by Sef Kurz of the OSC WaKu have revealed the strong likelihood of us being allowed to hold this event on the Wasserkuppe next summer immediately before our 21st International Rally in Czechoslovakia at Zbraslavice near Prague. Further details of these two International VGC

events can be obtained from: Colin Street, Chairman of the VGC International Rally Committee, Yewdown House, 7 Sharpthorne Close, Ifield, Crawley, Sussex RH 11 OLU, England. Tel: (0)293 543832. or from your respective International Committee members. In 1994, it was suggested that an International Rally should be held in England, at Lasham, to signal the 21st Birthday of the VGC. Other sites in Britain are invited to tender offers.

In 1995, it was suggested that Germany should hold another VGC International Rally. America would organize a small International Meet from July 16-25 1995. The great OSHKOSH event would start immediately afterwards.

In 1996, it was proposed that Hungary should hold an International Vintage Glider Rally. This would honour the World Fair that is to be held in Budapest during that year. Although the location of this VGC event is not absolutely fixed., one possible location could be a large agricultural aviation airfield with a good infrastructure.

The VGC's National Rally was held together with the Slingsby Rally at Sutton Bank, the Yorkshire GC, from August the 29th until September the 5th.

Those taking part were:

Brian Middleton -Slingsby SKY BGA 698.

Peter Teagle-Slingsby SKY-BGA 686.

Ted Hull - Moswey 4a. BGA 2277.

Denis Shephard – Olympia 460 BGA 2776 from Lossie Milltownn, Morayshire.

Mike Boxall, Olympia 419 BGA 1923.

Tony Maufe - Kite 1 BGA 310.

Michael Maufe - BAC-7. BGA 2878.

Peter Warren - Kite 2 BGA 689.

Richard Abraham - Rhonbussard BGA 2077.

Susanna Mooring - Eon Olympia BGA 795.

Tony Smallwood Gull 1 BGA 378.

Len Nicholson Eon Olympia 2B BGA 514.

John Smoker, John Collison, Trevor Moss. Grunau Baby 2. BGA 277.

Mark Dale, Olympia 463 BGA 1369, Colin Almack Skylark 4, BGA 2881.

Trevor Moss. Slingsby Kestrel 19. BGA 2047.

Bruce owen and syndicate. Slingsby Dart 15. BGA 1207.

Norfolk Club Tibbenham. T.21b BGA

Ian Dunkerly. Fauvel AV.22. BGA 2344.

Barry Smith. Nord N.2000 BGA

Mike Gagg - Eon Olympia. BGA

Please forgive us, should not all the entries be here. Such was the weather that some of the entries may have been only temporarily present. We were very glad to have with us Denis Shephard from North East Scotland with his Olympia 460 (from Lossie Miltown) and Barry Smith with his recently restored Nord N.2000. There were four flying days. The last Saturday was a fantastically good day. A gentle Westerly wind brought scattered cumuli with 6-10 knots lift under them. An SHK, which was ready on the launch point at 7 o'clock in the morning, flew a total of 461kms. The cloudbase seemed to vary but could be described as about 3,500-4,000ft above Sutton Bank.

Michael Maufe again showed us what his BAC-7 could do by thermalling it for over an hour. There were other long duration flights, including two by Brian Middleton in his SKY, which totalled over 10 hours of flying time.

Chris Wills



Michael Maufe ready demonstrate his BAC-7 twoseater, yet again, during our National and Slingsby Rally on Sutton Bank last September. This aircraft won him the Vintage Gliding Movement's highest honour this year at our 20th International Rally in Holland. This was the Grand Prize of the Musée de l' Air et de l' Espace at Le Bourget. It has demonstrated a good performance because of its good wing, which was used on other BAC single-seater gliders in 1931, and a smaller version of it was used on the 1937 Slingsby Tutors.

#### **VGC Prize Awards 1992**

Every year, it has been customary for the VGC to award small prizes to those of its members who have flown vintage gliders well, or have restored them, during the past year. As usual, we must point out that these are only small prizes for prodigious achievements, awarded as tokens of our appreciation for what they have done.

The Ed Hall Trophy. This is awarded to the person who has done the best flight from Lasham during the previous year... To Peter Warren, who flew his Siver C distance after two attempts, in his Kite 2 'Percy', during this year's EoN Rally. The trophy is awarded annually.

Frank Reeks Trophy. This is awarded in remembrance of Frank who worked for the VGC and on a Grunau Baby until almost his death. It is awarded annually to the member who owns the 'best turned out Grunau Baby' of the year. This year, it was felt that it should be awarded to Wolfgang Schaeffler, who brought to our two International Rallies in Europe a beautiful Grunau Baby painted in the cream (Elfenbein) that was so typical of German gliders of that time, and covered with transparent fabric. The Rodi Morgan Trophy. This is awarded annually to the member who has flown a vintage glider the best, during our annual National VGC Rally. We thought that this year, it should be awarded to Brian Middleton and his SKY. We believe that during two flights, he flew his SKY for over 10 hours.

VGC Restoration 1992 Tankards, suitably engraved, are awarded to our members who have done restorations, or rebuilds, during the year. The first was awarded to Peter Warren who has immaculately restored his Kite 2 'Percy'. It is of course named in honour of Percy Pilcher, a Scotsman who carried out pioneer glider flights in Britain just after Lilienthal, at the end of the last Century.

The second was awarded to Ted Hull, who has brought back the wings and ailerons of his Rhonbussard to their original form. He has of course sold this aircraft to a syndicate at Dunstable.

The 3rd is to Firmin Henrard of Belgium for the restoration into antique style of a French Nord N.2000 'Meise'. He has

modernized internally an old farm house and he has built a metal agricultural shed for his collection of gliders derigged. Thirdly, he has built next to his house, his workshop, which is as big as his house. Here, he can work on two aircraft simultaneously. Fourthly, he has founded an organization called the Fauchures des Marguerites. (Daisy Cutters) to look after all vintage gliders in Belgium. His N.2000 is the absolute pièce de résistance of the collection. It reminds one of the first ever British built Olympia with stained and varnished plywood surfaces, polished metal parts and transparent fabric, with an original canopy. It does not stop there, for in the cockpit are original French Badin instruments. He has only flown it twice so far. His first flight lasted an hour, because the variometer did not work. His second lasted over 7 hours with variometer.

The Fourth Tankard goes to John Shaw who has restored a T.21b in far off Perrenporth (Cornwall). He has also immaculately restored a Grasshopper Primary glider which is finished in natural varnish and transparent fabric.

The 5th Tankard goes to Mike Birch and his group at Wycombe Air Park.

With Graham Saw's assistance, he has led a group at Wycombe Air Park which have restored a T.21, Prefect and now a Tutor. The work has been done to perfection with rather unusual colour schemes. Under his leadership, the group is to continue to work on new projects and is one of the brighter areas of our movement.

The 5th Tankard was awarded to Nev. Churcher. He has always had the ideal of owing a Prefect. To this end, he was able to obtain shares of the Prototype Prefect which was, and still is, owned by some of Colin Street's syndicate at Lasham. He has spent all his time and spare cash on restoring this project, which is now airworthy. The 6th Tankard was presented to Peter Philpot and syndicate who have finally flown their Gull 3, which they have built new, after it had been started by the late Mike Garnett. The 7th Tankard was presented to Barry Smith who has restored in French colours a Nord N.2000. The eighth restoration Prize goes to John Lee who has finished and flown his second new Hutter H.17a,

BGA 3661. This a superb little creation in varnished wood and transparent fabric which really does weigh only 170lbs (77kgs) empty. (The American prewar name for the type was the 'Hutter Cloud Hurtler'. This adequately describes this little gem. It has a fantastic performance for its minute size, especially in climbing. Pilot's weight and its weight do make a difference to its circling speed which is said to be 28mph!)

Finally, Michael Maufe has received the greatest honour. He has been awarded the Grand Prize of the Musée de l'Air at Le Bourget for bringing us back a BAC-7, the first two seater glider built in Britain, in 1931. Not only has he superbly finished this aircraft in the old style, but he has more than

successfully demonstrated it in the air, both in this country and at our International Rally in Holland. This is the type that also may well have done the first cross country flights in Britain, in the hands of Eric Collins in 1933. Mike's BAC has caused a sensation wherever it has appeared.

This year, we have had bad weather for most of our Rallies, due to us receiving the eastward flowing Atlantic Climate. In 1993, we are to go further inland within the continent of Europe for our International Rallies, and this should bring us better weather.

Chris Wills



The Slingsby Tutor which has just been immaculately restored by a team at Wycombe Airpark under the direction of Mike Birch and Graham Saw. Its colour scheme of pink and purple with gold bands has to be seen to be believed. The aircraft has won Restoration Prizes. It is here seen at Terlet.

Photo: Chris Wills



Ted Hill's beautifully restored Rhön Buzzard, still, happily, at Dunstable.

AMERICAN NEWS as received from Jan Scott dated 13th of June. Extracts from his letter.

We have decided to go ahead with IVSM 1995! We have eight foreign gliders so far, and I am certain that more will sign on now that we are going to do it. The dates are almost certainly going to be July 16-25. The Oshkosh event starts on the 28th.

The first annual membership meeting and regatta that VSA has held in the southern part of the country was very successful. We had beautiful sunshine with thermals to 9,000ft every day! Amazing, considering the flat swampy terrain and the large lake surrounding the airport. Wayward alligators were a real safety concern!

15 vintage gliders participated – six of them were already based at the Manning airport, all owned by our host Jim Stoia who is still buying more. There are two gliders in England that he owns. They will be shipped as soon as he finds a third to fill the container.

Best restoration award went to Bob Gaines for his lovely Ka-3. The members re-elected the secretary (me), while we have got a lady President, Lin Buell, who has attended the last three International VGC Rallies. Other board members stay the same.

Our Western Regatta did not go as well as the previous ones, as on Friday, a severe storm with hail stones up to one inch in diameter, suddenly came over the airport just as the gliders were being assembled. Two Cherokees received major damage, a Ka-8 has to be re-covered, and all the fabric covered gliders need to be repainted. Even the metal gliders were dimpled by the hail. Men stomped around in ankle deep slush afterwards. And all this was in sunny California!

I am glad to hear that the 1993 Rally is planned for Czechoslovakia. I expect a large American contingent will be present with more than one glider.

#### DUTCH VINTAGE GLIDER NEWS

Raymond van Loosbroek reports slow progress on his Sky. The fuselage rebuild ahead of the wing trailing edge, which was done in England, is having to be done again, and drawings for it are being sought from England (Slingsbys?). The wing repair which was done by someone else in Britain (Martin Breen) is satisfactory. This was the SKY in which Philip Wills won the World Gliding Championships in Spain in 1952.

The last Grunau 8 two seater in the world, which was given by its owner Hein Schwing to an aircraft preservation society for rebuilding and restoration, is not progressing.

The Spanish built casein glued Kranich 2B-2, which Neelco Osinga has obtained from Gunther Welzhofer at Gunzburg on 10 years' loan after restoration, is progressing slowly but should progress much faster after the person who is working on it has retired. Neelco has recently bought an enclosed metal trailer from Schofield Aviation. It is almost identical to the one that this firm has built for Chris Wills' Kranich 2. At least, Neelco's Kranich will have a home for its components.

Chris Wills

#### **SWEDISH NEWS**

Niels-Ebbe Gjorup in Denmark reports that an Eon Olympia has been bought from England. It has the Eon Serial No. of 0147 and so it must be one of the last built? He supposes that the Olympia was previously owned by the RAF and, in 1967,

it received the BGA No. 1422. Its new Swedish owners are a syndicate at the Kronobergs Segelflygklubb, which is led by Rolf Algotson of: Livlandsgatan 116, S-112 37 Enskede, Sweden. Tel: 08 649 40 62. If his name is familiar, I can inform you that Rolf for the past 25 years has been one of the two organisers of the spectacular Ottsjo wave camp taking place near Are in mid Sweden.

Chris Wills

#### SWISS NEWS

Willi Schwarzenbach writes:

#### The Swiss Oldtimer Segelflug Vereinigung OSV

The Swiss Oldtimer Vereinigung came to life on 4th November 1989. Today more than 70 members and at least 48 gliders are registered by the association. Our dynamic and competent Willy Fahrni, well known VGC member and regular Rally participant, is the leading head of the organization. He is backed by no less dynamic a committee and a file of rules.

The aim of the OSV is to associate people with interest in Oldtimer gliding and to promote preservation, restoration and flying of gliders which are more than 25 years old. This, of course, opens the membership to relatively young and modern gliders, such as Ka 6, Ka 8, Blanik, Elfe, Phoebus, Diamant, Libelle and many more. But fortunately there is a hard core of pre-war designed gliders represented by Spyr, Spalingers, Mosweys, Meises and Grunau Babies.

#### 4th OSV National Meeting, Schaffhausen 1992

Invited by the Segelfluggruppe Schaffhausen the OSV met at Schmerlat airfield, place of the VGC Rally 1991, during the weekend of 11/12 April 1992.

Present were 10 gliders, namely the S-19, "Cheesli" Renz; Spyr 5, Werner and Hugo Roth; Spyr 5, Georg Fliss; Spatz 55, Hans Ratz; Spatz 55, Willy Walti, MG 23, Heinz Barfuss; Bergfalke, Fritz Fahrni; Ka 6, Willy Fahrni; Diamant 18, Hans Jakob and S-18, Willi Schwarzenback.

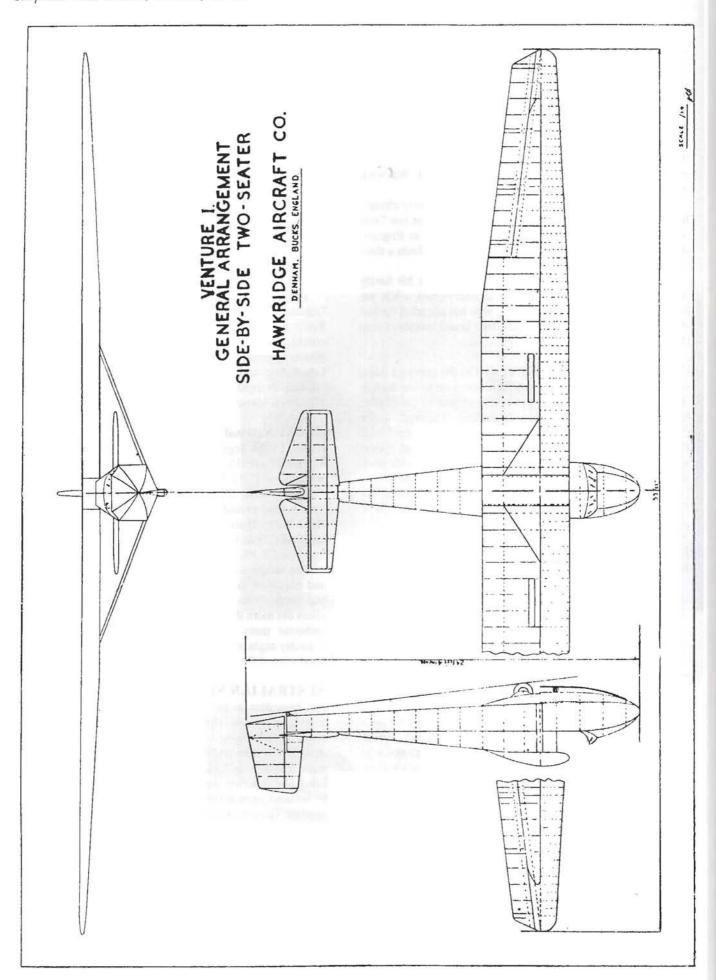
The meteo was fine, moderate northern winds, strong lift and excellent visibility allowed good soaring over the area and northerly over the Randen Hills easily up to 2000m. The pilots did more than 60 hours in 50 flights. A most memorable barbecue party kept the OSV people together late into Saturday night at the Clubhouse and the meeting was felt as a good start of the gliding season 1992.

#### **AUSTRALIAN NEWS**

An Australian at our Terlet International Rally gave us the extraordinary news that a Hawkridge Venture side by side two seater is still flying at Narromine, in N.S.W. This type was designed by Hawkridge Aircraft Ltd in 1946/7. to roughly the same format as a T.21. BGA 640 (G-ALMF) was seen at the Long Mynd during the early 1950s. It crashed on 22.7.62 and its remains were at the Lakes Club near Carlisle. It seems that another Venture two seater was built in Australia from plans supplied by Hawkridge. This is: VH-GDU. Information was taken from Norman Ellison's *British Gliders and Sailplanes* 1922-1970.

#### DANISH NEWS

More information on the Danish Mu 13D. It is possible, but not confirmed, that this aircraft was purchased new from the Schwarzwald Flugzeugbau Donaueschingen in 1939. It became LY-KEVA in Lithuania and won the first Championships of the Baltic Sca during that year.



Photocopied from The Sailplane and Glider, March 1946 - see Australian News.

Stephen Coates has sent the following information. "I do not have any definite information on the Danish Mu 13D, but I do know from my helicopter research that after the occupation of the Baltic States by the Soviets in June 1940, all aircraft of the Aero Club of Lithuania were dismantled and stored in a hangar at Aukstagiris near Vilnius until 'liberated' by the Germans in June 1941, when the aircraft were reassembled and transferred to Parabane Airport".

Niels Ebbe Gjorup wrote on 16.1.84. that on 1st July 1939, the sailplane was finished in 'Rohbau' (without fabric or paint) at the Schwarzwald Flugzeugbau on 1st July 1939. Its serial number was 108 (this is also the RLM's code for all gliders – CW.). Its first German Log Book mentions that it was a Mu 13d-11. (this '11' is a little strange. Do you know if it just means the serial version? The original SegelflugzeugbauPrufschein does not mention the 11. So may be it was written in the log book after the Mu-13D-111 version had been produced., One can never know.)

14 July 1939. Fabric and painting were finished, and the sailplane left the factory (probably).

(If this aircraft was LY-KEVA, it was certainly very new indeed when it was flown in the Baltic Games which ran during the period August the 14th-19th 1939 CW.)

WE GUESS that it was sold to the Russians, but no papers exist to inform us whether we are right or wrong.

WE KNOW, although, that during an inspection in 1947 the Hammer and Sickle became visible under some old paint that was removed from the rudder. A THEORY is made that the Russians bought it from the factory and transported it to the USSR, where the sailplane was eventually taken by the Nazis during the summer of 1941 (when they moved East) and was sent back to Germany again. We are not quite sure of this, but the idea is not so silly, since we had another sailplane in Denmark that the Germans had brought in to the Luftwaffe after having 'found' it in Poland. This was the Polish designed and built DELFIN, which some Danes bought and had it registered as OY-DYX.

16 April 1942. The Mu received its German Zulassungsschein and its Wehrmacht Luft registration WL-X1-217.

25 April 1942. The Mu had its first launch from the Flugplatz Fassberg. Here with Luftgau 11, it had some 193 launches and 76 hours were flown.

26 August 1942. The MU is removed to its new home at Lubeck-Blankensee where it had 100 launches.

5 September 1942. The MU had a crash and broke a wing. After the repair, the sailplane was taken to Denmark to amuse the German occupants.

2 June 1943. It had its first launch in Denmark at Vaerlose Airport

3 June 1943. It had been removed to Lundtofte Aerodrome where it had only 6 launches.

Here the story of WL-X1-217 pauses.

One year later, the war was over and the Mu was left behind in a hangar. Not many of the German gliders had this fortunate fate. Most were destroyed before the capitulation – by Germans. Unfortunately, I have no photos of the Mu 13 with its German registration.

Juridically, the sailplane had now become Danish State Property. The Ministry of Commerce decided to allow the sailplane to be inspected so that a price for it could be fixed.

In the Spring of 1947, the Danish Gliding Association bought the MU for 2500 Danish Crowns. So now they had a

sailplane capable of setting up records. Its new registration was OY-MUX.

Lots of good flights were made by pilots like Svend Michaelsen Carsten Thomasen and Signe-Skafte Moeller. Its longest distance flight was flown by Age Dyr Thomsen who flew it 332kms to a landing in Sweden! This was on the 17th of August 1953 The last owner of OY-MUX was, as you know, Signe who flew it for some years. Her best flight was 271kms distance in to Germany... the MU's home country.

After Signe's death, nobody flew the Mu, since its C of A had run out. For some years, it stood in the hangar of the Arnborg Gliding Centre.

In 1978, OY-MUX was bought by Erik Holten who wanted to make sure that this rare sailplane did not get destroyed. Later, a foundation was founded and some 20 people sponsored its restoration. Or at least, they donated some money, which was not nearly enough to get OY-MUX airworthy... Extract from a letter by Niels-Ebbe Gjorup: "Between the Danes and the VGC, it looks as if we are getting OY-MUX's history quite well documented!"

In another letter just received of the 18.9.92, Niels-Ebbe recalls the much remembered take off from an airfield in Southern England of the Danish Eon Olympia and the Newbury Eon aeroplane both without pilots. After the considerable pile up, the Danes still took delivery of the glider now repaired. It then flew two Danish distance records. (if he remembers rightly)

He will write later about many exciting Vintage Glider Projects in Denmark. (Among others, a new 1926 model Stamer-Lippisch Zoegling is approaching completion!!)

Chris Wills

#### **FRENCH NEWS**

We have to mention the very sad news that Robert Pechaud died during the early summer. He had been a fighter pilot and an instructor at Pont Saint Vincent. He became famous as the Chef du Centre of La Ferte Alais during the heroic time of that gliding club during the 1950s and early 1960s. Such pilots as Roger Biagi, François Louis Henry and Dr Amaud achieved tremendous things often flying old gliders. François Louis Henry flew the Rhoenbussard 360kms (a 200km triangle and a 160km out & return without landing in between them. François Ragot, later also of the French team, was dispatched for his 500kms to La Teste, near Bordeaux, flying the Kranich 2 solo. He arrived over his goal still with 6,000ft in hand. It was the second 500kms that this particular Kranich 2 had flown. All was due to the organization of Robert Pechaud who himself had a Gold C with three Diamonds. Mlle de Brugada broke the French feminine record by flying the Milan (Weihe) round a 300km triangle. She later lost concentration during a flight and crashed simply due to her being over tired. She later died in hospital and, after that, flying during good weather periods became less concentrated. Chris Wills was there during his holidays during 1959,60, and 61 and noticed how pilots would fly with their sleeping bags as cushions for many of them were never sure where they would be during the next night.

François Louis Henry became World Champion on the Standard Class at South Cerney in 1965, flying an Edelweiss. Robert Pechaud created a favourable climate which enabled them to achieve great things. In 1962, the Centre Regional de Vol a Voile at la Ferte was forced to move to Buno Boneveau because of the proximity of Bretigny, the French Farnborough. Robert Pechaud achieved the move and built

the centre up again at Buno. He was created Chevalier de la Legion d'Honeur for his service to France. Apart from all else, he knew a wealth of historical details concerning the development of gliding in France and has often helped Jean Molveau, the young editor of Vol a Voile and Pierre Vaysse with their historical researches. He will be sadly missed at the Historical Gliding Congresses which are held every winter at the Musée de l'Air et de l'Espace at Le Bourget. Chris Wills will remember him as the genial Chef of La Ferte who gave him the chance to fly his 300kms on an AIR 102. Such phrases as "Yes, you can fly anything we have got" and, after an all night retrieve from near Nancy, "How are you feeling? Well, take the AIR 100 for a 300 triangle. It is rigged. The AIR 102 is still on its trailer!" It was a tremendous time and it was all created by Robert Pechaud. He organized the retrieves. One trailer to fetch four gliders that were 300kms away, all to a central point from where a Morane 315 of a Storch could ferry them back in pairs! (or even in threes with the Storch!) On their return, if the weather was fine, the gliders would be turned round to take off again, usually with new pilots as their previous pilots often retired to bed.

Chris Wills once heard Robert Pechaud say after a tremendous day's flying operations. "J'ai fais mon truc".(I have done my bit). Never had he said truer words. No-one who knew him will ever forget him. He was flying almost to the end.

The book 'Histoire de Vol a Voile Français' describes the numbers of German gliders acquired in 1945. These seem sometimes rather more than there really were. However, everyone agreed that it was well possible that the Reiher that was in France never left Strasbourg. It was burnt where it was found. So that is why we can find no trace of the Reiher that was in French hands.

The anti-German feeling was so fierce in Alsace, which had been French, then German, then French, then German and then French again, that many German gliders were burnt there, as apart from all else it was felt that the new French two seater trainers and other gliders were more suitable than those of the Germans which were nearly all designed during the 1930s The French Trait d'Union went into great details concerning the German sailplanes which were taken over. Detailed drawings of them were published. If we are to believe these drawings, the Reiher in French hands was D-11-167, the second prototype built in 1938 which took part in the German 1939 Libya Expedition.

Concerning the VMA 200 Milans (the French built Weihes). 32 are said to have been built in 1950 from parts found in Germany. We think that Jacobs Schweyer built 280 Weihes during the war. However, there were 60 DFS Weihes before that, being built from 1938, when the first two took part with distinction in that year's Rhoen Contest. However, it was said in 1945 that there were parts for another 100 Weihes at the firm of Kittelberger in Bregenz. We think that it was from this firm that the French got their parts. During the 1960s, in France all kaurite glued gliders were forbidden by the Buro Veritas to fly and many were burnt at that time for taking up hangar space. However, the Milans were spared this (although they were initially grounded) because they were assembled in France using Certus glue. Certus was the glue used for all wooden aircraft in France and so no-one would ground all those. At the present time, it is said that 14 out of the 32 Milans can still fly, but this does not mean that they are all actually being flown. A fuselage less stern postis in the roof of the hangar at Paray le Monial, Jean Paul Robin at Gap

has the wings of one, which were going to be burnt. The rest of it was burnt. The AIR 100, which was used by Charles Atger for his world duration record of 56 hours 15 minutes starting on the 2nd April 1952, is still being flown at Limoges, but will soon be taken on charge by the Musée de l'Air et de l'Espace.

Chris Wills

#### **GERMAN NEWS**

... as of the 24th of June 92. Felix Kracht is 80 years old. He is particularly known to us as the father of the FVA 10b, 'Rheinland' which he flew, developed, and put in to production, 29 being built in a small annexed workshop to the Schmetz needle firm at Herzogenrath near Aachen, before outbreak of war in 1939 stopped play.

Felix Kracht was born in Krefeld on 13th May 1912. His great career in aviation started at the FVA (Akaflieg Aachen) where he gained his Diploma with the development of the Rheinland which initially had several serious shortcomings. Not only did he redesign and build it, but he expertly flew it during the Salzburg ISTUS meeting and the 1937 Rhon Contest, before it had been redesigned, and during the 1938 Rhon contest, after it had been redesigned. We also believe that he designed the 18 metre span, (NACA 23015 wing profiled throughout) fowler flapped, FVA 11 'Eifel' which, having a max. L:D of 1:33 must have been one of the highest performance sailplanes of that time. He flew it during the 1939 Rhon Contest. It was damaged and did not survive the war. During the war, he took over the leadership of DFS (German Experimental Institute for Gliding) which had among its departments, those for altitude, high speed and towed flight, the latter being led by Fritz Stamer, the former Chief Instructor of the RRG (Rhoen Rossiten Gesellschaft) on the Wasserkuppe. After the war, Felix Kracht went to France and worked for Nord Aviation and became very involved with the production of the German/French Transall and was instrumental in coordinating the German and French Aviation industries for this purpose. In 1967, he came to work for VFW Fokker at Bremen but changed from there to become business executive for the newly founded German Airbus GmbH in Munich. Since the founding of the Airbus Consortiums in December 1970, Felix Kracht became Senior Vice President especially engaged in building the Airbus A 300 and the following Airbus Programme in Toulouse. Felix Kracht belongs to the small elite number of aeronautical engineers who believe in knowing an aircraft down to its last detail. He is acknowledged as being one of the great fathers of the Airbus programme. In recognition of his service to the European Airbus, a street has been named after him in the German Airbus Works in Hamburg. He retired in 1981 but his advice on aeronautical design and construction is still being sought today. Further information on the DFS's Towing experiments during the war. As described in our previous issue, experiments for the towing of flying fuel tanks complete with undercarriages, to extend the ranges of bombers were found a practical application when one was towed with a rigid bar coupling behind an HE 177.

This aircraft had many failings, one of the worst of which was the possibility of its in parallel mounted DB 606 engines catching fire. Nevertheless a prototype He 277 heavy bomber with its four engines apart had flown. Germany had had no heavy bombers designed before the war due to their enthusiast General Wever being killed in an air crash in 1939, and there being thought to be no operational requirement for them.

However, by 1944, 390s prototypes had flown. These had six engines each, which developed almost 12,000 hp. These two huge aircraft set sail from Northern France in 1944 and, each one having six auxiliary fuel tanks in their fuselages, they made a non stop trip to a point within 20kms of the American coast, 10kms from New York. They then returned to France. The two prototypes, one built at the Junkers works at Merseburg, and the other at Letov (which we hope is to build the metal fittings for a new production line of 20 Lunaks) near Prague, were built for long range reconnaissance. However the third prototype which was being built was to carry bombs. It can be seen that all the five heavy bomber designs that we know the Germans were building - the He 277, Me 264, Ju 390, all of which had flown, and the Ju488, which could fly at more that 400mph, and the HE 274 (the latter two were being built in France and were not finished by May 1945) - were all short on range to be an Amerika Bomber. Nevertheless, the Ju 390 came nearest to meeting the requirement, and it is just possible that if one of their fuselage auxiliary tanks could have been replaced with bombs, and by towing a volley of flying fuel tanks to be jettisoned when empty, they might have just done it. It can thus be seen that DFS was engaged in perfecting in-flight refuelling. Of course the possibility of delivering bombs to New York, and then ditching near a U-Boat to take the crew home, was also being considered. Work on the ME 264 and HE 277 was stopped in favour of the emergency fighter programme. Nevertheless, it is strange that the Horten brothers were taken away from testing their flying wing jet fighter in March 1945, as other prototypes already flown had almost met the Amerika bomber requirement. No doubt the Ho Jet bomber could have flown to America and back at great speed at a tremendous height, but the chances of finishing a prototype at that stage in the war seems to us now as remote. This indicates the confusion, and the belief in miracles to save the situation, which prevailed in Germany at that time.

"Sie kommen wieder" but slowly! It has been our hope that the past glory of German gliding would be brought forth by our members there. However, there are now signs that some of the sailplanes in museums will be restored or built again to be flown. Following the example of the Musée de l' Air at Le Bourget, the German Gliding Museum on the Wasserkuppe, realizing that it is short of space to display gliders, is going to allow their recently acquired from Ernst Walter Mu 13d-1 to be brought up to original form and to be flown, as the best way of keeping it in good condition. While on the subject of the Wasserkuppe, there are signs that the great gliding school, which has hitherto been 'off limits' to civilians since 1945 due to it being a major radar installation for the defence of the West against the East, will soon be evacuated of American and German service personnel and their Radar. Due to the changed political climate, all the buildings may come up for sale... but to whom?

Will the Wasserkuppe return to its former glory?

Concerning the work of the Oldtimer Club Wasserkuppe, the Rhonbussard, formerly BGA 395, must now be finished, as during July, it only needed painting. Sef Kurz, representing the OSC with their Ka-2, described how they had found the Rhonbussard, which had been in England since 1938, was still in excellent condition. He also mentioned how he had done considerable work towards building a Reiher. It had been possible to work out much from the two drawings which had been received from England. However, it was clearly not possible to take the work much further without more drawings

and information. A Belgian, at Terlet, mentioned that, through the Brussels Air Museum, he had discovered that there was a very strong likelihood of there being Reiher drawings in Czechoslovakia. We hope that this is being followed up. We again ask all our members to try to discover whether there are any Reiher drawings in their countries, so that this most beautiful sailplane can be brought back. A Horten 4A. For a long time, the 4th prototype Ho 4A LA-AD has languished in the hangar with many other sailplanes on the ancient Bavarian airfield of Oberschleissheim which is the storage facility for the German Museum in Munich. LA-AD is seriously incomplete, lacking its centre section and elevons. Wooden outer wings have been built on to the wing to replace its former detachable metal tips. Recently, there has been momentum to restore this aircraft for museum exhibition, and also to build another one beside it to be flown. Among those taking part in this are: Edward Uden, Gebruderstrasse 38, 2202 Barmstedt, Germany, who has we believe already completed the stressing and redesign necessary to build centre sections etc, Peter Ocker, and Dr. Nickel of Freiburg in Breisgau. Meanwhile, we have heard a rumour from an American source, that Waldemar Sturm, now retired, may be building an improved Horten 4 (the 4C) in Buenas Aires.

A Rhonsperber. It seems that our member Otto Grau, a retired garage mechanic, is starting to build a new Rhonsperber as a complete set of drawings now exists in Germany for the type. We believe that the set was completed after some copies had been sent from the VGC in England to be used as a basis for them.

Otto has already completed and flown a splendid Goppingen I 'Wolf'.

A Hutter H.28-2. This has been started by a Herr Broderson, who lives near Hamburg. He intends that this will be his project after he retires in a year or two's time.

The two Kranich 2s, formerly BGA 1092 (Swedish Kranich 2B-1), and formerly BGA 1258 (Mraz built Kranich 2B-2), were bought as wrecks from Peterborough Sailplanes, by Heiko Harms, a German naval jet pilot from Flensburg. He has now passed on the surviving components, presumably for the rebuilding into one complete airworthy Kranich 2, to the Gliding Club at Oldenburg. Presumably, all the Kranich drawing prints, which were obtained also from Peterborough sailplanes (but which belong to the VGC) have also been passed on to Oldenburg. Luckily C. Wills microfilmed them while he had them, but the VGC would like to have the full size prints back one day. (So that they can be photocopied and made available to our members both now and in the future).

It is with deep regret that we have learnt that Gerhard Bergmann of Michelstadt/Odenwald, Germany, has died. He had restored many sailplanes including a Grunau Baby 3. He was currently restoring a Spanish built, casein glued, Kranich 2B-2, and he was building a new Minimoa 36. The VGC had been helping him with plan copies, microfilm and photographs. Another of Germany's old craftsmen has gone forever. We hope that his son will carry on his work. Jochen Kruse writes that having carried out the modifications that the LBA stipulated for his Mg 19, he still found that there were problems in that the LBA discovered that his aircraft was neither an Mg 19, or an Mg 19a, and that it was somewhere in between! It seems that in Austria, modifications were started to bring this original Mg 19 up to 'a' standard but they were never completed in that its wings still have the original Mg 19's long span ailerons. In August, we discovered that he is at last being allowed to fly it, but only over Germany. Its limited



Jochen Kruse's Mg 19 is allowed to fly, at last, in Germany. It has the long span ailerons of the original Mg 19. This photo was taken during its first day's flying. Jochen is in front with two young Polish friends from Leszno.

C of A did not cover it to be flown outside German territory. He likes the aircraft very much.

Jochen reports also that the new DFS 230 is now finished, but no museum has yet been found to exhibit it.

Another practical application of the Trag Schlepp (Carrier Tow) was when HE 111s towed the little Bachem 149 'Natter' (adder) vertical take off target defence rocket propelled aircraft to about 18,000ft for their glide tests. The little aircraft had been designed by the famous Schwabian glider designer, builder and pilot Eric Bachem to climb vertically under rocket power at an estimated 37,000ft per minute, and to thus avoid vulnerability during conventional take offs and landing approaches etc. At altitude, it was to fire rocket missiles into the American bomber formations. Without its missiles, it would become unstable in pitch due to centre of gravity change and was to be abandoned by its pilot who would descend by parachute, with rocket motor on another parachute. Nevertheless, it was felt that it must be flight tested to discover whether it would fly. Its rate of climb under power was estimated to be three times that of the ME163B 'Komet'. Many pilots flew it and said that, with its differential elevator and no ailerons, it flew well but had a high sinking speed, due to its having very small wings. For these flights, it was fitted with a fixed tricycle undercarriage upon which very fast landings taking considerable space were accomplished. Photographs exist of the little aircraft with its tricycle undercarriage, being towed by its nose hook and suspended by a tow cable from the underside centre of gravity of a Heinkel 111. Towing position was more than twice as low as the conventional sailplane low tow position as practised in Australia. The Natter was suspended almost vertically below but slightly behind the HE 111. When a DFS Habicht was towed like this, it was diving at great speed with its spoilers out. The Tragschlepp was the only method used to take the Natter to altitude for its glide tests. In the event, only one manned vertical launch took place under power and this ended soon afterwards with fatal result to its pilot. We believe that the late Ludwig Hofmann flew the Natter. Nevertheless, others were prepared for manned take offs with rocket power,

when American tanks over ran the airfield of Kircheim Teck, It was named 'Natter' because of the deadly effect its missiles were likely to have on bomber formations. The US 8th Airforce was flying over Germany at great altitude in huge box formations. As the boxes' combined defensive fire power was likely to devastate conventional fighters with cannons, it was felt that the boxes could only be blasted apart by rockets fired from outside the defensive fire's range. Thus, it was only necessary for an aircraft to fly to the altitude of the bombers and to loose off rockets through the formation. This became more hazardous when the Americans used fighter escorts. It was felt that Eric Bachem's Natter would have a very small chance of being shot down by fighters, and also the vulnerable period of flight during take offs and landings of a conventional fighter would be eliminated. In 1945, one Natter was hidden by our late very dear member Hermann Lederer. He later brought it out of hiding and presented it to the German Museum in Munich where it is believed to be on display. We received this news from Germany on the 11th July, Theo Rack of the German Gliding Museum on the Wasserkuppe has bought Ernst Walter's Mu 13D for 15,000 DM, and not for the 100,000 DM which was being asked for it. He said that it will be flown regularly and Bjarne Reier is building an original canopy for it. The Oldtimer Club Wasserkuppe (OSC) has held its anniversary and that Werner Tschorn, Jochen Kruse and Mario Sells were among those present. At that time, Gunther Welzhofer's Rhoenbussard, was finished except for painting. Otto Grau has been restoring an AV.36. It is not clear who owns it but it should be soon flying. Both the OSC (Oldtimer Club) Wasserkuppe and the Oldtimer Club Munster are taking on young members. The latter club is obtaining a Goeppingen 5 (H.I7a) from Namibia (formerly German SW Africa.) They will then have a family of Goeppingen designed gliders, as they already own a Goeppingen 3 Minimoa and a Goeppingen 4 Goevier 2. Rainer Karch has said that the original short fuselaged Mu 13d, which he has been storing, will go back to France next year to its owner François Ragot.

Chris Wills

#### **BRITISH NEWS**

Of the second new wave of vintage gliders being restored or built again, many will have flown by the time this is printed. These are: (1) the Rhoenbussard BGA 2099 owned by Ted Hull which now has new long span ailerons. He has sold it recently to a syndicate at Dunstable which includes Richard Abraham. (2) the second new Huetter H.17a built by John Lee (see article "Hutter? Utter Hutter!), (3) the Tutor which was restored by David Shrimpton, (4) the prototype Slingsby Prefect, BGA 689, which has been restored by Nevil Churcher and (5) the Nord 2000 (French Meise) which has been restored in French colours by Barry Smith in the North of England. It looks very fine with its original canopy. He hopes to bring it to our International Rally near Prague next year as his wife was a medical student in Prague and speaks fluent Czech. Nev Churcher hit upon a most constructive idea. He sent his wife on a gliding course to give him more time to finish the Prefect. The project has taken him many hours of hard work but we hope that both he and his wife will have many hours of enjoyment in the air in the Prefect. (6). The Tutor which was restored by Mike Birch and Graham Saw's Vintage Glider Group at Booker. During the final days of July, it was a joyous sight to see the entire group working to finish the aircraft in time to take it to Terlet. Its colour scheme and immaculate turn out has to be seen to be believed. There has certainly never been a Tutor like this one before. Kite 2. The original group of owners of this aircraft at Redhill and Lasham during 1951/2 have reformed to buy the aircraft back. It was one of the first sailplanes to be at Lasham, when the Surrey and Imperial College GCs moved there in 1952. The Surrey & Imperial College's fleet of 1 T.21b, 2 Tutors, 4 Eon Olympias and the Weihe BGA 448, joined the Army Club's Eon Olympia, 2 German Grunau Baby 2B-2s and T.21b in the Lasham hangar. The only two privately owned gliders at Lasham were the Kite 2 and Jack Carran's Eon Olympia. So the Kite 2 will be coming home. News of the new Gull 3 is that it had its first flight in the hands of Peter Philpot on Saturday 12th of September. From its one circuit, it gave the impression of being a very light, viceless glider. Its rudder pedal operation system is having to be modified. We

congratulate the Blackpool & Fylde Club's syndicate on having built a completely new Gull 3. The original Gull 3 is owned by its restorer Mike Beach. It was originally designed and built during 1939/40. The building of the new Gull 3 has taken years. It was originally started by the late Mike Garnett of the Bristol Club at Nympsfield. We hope that we will be lucky enough to see it at some of our Rallies.

DFS MEISE BGA 449. Rumour had it that this aircraft had severe glue failure. Ruth Phillips says that this is not true. Fuselage, tailplane and rudder are now rebuilt but the wings still need doing. Ribs and spars are OK but soldiers still need regluing in the wings. There is no intention to destroy the aircraft as its owners, Ruth and Pip Phillips have had too many happy hours flying it. BGA 449 was one of the 6 German sailplanes handed over by RAE Farnborough to the BGA in 1946 at Cranfield after the RAE had finished testing them. Other sailplanes handed over were two Grunau Baby 2B-2s which were allocated to the Bristol Gliding Club and the Derby & Lancs Gliding Club), the then incomplete Kranich 2B-2, BGA 494, to the Cambridge GC, the Weihe BGA 448 to the Surrey Gliding Club at Redhill, the Weihe BGA 433, to Philip Wills and the Meise BGA 449 to the Newcastle Club where it was extensively rebuilt by among others Arthur Burningham. Andy Coulson of that club flew it until the early 1950s and then it was sold to Frank Foster at the London GC.

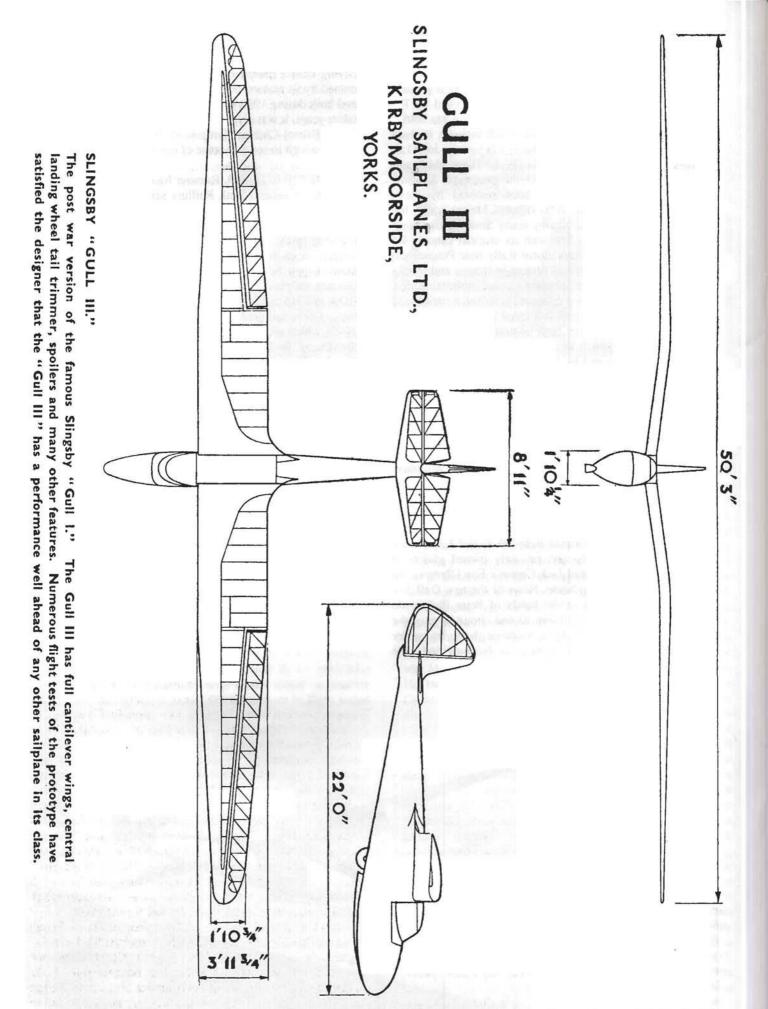
It was later owned by a syndicate at that club before being sold to owners at the Cornish Gliding Club at Perrenporth.

There was another Meise at Farnborough but this was in such bad condition as to be beyond repair. It is thought that it was allocated to Elliotts of Newbury for examination where it was seen by C. Wills in 1953, who was working there. BGA 449 is, so far as we know, the last wartime built German Meise that is likely to fly again. Wartime production of German Meises that we know about is: 601 Meises by Schmetz at Herzogenrath near Aachen, and 25 Meises by Schleichers. Others may have been built.

Chris Wills







This is the Slingsby Gull 3, as it was to be built after the war. The canopy had to be more in phase with that of the Weihe, Meise and that which John Sproule had just managed to build for the broken Philip Wills Minimoa. The new Gull 3 may have most of these modifications, but not the canopy. The drawing has been photocopied from Sailplane and Glider February 1945.

## TO RENDER UNTO LASHAM THAT WHICH WAS LASHAM'S

This is to draw the notice of our members to the remarkable organization which has been set up at Lasham around the VGC Centre, and its Peter Davis Workshop. The VGC Centre has become a focal point for all our members whether they are Lasham members or not. It was set up by our VGC members at Lasham under the guidance of Colin Street and what has been accomplished by them is remarkable in every way. By their hard work and often by dipping into their own pockets for finance, they have built a home for us out of the former scout hut, complete with almost every convenience. The clearing of the drains and the building of the Peter Davis workshop, which was a converted and extended wartime military building, have been not the least of their toils. They have striven to bring back something of the Lasham of the old days (i.e. the 1950s) and it is very noticeable how many of the original Lasham members of that time come to it.

The Peter Davis workshop has seen much restoration work and understandably this has concerned mainly sailplanes of those early Lasham times. An Eon Olympia 463 and a Swallow as well as a Capstan are currently being worked on. Richard Moyse is working at home on a Slingsby Cadet of very much pre Lasham vintage (prototype flew in 1936) and is making excellent progress with it. A brave attempt was made to buy the 1943 built JS Weihe BGA 448 which, having been wrecked during our Rally at Thun, was once the pride of the Surrey Club's fleet when it first came to Lasham in 1952. This failed but another JS Weihe has been found which has been bought. This is the 1950 Swedish built Weihe BGA 1093 ex SE-SHU, which had been restored by Andrew Coates. During the 1950 World Championships, at Orebro, Sweden, it was leading until the last day when it was beaten into second place by a very narrow margin by the Swedish pilot Billy Nilsson, flying the Weihe SE-SCM (believed to have been sold in the USA). The owners are now Keith Green, and Andrew Coates who will keep a share in it.

SE-SHU is still in original form and colour and the Lasham group have been asked to keep it like this as it is the only JS Weihe in Britain which is still original in every way. We understand that Keith Green, Mark Wills and Ian Smith will strive to bring it up to the highest standard of finish and airworthiness which are the hall marks of all the other projects that our group at Lasham have worked on.

An Honour for Ian Tunstal. Ian has been created Honorary Life Member of the G.P.P.A. (Groupement Preservation Patrimoine Aeronautique) of Anjou, by Christian Ravel in recognition of his journalistic activities which have more than shed light on our Vintage Gliders.

Through his countless articles in aviation and model magazines he has brought our vintage gliders to the attention of the masses. Congratulations and Thank You to Ian Tunstal. He has also built many models of our vintage gliders such as Fafnir and Mg 19a. He is currently working on a 3.75 metre (13ft) span model of a Horten 3 which has been sent him for evaluation by a firm in Nuremberg (Nurnberg). The kit, which is almost the completed model, costs £225 and £40 for transport.

He later this year is helping to organize a flying wing symposium in London at which Dr Karl Nickel, the flying wing expert from Freiburg im Breisgau, may well be present.

#### ACTIVITY AT WYCOMBE AIR PARK

Last winter, on the inspiration of Mike Birch, a group was

formed to restore vintage gliders that were part of the Booker Gliding Club's fleet. The reward for its members would be the flying of the gliders which they had restored for as long as they liked free of charge and the entering of three of them in our International Rally at Terlet. Another reward would be the learning of the ancient skills pertaining to the restoration of wood and fabric gliders. For this end, the club has allowed them to use its workshop during Saturdays and Sundays, when the club's maintenance staff was having the time off, providing they left the workshop as it was before they came into it. Thus, every weekend, they have worked hard. Last year the club's Slingsby Prefect was finished. This year, by mid June, the Club's T.21b was finished (i.e. fuselage and tail surfaces were recovered with fabric) and both aircraft have been painted in colour schemes which will make sure that they are noticed. All work has been undertaken under the competent guidance of Graham Saw who certainly instigated the colour schemes. Already, the Tutor had been restored and recovered by mid June. It was only now necessary to paint it in yet another startling colour scheme before it could go to Terlet also. After the Tutor, then perhaps the duration record breaking Krajanek will go in to the workshop, to be restored as it was when Ladislav Marmol first brought it to England in 1947. We congratulate Mike Birch and Graham Saw on their leadership which has denied them any chance of flying during the good gliding weather of May and June.

The above is what is happening at two of our clubs where small groups have been formed to restore vintage gliders.

At the Blackpool & Fylde Club, a syndicate has built a new 1939 Gull 3 and, at the Stratford & Avon Club, a group is to repair the 1943 JS Weihe BGA 448.

A third team of restorers is working with Mike Beach at Brooklands. Although they may part of the time be restoring ancient aeroplanes, Mike himself is engaged in building a new Scud 1.

At the beginning of July 92, its fuselage was already finished. News from that date also is that the London Club member Ted Hull, having recently beautifully restored his Rhoenbussard, has now bought the Scud 3 BGA 684. This aircraft has been under restoration for many years by Les Collins and there have been set backs. One of these was a Blanik trailer blowing on to its trailer during a gale. However, Les has carried on gradually restoring it more and more. Now, he is retired and would have had more time for his Scud 3, he has been prevented from continuing the restoration by ill health. Apparently six feet of one wing now needs replacing behind its main spar. A second Scud 3 BGA 283 has been airworthy for some years in the hands of Martin Gamett, whose father originally restored it at Nympsfield. The Scud 3 was originally designed by L.E. Baynes in 1935 as a motor glider and it was a very advanced design for that time. Only these two were ever built. Martin Garnett's Scud 3 is kept with the Cambridge Club at either Duxford or Marshalls. John Lee flew his second self-built Huetter H.17A, BGA 3897, successfully during June. We understand that he had 5 aerotows from a farmer's strip in Sussex. It should weigh 175lbs empty after installation of wooden wing struts.

Tim Cox of 19 Church Road, Winterbourne Down, Bristol BS17 1BX, (from the Western Light Aeroplane Workshop i.e. Grass Roots Aviation. Light Aircraft Construction and Restoration) Tel: 0454 778111, has bought some H.I7a drawings from us and intends to build one next winter. He had seen John Lee's H.17. This should bring the number up to five airworthy H.17As in Britain.

We will soon be able to put them up in squadron strength!!! An Eon Eton (SG.38) is to be restored by Mike Dearling. He has bought it from Michael Beach, who is currently building a new Scud 1. The Primary is to become the absolute flagship of the Historic Sailplane Group at Dunstable's fleet!

An achievement in the air has been by Harry Chapple in his Mu 13D (3?). During the very hot and good gliding weather of May, he flew (on Friday the 22nd of May), a 150km triangle from Bicester with turning points at Halton and Little Rissington reaching at times, 7,000ft a.s.l. out of cloud, and sometimes when there were no clouds. At times there was also tremendous sink (4 metres / sec for five long minutes). Congratulations Harry!

Peter Molloy and partners have been annually taking their 1943 Swedish JS Weihe BGA 1297 to the German club (Akaflieg?) at Darmstadt where they always seem to experience good weather. The following is a list of Peter's flights. Eric Couzens did not fly as he was not feeling well. These below are the list of Peter's flights. Eric Couzens did not fly as he was not feeling well.

5.9.92 A/T to 1500ft. Flying time 4 hrs 32 mins. Best height 4,950ft. Hot day (90 degrees). 6.8.92. A/T to 1200ft. Best height 6,100ft. 5 hrs 38 mins. Hot and very hazy. (92 degrees.)

7.8.92. A/T to 1200ft. Best height 5,700ft. 4 hrs 30 mins. Hot and more hazy (95 degrees.)

8.8.92. A/T to 2,500ft. Best height 5,900ft. 3 hrs 11 mins. Hot and humid. awful viz. 95 degrees.

12.8.92. A/T to 1300ft. Best height 6,700ft. 3 hrs 28 mins. Very fresh SW wind. Excellent visibility.

15.8.92 A/T to 1400ft. Best height 3,200ft. 1 hr. 58 mins. Cloudbase was at only 2,000ft to start with.

15.8.92. A/T to 1500ft. Best height 6,000ft. 5 hrs 9 mins. Poor visibility.

Peter writes: "Not an exceptional list of flights, as in 1990 but those two weeks are still talked about as being something out of the ordinary.

On Sunday 9.8.92, I didn't fly as local temperatures on the airfield were recording 103 degrees.!!! and the weather was bad with heavy rain etc. on the 10th, 13th and 14th.

On one of the wet days, we visited the Speyer. Technik Museum and, hanging from the roof, were an immaculate looking L-Spatz D-8580, and an Olympia Meise D-1948 also in very good condition.

Our visit to Darmstadt was curtailed a little by exceptionally hot, and sometimes humid conditions which made the thermals start later and later."

Winter Shelter for trailers in the Oxfordshire area can be organized by: C. Wills, Wings, The Street, Ewelme, Oxon OXIO 6HQ. Tel: 0491-39245.

Chris Wills

#### **HISTORY**

The 20th International Rally was held on the site of a wartime German radar complex otherwise known as Teerosen. The radar tower 'Anton' was on the Galgenburg, not far from our camping site. The whole area had been the site of the Arnhem Gliding club, which had among its gliders an Anfanger. The last reminder of the Teerosen is Teerose I. This was the building behind our flags, in which we all washed, and where the National Gliding Centre has its offices. The 1944 Air Landings did not take place at Terlet, but on a similar area of heathland further West. We asked whether there might be remains of Horsas for our Army Air Museum at Middle

Wallop. The answer is that in the four Airborne Museums in Holland, there are only a very few remains. The Horsas were built of wood and German soldiers burnt them in case they could have been used again, as their DFS 230s had been.

The last time Lou Glover had been in the area, was in 1944 as a tank gunner.

As we have recently obtained from Stephen Coates details of the Wehrmacht Luft's gliding operations during certain months of 1944, details of the NSFK's operations have also been sought as this is believed to have been a larger organization than the former.

The book 'Junge Adler' was obtained after great difficulty as it was out of print. The British Library, which is supposed to obtain one of every book, did not have a copy... and also copies of other books as well.

Georg Cordts, its author, has obviously obtained a tremendous amount of information of which only the barest facts could be included in the book. From him, it might be possible to obtain the answer as to where more information is (Perhaps the Bundes Archives in Friburg in Breisgau?) However, the information in the book is already staggering. In 1944 alone, NSFK members carried out 3,500,000 launches. 100,000 Licences (as Bs and Cs?) were gained and 15,000 young men finished their training. Most of the launches may have resulted in a few second flights from bungee launched SG.38 s. In 1939, there had been 1,500,000 launches from which 40,299 A, Bs and Cs had been gained. 9,000 completed C certificates were reported. All were flown by 16 and 17 year olds. Basic training was in SG.38s and the old Zoegling 35s and Grunau 9s were further improved. These aircraft were mostly bungee launched from slopes. For further flying, Grunau Baby 2Bs. Wolfs and Rhoenbussards were used by pilots for their Gliding Licence Part 1s. Thousands of the pupils flew their C certificates on Grunau Babies. As two seaters, the Kranich 2s were in use. High performance sailplanes such as Rhonadler, Minimoa, Olympia Meise, Weihe, Mu 13 and Condor 3, were only occasionally fetched out of their hangars for small competitions or flying demonstrations. Stummel Habichts were used during the final war years, but these had such high sinking speeds that they could not do much from winch launches. It was better for them to be aerotowed. During the final war years, there were Fighter-pilot courses for a special purpose. These were to attempt to train young pilots to fly the ME 163B Komet rocket fighters. After their fuel source was bombed, this special purpose became the flying of the HE 162 'Volksjaeger' (People's Fighter). For this end, an HE 162 without its turbojet was to be used as trainer. Both Hanna Reitsch and Ernst Gunther Haase both test flew the prototype without problems (so they said) at Trebbin, the Reichssegelflug Schule North of Berlin, on the 8th of April 1945. The last NSFK flight in a glider happened on April the 1st 1945, Easter, 1945. It was an Olympia Meise. It seems that the gliders (the un-powered Volksjaeger?) were winch launched to 300-500 metres from which the pupils tried to make spot landings, and during the nights after these intensive flying operations, the winch cables were repaired. Finally, it was resolved to send Trebbin's gliding instructors in to battle against Soviet tanks flying Bucker 181 Bestmanns, fitted with Panzerfaust ultra close range anti tank rockets with one below, and one above, each wing. Aiming was by primitive sites fitted above the noses and the missiles were to be discharged by pulling a wire in the cockpits. There were no reported successes and only one pilot returned from these missions. The little wood and fabric aeroplanes with their four panzerfausts did not have a chance. NSFK Members served as

anti aircraft (FLAK) and searchlight helpers, and assisted with everything to do with military aviation. Finally they were drafted into the infantry or the parachute troops. A small group fought their way through to Flensburg via the Rhinower Bergen in Brandenburg, where Lilienthal had flown and been killed. His motto "A sacrifice will have to be made" must have seemed appropriate for the time. Their last Korpsfuhrer Generaloberst Keller led them.

Others fought with the Volksturm (Home Guard). At the very end it was passed from mouth to mouth of NSFK members: "Every man for himself" (or save yourself if you can literally translated from German or French). If they were captured, they were put in prison camps. The last NSFK member was released from detention in July 1947. It will be seen in the book that the NSFK's flying activities actually increased threefold from 1940 to 1944 (from 1.5 to 3.5 million launches per annum). At least, they had been spared having to fly the HE 162 Volksjaeger. At that time, it was imagined that glider pilots would be able to fly the new jet and rocket aircraft without problems, as they had no propellers, or the torque from them, and landings would be made on skids in the case of the ME 163 and the Arado 234 and on a little tricycle undercarriage in the case of the HE 162. Stummel Habichts and the HE 162 without power unit would accustom the course members to the very high landing and take off speeds. Pupils were trained to spot land the gliders and were then supposed to learn how to control the HE 162 under power on the ground. However, the very quickly designed and tested aircraft did have structural problems if manoeuvred briskly (i.e. something could break) and a spin could be frightening. There was also the intention of operating them from the Autobahns. 45 intact HE 162 Volksjaegers awaited the pleasures of the British on the airfield of Leck in Schleswig Holstein, on the Danish Border. Hundreds more were being built. Two HE 162s can be seen in Britain. One is in the Imperial War Museum in London, and the other, in the RAF Museum at Cosford.

Another is exhibited in the Musée de l'Air et de l'Espace at le Bourget (Paris). Mungo Buxton flew one back to England in 1945 in five laps as it had a limited range. This was a toy the NSFK did well to have done without. The little aircraft, which was named Salamander, because of the Jumo turbojet

on its back, was designed and flown in 69 days. Development took place in Vienna Schwekat's Heinkel plant. During its first flight, it already achieved 800kph but broke up during a low level aerobatics demonstration before high officials. 116 were finished before the end of the war. Its wings were of wood but fuselage and tailplane were of metal. We have never seen a 3 view drawing or a photograph of the glider version. The author lived through the last chapter of the NSFK's existence as a 17 year old at Brunn-Medlan (now known as Brno-Medlanky in Czechoslovakia.) As a 14 year old, he had joined the Flieger HJ and gained his A, B, and C in gliding camps at Oerlinghausen and Borkenberge. He attended the Fighter pilot training for a Special Purpose at Brunn-Medlan, and Trebbin near Berlin. The course was interrupted by Marshal Koniev's tanks. During the battle for Berlin, he became a prisoner of war of the Russians.

The research for the book took him more than five years. He wished to discover, and to throw daylight on, the destinies of his generation of pilots.

Heinz Scheidhauer was again with us with his motorcaravan during our 20th International Rally. On the 5th of August, he left us, while we still had tolerable weather, to visit the Wasserkuppe to celebrate his second 'Birthday' on Saturday the 6th of August. As so it was on Saturday the 6th of August 1938, his Horten 3 had to be abandoned at 5,000 metres height, while climbing in tremendous lift, because its canopy and plywood started to break up in the hail. He was beaten unconscious while baling out but his parachute opened by static line. On this, he was carried up to over 8,000m altitude and frozen, unconscious through lack of oxygen (and by being beaten by the hail). After his eventual landing, he was gently un-frozen over six hours. He was in the greatest pain then and for a long time afterwards. He had to have two fingers amputated. That he survived was a miracle and this was hailed (in Luftwaffe terminology) as his 2nd 'birthday'. In other words, he was born again after being as good as dead. He survived to fly one of four Luftwaffe Horten 3s in the 1939 Rhon contest, when he accomplished a distance flight of 332kms in 5.1 hours, in this 1.6lbs/sq.ft wing loaded aircraft.

Chris Wills



The Heinkel HE 162 'Volksjaeger' (Salamander) which was to be the final exercise for the NSFK glider pilots. Both Hanna Reitsch and Ernst-Gunther Haase test flew the engineless prototype at the Reichssegelflugschule of Trebbin, near Berlin, in April 1945. E.G. Haase declared it to be without problems. We have never seen a photograph, or a three-view drawing, of the glider version and we do not know whether it was a single or two seater. Corporal Jim Honeywell of the RAF, and close work colleague of C. Wills, restored this example and found it to be in perfect condition, including its guns, which were greased and ready for use. Jim Honeywell was a real artist with the painting. This HE 162 is on exhibition in the RAF Museum at RAF Cosford.

#### **HUTTER? UTTER HUTTER!**

by John Lee

The welcome effect of circling, after two years' hard labour in the workshop, produced a sudden uncanny timeless feel, an exaggeration of the regular return to the nineteen thirties. All at once, this was Hutter, inexplicably the same, suddenly back two years. Something reminiscent passed the corner of my eye, something I had even seen in the same way before. I had that feeling that one sometimes experiences on the road – Where am I? – Which similar stretch of road is this? – Where was I going anyway? – I had to shake myself to realize that this was two years on, this was another Hutter that simply looked the same; but it had become the same, flew the same and belonged in the same time all at the same time. In all of the overwhelming experiences of building two H17a sailplanes, this was the strangest of all, as close as possible to going back in time.

As with the first H17, there were no modifications required. As the ultimate ultralight design, there would be the least likelihood of centre of gravity problems, and with Austrian precision there is little left to the imagination provided, of course, that one was capable or, more likely, willing, to closely follow the detail. I had already discovered that few people do, and this is a mystery – why build a vintage sailplane with all its complexity, and alter or simplify the design so that it does not even look right to someone with a handful of drawings? I am left assuming that the builder has sufficient vanity to believe he knows better, or more likely, that he seeks to reduce his workload. In both cases he will be wrong with his answers, because he will not produce an authentic machine, and, what is more, he will not reduce his workload to any worthwhile degree - he will struggle on forever with his limited experience and never expand into the aesthetic belonging exclusively to the designer.

These two Hutters were built mostly simultaneously. Having glanced through the drawings, I made the rash decision, whilst at it, to build two at a time – I liked the idea of double aerotows...

The economic pressure to get one finished in a reasonable time meant that the split-up came earlier than I would have liked. Most of the fuselage, tail, and controls had been done on both, and all of the wing ribs had been completed and dated. There is more to wing construction than one ever imagines, and it is here that jigs make the job economic on production runs; without them, it is all down to very refined technique and defensive method. Each vertical wing spar contains around two hundred and fifty components, and they must be made with remarkable accuracy and considered approach. It is around the accuracy of these spars that the trueness of the wings will emerge: without it the wings will not match each other.

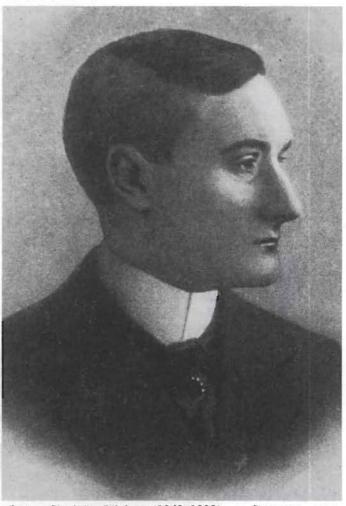
Having got the first machine flying, I could then see no way that the second would ever reach a conclusion. There were even offers to buy it half complete, but they were derisory: only someone who had built something like this would have any idea of its true value. I saw no likelihood of anyone turning up who might even be likely to finish the job. Most people inevitably base their values on the second-hand market, and see straight away that there is no point in building anything.

My motives? Mainly to recreate a classic design which will always be worth flying and worth seeing, as a salutary reminder to the high finance glider pilot, where this sport he calls his own actually came from and what it was supposed to be – not politics or brainwashing, but fun. In truth, I suppose, I don't really know.

#### "WHY IS YOUR GLIDER CALLED PERCY?"

by Peter Warren

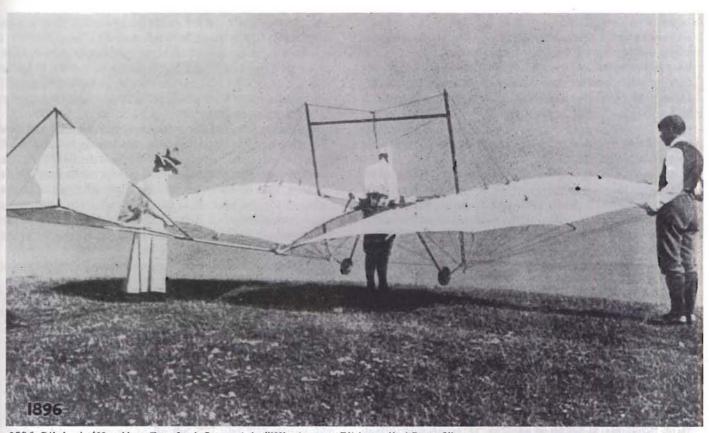
Once upon a time (actually in the summer of 1947) when I was a lad of 14 years old I saw a beautiful high performance sailplane at an ATC air display at Martlesham Heath, Suffolk home of No. 612 Gliding School. It was owned by the commanding officer Richard (Dick) Pilcher who was a direct descendant of Percy Pilcher who built a hang glider which he called the Hawk.



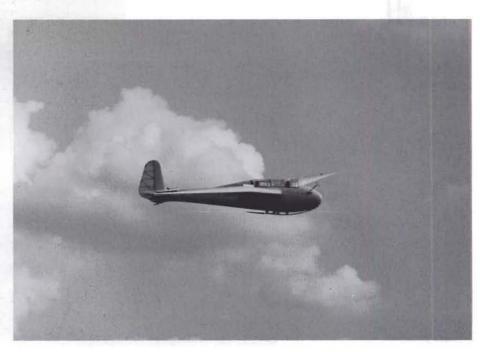
Percy Sinclair Pilcher (1869–1899), a Scotsman, was Britain's second Glider pioneer after Sir George Cayley. He was a contemporary of Otto Lilienthal, but would have been first to admit that Lilienthal was before him.

The glider I saw was one of the new Kirby Kite 2 sailplanes being produced by Slingsby Sailplanes (contracted to Martin Hearn), the fourth production aircraft RK 4, BGA 520, which flew for a time registered as G-ALTI, and had the name Percy on its nose. I instantly wished that one day I could own a glider like that one. (a boyhood dream really.)

I saw it fly quite often and heard people talking about it. It was said to have strange spinning habits. One pilot was thermalling happily when he found the machine spinning very flat and nothing he could do would stop it. Fortunately it stopped of its own accord in time for him to make a hurried field landing. It went back to Slingsby's and had washout added to the tips which cured the problem.



1896. Pilcher's 'Hawk' at Eynsford. See article "Why is your Glider called Percy?"



Chris Wills soaring his Kranich 2 at Terlet

In 1950 it was sold to one David Carrow and partner without its trailer. David Carrow set about making a trailer for it outside his flat in Chelsea. In November 1950 a young contemporary of his, one Bill Bedford, later to become famous as a test pilot, flew the Kite 2 and wrote a handling report which included comments on its successful spinning and recovery in both directions. Later, after David Carrow had sold his share, the original Percy was crashed. The broken bits changed hands and after some years were consigned to the flames. So ended BGA 520.

My dream, however, lingered on. I began gliding as an ATC cadet, learning on the Cadet Mk. 1 at Martlesham Heath. As one of the first cadets to be awarded a Flying Scholarship I gained a PPL and continued flying and gliding for over 20 years before marriage and children took precedence.

After 21 years I saw advertised in Sailplane & Gliding a Kite 2A. I telephoned the vendor to enquire if I might just see it out of simple nostalgia. On learning the asking price my boyhood dream was awakened and the upshot was that BGA 689 came in to my ownership. So there I was with a glider but not having flown solo for 21 years. I joined a club and turned up as a new member with my glider in its trailer. "But you can't fly a glider just like that. You have to learn first," said the Duty Pilot.

With misunderstanding cleared up and after three aerotows in the two seater I flew my Kite 2A 21 years almost to the day after my last solo which had been on a Swallow at Sutton Bank. Now, two years later, my Kite 2A is restored to look just like the one which I saw in 1947, and of course it is appropriately named Percy. At the VGC Rally, Lasham, in May this year (1992) I met David Carrow who was intrigued to see his original first glider recreated in the shape of mine. On inspecting my trailer he was astonished to find that it is the one he built for the original Percy in 1950, the chassis still as good as ever although the body has been rebuilt.

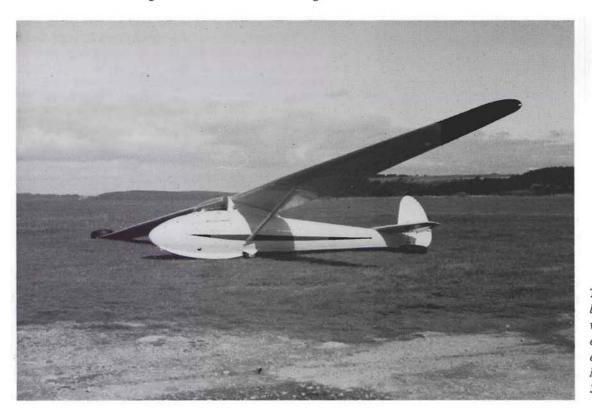
Of some 14 built, only two Kite 2s are in airworthy condition in the U.K. The other one BGA 663 has now returned to Frank Irving who owned it some time ago and

fitted it with under surface air brakes to supplement the rather poor spoilers. A third machine has recently gone to America. I am thinking of having a T-shirt printed with the logo "I know there are a pair of Kite 2 wings up in the roof of the hangar at the Yorkshire Gliding Club" to save anyone reminding me. I am quite happy with the wings I have and hope to remain so for a long time to come.

I converted my old C to a Bronze C and completed all three Silver C legs in Percy, the glider still having done only 500 hours flying in its career. It was originally a Kite 2 without washout on the wings and suffered a number of severe crashes, one of them on the test flight after an extensive rebuild! It came back on to the BGA register in 1970 after a superb rebuild by one T. Dorricott when the tips were rebuilt with washout to make it a 2A. I hope to be flying it for a good few years yet.

I am indebted to David Carrow for the information as to the fate of the original Percy.

Photographs of the pioneer Percy Pilcher and his "Hawk" are included. He was killed near Husbands Bosworth during a horse drawn launch in rain and over uneven ground.



The recently restored, by Peter Warren, prize winning Kite 2 'Percy' on Sutton Bank during our Slingsby and National Rally last September.

#### LETTERS

From Mr M J Sismey, Stamford, Lincs.

Members may be interested to learn that a memorial stone was dedicated on September 5th to Sgt. Strathdee of the Glider Pilot Regiment.

Sgt. Strathdee's photo appeared on Page 15 of No. 74 Autumn 1991 issue of VGC News as the first Army pupil to go solo in a Kite. Sgt. Strathdee was unfortunately killed in the first British Glider Operation (Operation Freshman) in Norway in November 1942.

The memorial stone is placed at Skitten (Wick), the airfield from which the ill-fated operation took off.

From Mr John Mead, Cowbridge, S. Glamorgan.

May I use just a few lines of magazine space to express thanks from my wife and myself for the kindness and generosity shown by our Dutch friends at Terlet after the demolition of our tent in the Sunday night storm. Particular thanks are due to Hans and Egon from Teuge for the loan of their camper, and for the opportunity to fly the T21.

From Mr Arthur Bound-Pearce, Bishopsteignton, Devon. I noticed with interest Phil Butler's letter in the VGC News INo. 76, where on page 27 he refers to the two Grunaus of the Bristol and Midland Clubs.

I was a member of the Bristol Club at Lulsgate at the time of the demise of the Grunau and shared more than one thermal with it whilst learning to fly the T21 and T31 during May 1953. Unfortunately it had passed away before I was ready to move on from the Tutor. My next conversion was to the Prefect which, if I remember rightly, was bought new as a replacement for the Grunau and collected from Slings on November 28th 1953.

So the Grunau was flying during the summer of 1953 and the enclosed photograph taken at the time shows the number to be BGA 447. Later the Grunau was slightly damaged when landed in a soft ploughed field and on inspection of the structure, exposed during repair, the glue was found to be in a dangerous state and the aircraft condemned.

The pilot at the time was Peter Collier whose second claim-to-fame came on May 15th 1957 when Prince Philip

had his first glider flight with him in Peter Scott's Sea Eagle at Nympsfield.

The final record I have of the Grunau is that it was rescued from the clutches of the bonfire fiends and disposed of to Don Campbell for resurrection at some rather distant date.

From Mr Peter Underwood, 68 The Rye, Eaton Bray, Beds LU6 2BQ

I should be grateful for any information members may have on the Cambridge Dart. If you can help, perhaps you would be kind enough to contact me at the above address.

The following letter has been received from Frank Irving dated Chris Wills writes:

While on the subject of the King Kite, I feel that I must publish the following extract from Fred Slingsby's article 'Hard Facts'.

"In 1937, Mungo Buxton, a very clever aeronautical designer, and one of the leading experts on all gliding matters in those days, asked me to cooperate in the design and production of a high performance sailplane, which he hoped to persuade the BGA to use for the next World Gliding Championships in Germany. In 1935 we had built a sailplane for Mungo, his own design, and it had been very successful with Philip Wills as pilot. We made three competition sailplanes to Mungo's latest design; we named the type 'King Kite'. This had quite a good performance, but also unfortunately had a tendency to drop a wing at stall or near the stall. The type was not up to expectations, and was abandoned. Many years later, I was making an incidence check on a King Kite wing and discovered to my surprise that instead of the three degrees wash out, we had specified, the wings had 2 degrees wash in, hence the tendency to drop a wing and spin and spin at low speeds. I was fated to have this miserable design error thrust upon me on two more occasions in the following 25 years. Fortunately, on those occasions, I was able to find it before the aircraft was ready for test." I wonder whether this King Kite could have had its wing tip repaired wrong? The two King Kites surviving the war could have had a rough time during the war.

Incidentally, his cousin, now Sir Patrick MacNaghten, was



Bristol Gliding Club – Lulsgate, Summer 1953. Grunau 2B (with memsahib on nose). Olympia 1 (no wheel) 'Bluebird' behind.

treasurer for the Midland Club during the later 1940s and can remember very sizable parts of the King Kite in what is now either the club workshop of the MT hangar. Presumably, these were the parts of the aircraft which had broken up in cloud during 1946 They were still finished in the prewar style and so these components were not those of the third King Kite which was still surviving in ATC hands at that time, as this aircraft was camouflaged.

I only know that ATA (Air Transport Auxiliary) pilots hated the low speed flying characteristics of the Hudson and Liberator and that I was once slightly bitten by the wing drop characteristics of a NACA four figured wing profiled sailplane. Nevertheless, I have experienced the 5 figured wing profiled Arsenal 4-111, and this was said to be gentle.

I am suspicious of those NACA sections of the time especially after the experience with the Mustang and Horten 4B which used its laminar flow profile. The Mustang fighter is said to have need more than 7,000ft to recover from a spin. There were also problems with the Swiss Elfe 2. I feel that it was because of nothing that the German and Austrian first post war sailplanes, the Condor 4 (Goettingen 532), Kranich 3 (Goettingen 549), Mu 13E and Spatz (Mu profile) and MG 19 (Goettingen 549) all used the well proven Goettingen prewar wing profiles. That these worked well at higher wing loadings had been proved by the Reiher V1, and the Soviet GN.7. (Goettingen 549). The latter had flown 650kms and other flights of over 600kms, in 1937. The former had had its weight increased by 90kgs (198lbs) in an attempt to stiffen its wings, and then still managed to win the 1938 Rhoen Contest. The latter had a wing loading of 23.8kgs/sq.m. (4,8791bs/sq.ft.).

Even those sailplanes employing the slower Goettingen 535 wing profiles with relatively higher wing loadings such as the famous Rhoenbussard, Rhoensperber and Kranich 2, were remarkably fast for their time. The Goettingen 535 had previously been the Grunau Baby's wing profile and was very docile even if a wing surface was in bad condition. It could be persuaded to go much faster than a Grunau Baby ever flew and still remained efficient. It would be most interesting to compare a Kranich 3s performance with its Goettingen 549 profile, against that of a Slingsby Eagle which has the laminar flow NACA 63 wing profile. Polish tests between a Kranich 2 and a Bocian in 1953? the former using the well proven Goettingen 535 and the latter using the NACA 43018A /43012A, had to be suppressed because up to 80mph (120kph), there was no difference of performance between them. Only the Kranich's ailerons became heavier to use.

The above information has been collected by me from memory but I think that I have it right.

It was the British who finally brought about the break through by using the NACA 6 series profiles with success in their Skylark series from 1954

In answer to the announcement concerning Eric Addyman's glider relics, Nigel Ponsford writes: "Yes I do have the Addyman remains, but NO, I do not unfortunately have any parts of Carli Magersuppe's Professor. I went to Addyman's on the night of the 6th November 1965 and looked, with Oscar Addyman, at all the material. There were definitely no parts of the Professor there — Sorry!!! Eric did lose his hand flying a Dickson and I have its remains and I am VERY slowly rebuilding it with the invaluable help of Harold Holdsworth." Best wishes to Nigel Ponsford from Leeds. He works for Balloon Displays Ltd as a director, together with Charles Saffery, the late John Saffery's brother.

#### THE KING KITE, IT'S STALL, AND NACA 23021

by John Gibson

The recent technical article on the King Kite raises several questions of fact, as I guess it was intended to do. Although it is largely wrong in its conclusions about the reasons for the King Kite's poor reputation, it gives enough clues to the real explanation.

It is true that the NACA 230 series of wing sections have a sharp stall. Contrary to the article, this is of the leading edge type, rather than the trailing edge stall which is more gentle and progressive. If as stated the King Kite had a symmetrical tip section, then the NACA 23021 cannot be blamed for the tip stall. In another article, Martin Simons discussed the fallacy of using such a tip design to achieve aerodynamic washout, with a much lower maximum lift coefficient than that of the 23021, and therefore requiring a very large geometric wash-out to avoid tip stall. We read that there was only 3 degrees of this.

While this was bad enough, there is more. The table of details states that the NACA 4312 section was used at the tip — was it right at the tip or did it change to a symmetrical section? Now NACA 230 has an almost zero angle of zero lift, while on the NACA 4312 this is at several degrees. This builds in aerodynamic WASH-IN which might just about be cancelled by the stated geometric wash-out. Couple this with the high taper ratio with the resulting overloading of the tip, and you have an ideal recipe for tip stalling, but it's not because of the 23021 section. As there must have been some people around at the time who knew of such things, could this be the origin of the rumour that the King Kite had wash-in?

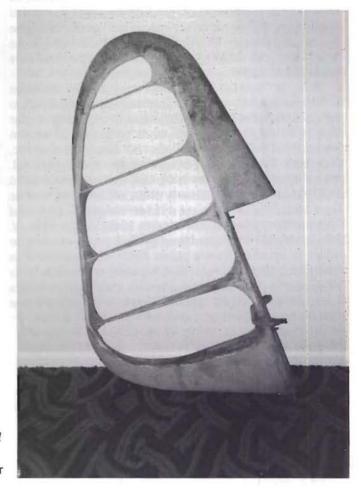
Because of its zero lift angle, the wing would have to be built in with a higher than usual incidence on the fuselage to keep the latter flying at normal attitudes. There seems no reason to suppose that it flew unusually nose-down though the short swept-down nose could well give that impression to the pilot. (Of course, a Wortmann section at that incidence would put the nose down by four or five degrees.) While wing loading and general efficiency have an effect on attitude changes with speed, which is what the pilot sees, the King Kite was not so different from other types. As for "great speed changes for minimal changes of angle of attack", these produce the same changes of lift with any wing section whether 23021 or not. Anyway, pilots could not see angle of attack.

In discussion of the 230 series in other designs (unless a misprint, the 2318 and 2315 of the "Wippsterz" are not from this series), far from it being a mistake to use it for a non-aerobatic sailplane often flown at just above stalling speed, one could hardly imagine a more docile type than the Schweizer 2-33 two-seat glider. The stall behaviour can be tailored to whatever is required by intelligent use of taper and twist – witness the Tempete.

So while the 230 series sections are not much used today, they certainly were not the disaster attributed to them in the article. Their main claim to fame was a very low wing pitching moment which gave low wing twist and tail loads. Their general lift and drag features were unremarkable.



Two model gliders were seen among others at Terlet. They were of the highest standard ever seen. They won the Grand Prize of the Dolomites. Obvious nautical influence can be noticed which could have some use for us should we have more 'wet' Rallies.



Still existing is this rudder off one of five Lippisch designed Professor sailplanes that were in Britain during the early 1930s. Photo: Mark Wakeur

#### TECHNICAL OBSERVATION

Concerning the tailplanes of the Olympia, Olympia Meise and Nord N.2000. It was mentioned concerning the Eon Olympia. when it was in service with the British Gliding Clubs after the war, that although it was very strong, that it might not be fully aerobatic and that during high speed manoeuvres such as rolls etc., that the tailplane would be the first component to fail. Olympias were at times flown during beat ups at 110mph and a pilot, called Miller, who had at that time flown across the Channel in a glider (which was very rare in those days), intended to demonstrate an Olympia being flown at 200mph at an air display. He spent the whole morning before the air display, practising bailing out and throwing the canopy off his aircraft, in case he had to abandon his aircraft in a hurry at low altitude. He had to all right, but he was killed. To improve the strength of the Olympia's tailplane, especially as its leading edge was often lifted during ground handling, a forward fuselage/tailplane attachment bolt was installed, and thus, the Olympia 2 became a 2B. The French seemed to have modified their Nord N.2000 (Olympia Meise) in a different way. Their entire tailplanes were covered with plywood right back until their main spars (as is the Weihe's, which only has one spar anyway. Formerly, Olympia Meises, Eon Olympias, Kranich 2s, Rhonsperbers etc. had their tailplanes covered with plywood back to their front spars creating a leading edge stressed torsion box. For the French 2000, the whole tailplane back to the elevator, is a stressed torsion box, which seems to have no adverse effect on the aircraft's C of G.

Chris Wills

#### **Technical Notes**

Hitherto, it was thought that the use of two part glues with coloured hardeners such as Aerodux and Aerolite, would, on account of their colour stains, preclude the use of transparent doped fabric for the old style finish, as the colour of the glue would show through. This in fact happened in the case of the new Gull 3 at the Blackpool and Fylde Club. Its owners were compelled to decide on a painted finish because of it.

However, Ted Hull had a similar situation with the wings of his Rhonbussard, which he has extensively changed back to their original form. To avoid the stain of the Aerodux glue coming through the transparent fabric, he painted all wooden parts white with non- cellulose, oil based or synthetic, undercoat. To this the fabric has been successfully adhered. This is especially necessary in the case of the undercambered ribs. The result is an extremely clean and neat job. Had he used white cellulose paint, the cellulose transparent dope used with the fabric would almost certainly have caused a mess. 2/. Firmin Henrard in Belgium is using a one part synthetic glue which is squeezed from a plastic bottle. He says that it is easier and cleaner to use than Aerodux or Aerolite. It is obtainable in different coloured bottles. Only the blue bottles are approved for aircraft use. It is also believed that this glue is being used, or tried out, in France.

#### INTERNATIONAL COMMITTEE

This met as scheduled, at our International Rally this year as scheduled on Wednesday the 12th of August 1992 1500 hours, chaired by Colin Street. It was decided that the 21st International VGC Rally should be held between the 4th and 15th of August 1993, at Zbraslavice Airfield which is 70kms SE of Prague. The address for members to write to is: VGC Rally 1993, Aeroklub Zbrazlavice, 285 21 Zbraslavice, Czechoslovakia. Entries should be sent in by 1st March 1993.

It is hoped that a Rendez Vous Rally will be organized at some point on the way there from Britain, i.e. on the Wasserkuppe.

Other International Committee members present were: Paul Serries (VGC Vice President) and Rainer Karch – Germany.

Jan Scott – USA. Hans Dijkstra – Holland, Imre Mitter – Hungary. Peter Egger Jun.- Switzerland. Yarka and Petr Hanackovi rerpresented Czechosloavakia. Also David Shrimpton, Chairman of the VGC's Committee was present.

Other venues and dates for International Rallies were put forward: 1994 – Britain or Germany.

1995 - Germany.

1996 – Hungary to support the World Fair that would be in Budapest during that summer. A large agricultural aviation airfield with suitable infrastructure might be made available.

France - 1997.

America would organize a small International Meet from July 16–25 immediately before OSHKOSH in 1995.

There was a proposal that Lasham could hold the International Rally in 1994. All members voted in favour of this with two abstentions. Other possibilities put forward were Husbands Bosworth, Dunstable and Sutton Bank.

Concerning next year's International Rally at Zbraslavice. This is a large grass airfield with a single runway 70kms SE of Prague. 20kms (12 miles) from the airfield is the small town of Kutna Hora with a large hotel. This would cost 80 DM per day per person. For those who wish to stay near the airfield, there are bungalows with two beds, or 10 beds. The smallest would cost 50 DM and the largest... 150 DM per day. There are many bungalows but those wishing to hire one, should inform management as soon as possible. 2kms away, there are chalets costing 100 DM per day. For campers. special toilets with water can be organized.

For launching, three winches are available and a four drum winch prototype is now being built. It will be possible to aerotow and winch launch simultaneously. There is a hangar that can shelter 10 rigged gliders.

Rainer Karch was asked to look into possibilities of holding a Rendez Vous Meeting somewhere in central or eastern Germany immediately before the Czechoslovakian International Rally. Such locations as the Wasserkuppe or Burgfeuerstein were suggested.

Preliminary investigations by Sef Kurz of the OSC Wasserkuppe as to whether we could hold a Rendez Vous Rally there on the mentioned dates, has brought a very favourable response from the powers-that-be on the Wasserkuppe.

Chris Wills

#### BOOKS

A copy of the book Planyeri CCCP (Gliders of the Soviet Union), by A.P. Krasilshchikov has been seen by C. Wills, It was printed by Moscow's Mashinostroeni in 1991, and it cost £12.95 in England at Foyles bookshop. This is a most comprehensive history of the design of gliders in Russia starting long before the Revolution. (1825) and running through to the modern Lithuanian fibreglass types. The book is illustrated with small un-detailed three view drawings with short histories of the types as well as by photographs. The little drawings go with the information on the various Soviet gliding meetings from 1923. Chapter 3 is on Training gliders during the years 1927 - 1930. Chapter 4 is on gliding technique and mass development of gliding during the years 1931-1940. This contains most of the Antonov designs which include the OKA and Rot Front series. There are an enormous number of designs but I think it is true to say that few were ever built in quantity. Of the famous Rot Front 7 sailplane which flew in July 1939, 749kms, only five were built. Some of the aircraft were extremely beautiful gull winged designs. Chapter 5 is on experimental gliders and these include seaplanes, parabolas and flying wings. The latter had not such high aspect ratios as some of the later Hortens. There was even a tandem wing design. The KAI 3 flying boat glider which, by flying 336kms, won the 1937 National contest against much higher wing loaded gliders is illustrated. Chapter 6 is on troop carrying gliders of the war period and considerably before. Chapter 7 is on Gliders and Gliding during the period 1950 - 1990. There was even an experimental crescent winged Stakhanoviets! All the time Lithuanian and Estonian designs are running like a silver thread through the tapestry of Soviet sailplane development. There was a relatively large production run of Antonovs A 15 which was designed in Kiev in 1959. Employing NACA 64 and 63 laminar flow wing profiles. 60 were built and they were used by aviation sports clubs for years. The last pages are devoted to the statistics for over 300 Russian glider designs!

This is the book the gliding historians have been waiting for. Only now can it be told. Improved detailed drawings would be an advantage for aeromodellers etc. but these may never be available, unless they appear in the magazine Krilya Rodiny (Wings of the Homeland). Knowledge of Russian language would be an advantage but the drawings and photographs are of interest alone. I will try to obtain a copy.

Histoire de Vol a Voile Français by Reginald and Anne Jouhaud.

336 pages containing information and photographs describing the events, performances, techniques of gliding in France from its origins to present times. 17 by 24 cms, it is quite a small book but it is packed with information. The authors worked alone and so there are some errors, but the book is well worth having. Its price is 280 francs plus 30 francs for postage.

Chris Wills

#### SAVE THE BUNGEE ROPES

Bungee launching ropes can at present be bought from: Whitely Products Ltd, Low March, Daventry, Northants NN11 4SJ. Tel: 0327 300545.

Since orders are no longer coming in from the Ministry of Defence for bungee launching ropes for Grasshoppers and Newbury Eons belonging to School Cadet Forces, owing to the Primary gliders having been replaced, future production is very likely to stop. As this is the last source of these ropes that we know of in the world, it is up to our members at home and abroad to keep orders coming in. Double strength bungee ropes are recommended. We understand that recent recipients of these ropes have been The Midland Gliding Club, Poland, and the Wasserkuppe; and now the Swiss Oldtimer Gliding Association is interested. The former sheathing has been replaced with man made fibre which is more durable.

# FOR SALE

#### FOR SALE

LY 542k STOSSER AEROBATIC TWO SEATER

This first flew on 11th August 1955. Designer was Ing Paul Luty of Krefeld. Wing span is 12.8 metres. Wing profile is Goettingen 549 (altered). Construction – wood. Empty weight is 675lbs. Wing loading is 5.82lbs/sq.ft solo and 6.95lbs/sq.ft when flown dual. Max L/D is 1.26 at 75kph. Min sink is O.9 m/sec at 65kph. The aircraft has no air brakes and has ailcrons of very narrow chord, which obtain their efficiency by boundary layer control (holes in the ailcron gap upper surface through which air goes in: air exits through a hole in top). This aircraft is suited for aerobatics rather than thermal soaring, although it has been soared. It was rebuilt in 1986.

Offers to: Howard E Mills, Im Hauen 227, 2080 Pinneberg, Germany. Tel: 049 4101 76422.

FOR SALE. SLINGSBY T31 and TUTOR Enquiries to: 0749 841084 (evenings).

#### FOR SALE

BREGUET 901 S No. 12 F-CCCO

It was entirely restored during 1986 – 1987 and won the best restoration prize during the International Rally at Bourges in 1988.

It is glued with Casein. The fuselage, tailplane and all the flaps and brakes in the wing have been recovered with fibreglass and epoxy resin. The surface of the fuselage has been finished with micro-balloons. It has been covered with polyester fabric which has had two coats of anti-UV silver dope. Its painting is with polyurethane white. It has original instruments. All the papers since its construction are with the machine. It was built in 1956.

This type of glider won the World Championships in 1954 flown by Gerard Pierre, and in 1956 flown by Paul MacCready of the USA.

F-CCCO has flown 3,000 hours. Water ballast tanks are in good condition.

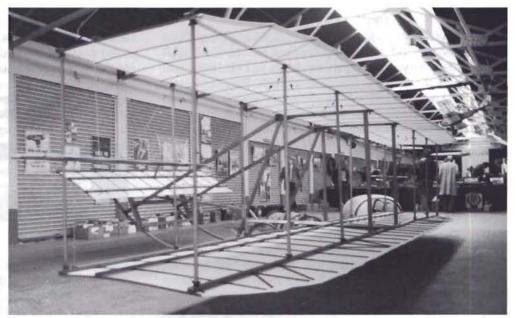
Its asked-for price is 50,000 French francs. It is having to be sold to finance another vintage glider project. A photo of this aircraft appeared on the cover of VGC News No. 65 (Autumn 1988).

Offers to: Jean-Claude Neglais, 11 rue des Saules, Fleville, 54710 Ludres, France. Tel: 83-25-80-88.

#### FOR SALE

PAIR OF SLINGSBY T31Bs

Good condition, enclosed trailer, sold with or without C of A, suit vintage enthusiast, also considerable spares holdings. £4,000 ONO complete package. Tel: 081 684 4200 (24 hrs).



For Sale. Offers to Phil Colins. Replica ready to fly 1910 Twining glider. Photo: Phil Colins

FOR SALE REPLICA TRANSFERS OF THE ORIGINAL PRE-WAR SLINGSBY EMBLEM Available from VGC Sales £2.50 each plus postage.



#### WANTED

Main pin extractor (or dimensioned drawings to produce same) for OLYMPIA 2.

John Mead Tel: 0446 773269

### NEW! THE VGC CHRISTMAS/ SEASON'S GREETINGS CARD

Available from VGC Sales: prices as follows:

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



Season's Greetings Meilleurs Voeux Frohe Festtage Prettige Feestdagen Boldog Ünnepeket

#### WANTED

TRAILER for the KITE 2c.

Fuselage height at cockpit: 1.4m; root chord: 1.2m. Appearance not too important but must be roadworthy, weatherproof, free from rot, reasonably priced.

Frank Irving. Tel: 081 940 4837.

#### FOR SALE

RAF SERVICE TECHNICAL MANUALS FOR SLINGSBY TYPE 30 PREFECT

Vol. I: General

Vol. 2: Repair and Maintenance

£5.00 each: money to go to VGC Funds.

Nev Churcher, Jamaica Cottage, Jamaica Place, GOSPORT, Hants. Tel: 0705 527202

#### FOR SALE KRANICH III D-9176

Manufacturer's serial no. 58: year of manufacture 1952. Instruments (both seats): altimeter, variometer, ASI. (front seat only): compass, radio Dittel FSG 15. General overhaulings: fuselage 1982/83, wings 1964.

Hours since last overhaul: 600 (2400 launches). Total launches/hours unknown. The glider is in excellent condition and available for flights and inspections every weekend at AUKRUG (near NEUMUENSTER, 80km north of Hamburg).

DM 10,500 ONO without trailer (not available).

Pls contact:

Gunnar Schreiber, Tel: 4940 830 0543 Holger Mueller (pvt): 4940 538 2486

(bus): 4940 30 01 36 95 (fax): 4940 32 35 93

#### WANTED

MAJOR COMPONENTS such as aileron, tailplane, elevator, landing skid and canopy for JS WEIHE or VMA 200 MILAN in order to render a JS Weihe in England airworthy. It does not matter whether components are glued with Casein (Certus) or Kaurite.

Offers to: Chris Wills, "Wings", The Street, Ewelme, Nr Wallingford, Oxon OX10 6HQ. Tel: 0491 39245.

#### FOR SALE

Hutter 17a in closed wooden trailer. This is BGA 490, the aircraft which was restored by Southdown Aero Services at Lasham. It has not been flown for economic reasons and has been stored in its trailer in a garage. It is still in the same immaculate condition as it was after restoration. This H.17 has longer span ailerons and a longer nose for pilot comfort, than standard H.17as. It is believed that these were British modifications. The ailerons are slotted along their span and this gives fantastic aileron control. It has basic instruments.

Offers to: David Wright, 84 Dowber Way, Thirsk YO7 1EP. Tel: 0845-524803.

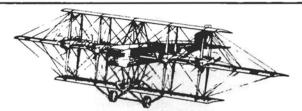
The aircraft has no C of A at present but would easily get one.

Nord 2000 (French Meise) built 1947. This has just been restored in French military colours and its original canopy. It had its first flight after 17 years at Pocklington on 25th of May. Offers to Barry Smith, Rose Cottage, Butts Lane, Tibthorpe, Driffield, East Yorks YO25 9LE.

Manuel Willow Wren. BGA 162. Possibly the oldest genuinely original sailplane in the world. This is the late Bill Manuel's original prototype 'Willow Wren' of 1931. Sound structural condition and carefully stored. This aircraft is totally without damage and will make the basis for an immaculate restoration.

The structure appears capable of restoration to flight status, but its handling would require it to be flown with great care.

Can deliver a reasonable distance but aircraft has no trailer. Enquiries and serious offers, please, to Mike Russell: 0279 - 850308.



#### WW1 AERO (1900-1919) and SKYWAYS (1920-1940)

For the restorer, builder, & serious modeller of early aircraft

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

1 year subscription \$25

Sample issues \$4 each

Overseas \$30 Published by WORLD WAR 1 Geroplanes, INC.

15 Crescent Road, Poughkeepsie, NY 12601 USA (914) 473-3679

#### FOR SALE

Slingsby Type 1 British Falcon BGA 3166. This is the immaculate 9th production Falcon built by the late Ken Fripp's Southdown Aero Services Ltd, at Lasham during the late 1970s - early 1980s and first flown at Lasham by Derek Piggott at the VGC International Rally on 8th August 1986. It has made a total of only five flights to date, four descents and one hill soaring flight for a total of 2 hours 30 minutes. It flies beautifully but needs great care. Its gliding angle is said to be 1:19, but there are no spoilers and it feels like 1:57 if you are high and fast on final approach, unless you know how to side slip!

A truly splendid machine, complicated to rig but a new set of pins go with the machine which will help simplify the problem. The aircraft has a sound trailer which was built for it. It is offered with or without a one year BGA Permit to F. This is an unrepeatable opportunity to own a quite unique aircraft.

It can be viewed in N.W. Essex and can deliver a reasonable distance. No VAT. Enquiries and serious offers please, to Mike Russell on 0279-850308.

#### FOR SALE

REPLICA OLD-STYLE SCHLEICHER LOGO

Correct style and colour for tail of older Schleicher gliders. Original decals no longer available.

\$5.00 USD. Robert Gaines, 308 Chase Lane, Marietta GA 30068 USA.



Jacobs Schweyer Kranich 2B-2 BGA 1147. Believed to be 1943 Mraz built. Offered part restored. Wings were totally overhauled during the mid 1970s and should be ready for fabric covering. Ailerons, tailplane, elevator and rudder are part restored but need completion before fabricing. Fuselage has been stripped of paint but needs much work still. It is basically a sound aircraft which could be the subject of an immaculate restoration. Much work has been done but there is a good deal more to do. Nevertheless, this is an opportunity to obtain a very rare aircraft which has done service with the Germans during the war, and the RAF. All parts are present and the aircraft is complete in every way. There is a good sound trailer in which the aircraft has been stored for many years and it has been generally kept indoors.

The trailer is necessarily large and is without fittings. The electric light kit and mudguards go with it, but are not fitted. Breaks are not connected and therefore the trailer is unroadworthy. Its purchaser must make his own arrangements for its removal. Really a 30ft long low loader would be best. No VAT. Enquiries and serious offers please, to Mike Russell on 02709-850308.

Slingsby T.13 'Petrel' BGA 651. Before you ask... the Petrel is NOT FOR SALE!

Olympia Meise. Home built in Germany in 1962 (Aerodux Glue) Good Condition. New Panel, Radio, Parachute, metal enclosed trailer.

£2,450. Full details, Phone: Robert Smith 0451-850685.

B-Spatz with trailer. Offers to Barry Smith, Rose Cottage, Butts Lane, Tibthorpe. Driffield, East Yorks, YO25 9LE.

T.31 in enclosed wooden trailer. Offers to: Brian Bull, Atlanta House, Old London Road, Benson, Oxon. Tel: 0491-35873.

Mu 13 D-3, Offers to Heinz Nierholz, Im Tanle 7, 7823 Bonndorf-Wellendingen, Germany.

Huetter H.17a. New!! BGA 3661. Closed trailer. Offers to John Lee, 32 Lyminster Road, Littlehampton, Sussex BN17 7LB. Tel: 0903 721099.

A Slingsby Grasshopper rear tailboom in good condition and new spares:

6 rubber shock absorber rings.

2 cables with rigging screws.

release knob and cable.

Ottfur tow hook.

1910 Twining Glider replica – 25ft span. Based on original drawings and ready to fly. See photographs elsewhere in the magazine.

Offers to: Phil Collins. Iver House, Firs Road, Kenley, Surrey. Tel: 081 660 8736.

Published by:

C. Wills Wings The Street Ewelme Oxon OX9 6HQ

Editor

S. Mooring 6 The Uplands Harpenden Herts AL5 2PH

Typeset in Times using Quark Xpress™ on the Apple™ system by Roger Booth Associates Half Moon Chambers, 10 The Bigg Market, Newcastle upon Tyne NE1 1UW.

Tel: (091) 232 8301 Fax: (091) 261 9745.



#### "You can bank on us"

#### RADIOS

DELCOM AIR 960 Tx/Rx. £186, ICOM A2 Tx/Rx. £268, ICOM A20 Mk 2 Tx/Rx, VOR £329, Inc. nicads and accessories.

#### **GLIDER ELECTRONICS**

T/S Inverter "High Tech Model", 12V in – 24, 26, 28V out £23.90. Automatic charger for sealed rechargeable 12v batteries, two outputs with LED indicators audio polarity warning £38.90.

#### INSTRUMENTS

Latest zero resettable PZL Sensitive Variometers complete with speed to fly ring and flask. Standard size £159, Miniature £189. PZL expanded scale sensitive ASI 0-140 kts in 1% turns or 0-200 kts in 1% turns £89. PZL TE Compensator £25.90, Stainless Steel Total Energy Probes £18.60, Reconditioned Sensitive IFR Altimeters 20,000' £147. 30,000' £157. New IFR 20,000 Altimeters £159.90. Reconditioned 12V T/Slips £144. New Miniature 12V PZL Turn & Slip £269. Reconditioned Bendix 31/8" Artificial Horizons with new inverter £349. Airpath Panel Mount Compasses reconditioned £43, new £48.90. New IFR Pedestal Mount Compasses £64. Ex Ministry Accelerometers Standard Size £82, New IFR Mini Accelerometers £179.90

#### THE NEW "XK 10" VARIOMETER

Standard or Miniature Instrument sizes, Dual Range, Dual Response Rates, Up and Down Audio with Variable Thresholds, Dedicated Continuous Reading Averager, No Flask required, Only 10MA power consumption. £299. Repeater Meter £79.

#### **NEW PARACHUTES**

SK94 – latest state of the art, 24 gore, two pin release, soft comfortable back pack parachute. Rapid opening with low descent rate, steerable, 20 year life £415.

#### AIRFRAME SPARES

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

#### **ASH SKIDS**

K-7 & K-13 £69, OLY 2B and other types from £62.

#### **OTTFUR RELEASES**

New "Ottfur" releases £116.00. Exchange "Ottfur" re-condition service £46.00.

#### TRAILERS

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

#### GLIDERS

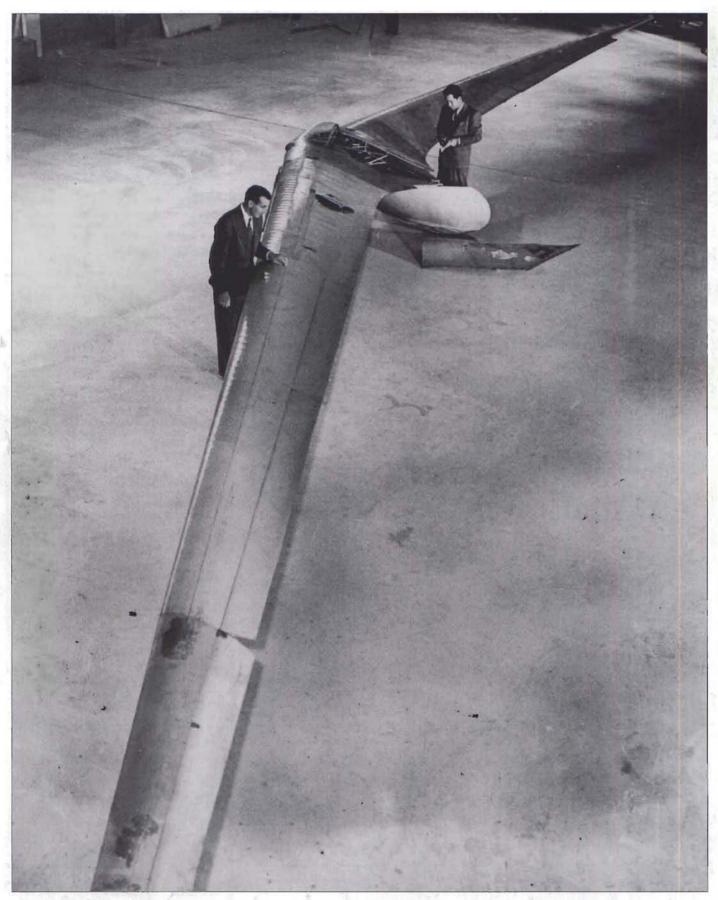
Foka Standard, Foka 5.
\*SZD-51-1 Junior £16,500
\*SZD-50-3 Puchacz £24,000
\*SZD-55 US\$45,000

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

Prices shown exclude VAT and carriage.

#### **COLIN D. STREET**

"Yewdown House", 7 Sharpthorne Close, Ifleld, Crawley, Sussex, RH11 0LU. Tel: 0293 543832, FAX 0293 513819 24hrs



The 24 metre span Horten 6.

The highest performance vintage sailplane of the before 1945 era. It had a limited speed range with flutter occurring at 100 kph. With a max. calculated L/D of 1.42, the first two prototypes flew during the summer of 1944 and the spring of 1945 and clearly demonstrated their better performance over that of a Horten 4. The two prototypes were captured by American troops. The first was burnt at Goettingen, and the second was carried off to the Northrop Plant in the USA, which was itself engaged in flying wing development. The Horten 6 was never flown in the USA, the test pilot declaring that it had too much wing flexing on the ground. It is seen here being inspected by Northrop technicians. It is currently stored, with its wooden main planes severely damaged, at the Silver Hill Storage facility of the Smithsonian Institute.