

THE SAILPLANE & GLIDER

NOVEMBER
1934

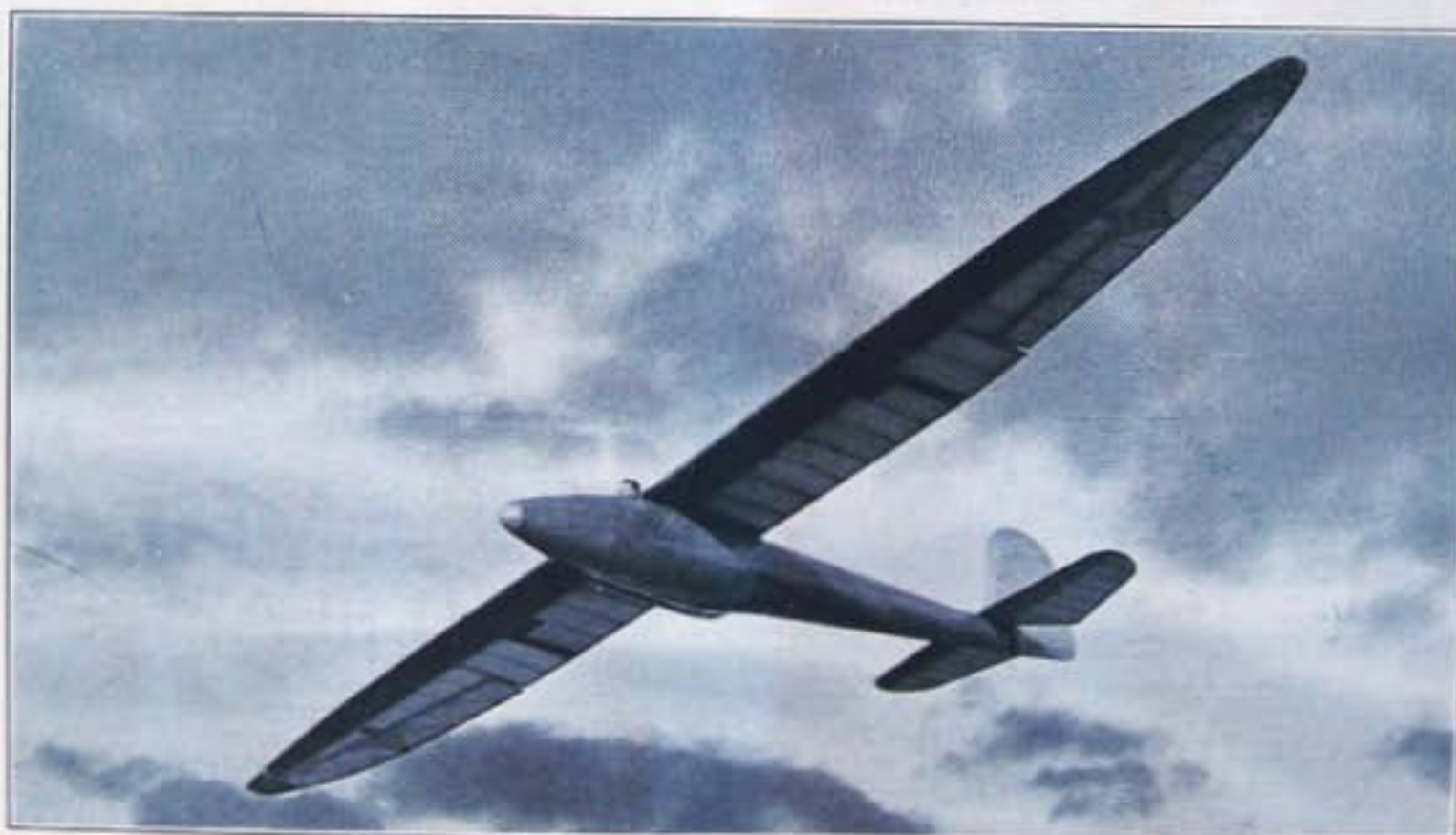
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Editor: ALAN E. SLATER



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NOVEMBER, 1934

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"The Sailplane's" Circulation

THE large size of our September issue met with general approbation; but it was only made possible by a temporary 300 per cent. increase in the circulation, due to our being able to sell innumerable copies to the public at Sutton Bank. This circulation, and with it the size of the paper, has now dropped to normal. As usual, much interesting news has been crowded out, and many articles (including a series on glider construction) have had to be held over indefinitely. There is only one remedy for all this: an increase in the circulation; otherwise the paper cannot be enlarged nor the price reduced. Club secretaries are urged to get all their members to subscribe. If this was done, the paper could be run on a much more satisfactory basis. The subscription is 5s. 6d. for 6 months, or 10s. annually, to be sent to the Publisher of THE SAILPLANE, 13, Victoria Street, London, S.W.1.

There are still some subscribers who are not getting the copies to which they are entitled. In most cases, apparently, they merely mention the matter to some friend unconnected with THE SAILPLANE. A far better method of securing the missing copies is to write direct to the Publisher for them.

The "Memoranda"

A LETTER criticising our leading article of last month has been received from Mr. S. Whidborne as we go to press. It will be published next month, as it was too late for inclusion in this issue.

The "Rhonadler" Demonstrates

ON September 27th G. E. Collins was aero-towed in his RHONADLER from Sywell (Northampton) to Bedford, where he cast off and gave a demonstration to a concourse of people at Kempton in aid of "Toc H" funds. There was little or no lift in the air, and, apart from a little circling in one thermal at 500 feet, the evolutions were confined to loops, stalled turns, and a spin. An explanation of what he was up to was given by G. L. Bell from a broadcasting van.

On October 6th the RHONADLER took part in the celebration of the official opening of the new clubhouse at Sywell. Mr. Collins was towed up in the rain to 2,000 feet, from which height he did loops, etc., and followed these with an upside-down glide lasting nearly a minute. This is no doubt the first sustained inverted flight in a sailplane to be performed in this country.

Second British "Silver C"

MR. P. A. WILLS, of the London Gliding Club, has now received the international "Silver C" badge and certificate, for which he qualified with a flight of 5 hours' duration on July 14th and one of over 31 miles' distance and over 3,280 feet (1,000 metres) climb on March 18th. It is numbered 45. Mr. Collins, the only other British holder of the certificate, qualified for it on April 20th and 22nd, and received No. 26. The list of holders of the badge is therefore growing rapidly, and anyone who covets a two-figure number had better be quick about it.

Royal Photographic Society

THE Annual Exhibition of this Society included, as usual, many photographs of aerial interest, including some of clouds from above by Mr. C. P. Aron, whose photo of clouds over Essex appeared on the front page of our July issue.

Among the exhibits by G. A. Clarke, the cloud photographer, was a panoramic view of a "cumulus wave probably during passage of Cold Front," showing a not very thick roll of cloud moving apparently transverse to its length, with clear sky in front but more cumulus behind. He also showed two photos, taken at ten minutes' interval, of a cirrus cloud shaped like a Catharine Wheel, claiming that the displacement of the arms showed a large scale eddy, or vortex, at cirrus level (about 30,000 feet). If this were true, the motion must have been terrific, probably including a large vertical component; but we are inclined to attribute the apparent change to altered perspective, due to movement of the cloud in the interval.

"Shadow Fleet," by H. F. Low, was an aerial view of a sea covered with isolated cloud shadows, photographed from over the coast. It showed well how a sailplane pilot, in a similar position, would have to look at the shadows to guess what clouds were around him, since the photo was taken from just above cloud base level, and the nearer clouds blocked out the view of all the rest.

Large cumulus clouds can be caused by forest fires, and an example of one at Yaphank, Long Island, was shown, photographed from above—a most unusual angle of view. Such clouds need not contain smoke in all their parts, since the air may be already unstable and ripe for forming cumulus, only waiting for something to "put a match to it."

Aftermath of the Competitions

WE give here the list of prize winners at the Sutton Bank Competitions in September, for which there was not space in our last issue. The rule was that only one of the main competition prizes could be won on any one flight, but this rule did not apply to the Daily Prizes, any of which could be won on the same flight as a main prize.

Trophies and Awards

Wakefield Trophy: G. E. Collins, for flight of 98½ miles on August 6th (longest distance since last competitions).

De Havilland Cup: G. M. Buxton, for height of 7,970 feet on September 4th.

Volk Cup: J. Laver, for flight of 12 hours, 21 minutes duration on September 8th.

Manio Cup: G. E. Collins, for out and return flight, from Sutton Bank to Osmotherly and back, September 3rd.

Class I (Unlimited Span)

Distance: J. Dewsbery, for flight of 30½ miles on September 4th.—£5.

Height: G. M. Buxton, 7,970 feet on September 4th.—£5.

Duration: J. Laver, 12 hours 21 minutes on September 8th.—£4.

Out and Return: G. E. Collins, to Osmotherly and back.—£2.

Class II (Span up to 46 feet)

Distance: 1st.—P. A. Wills, 18 miles to Kildare.—£4.

Height: 1st.—G. M. Buxton, 2,650 feet.—£4.
2nd.—W. W. Briscoe, 2,000 feet.—£2.

Duration: 1st.—J. Laver, 5 hours 56 minutes.
2nd.—J. Laver, 2 hours 16 minutes.

Out and Return: 1st.—G. M. Buxton, to Oswaldkirk and back.—£2.

Daily Competition

Monday, September 3rd.—Out and Return: G. E. Collins, to Osmotherly and back.—£2 2s.

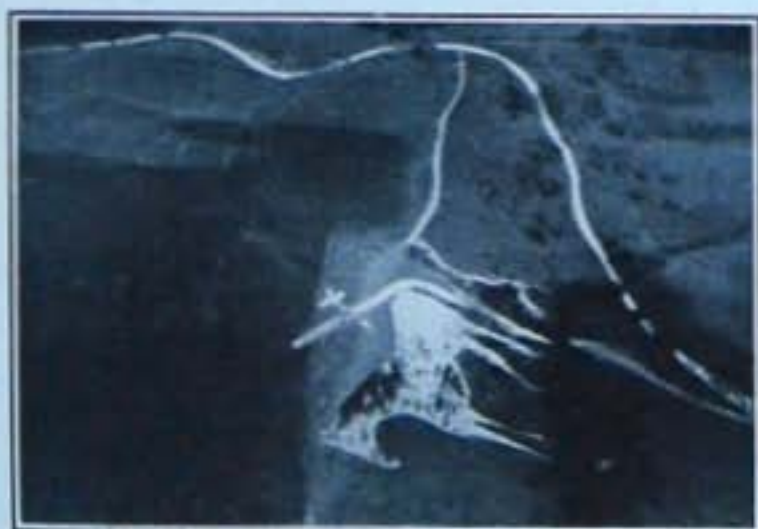
Tuesday, September 4th.—Distance: J. P. Dewsbery, 30½ miles to Hawsker.—£2 2s.

Friday, September 7th.—Aggregate Duration: S. Humphries and J. P. Dewsbery in CRESTED WREN.—£2 2s.

Saturday, September 8th.—Out and Return: G. M. Buxton, to Oswaldkirk and back.—£2 2s. Special Prize for Altitude: G. E. Collins, 3,600 feet.—£1 1s.

Sunday, September 9th.—1st. Greatest number of flights between White Horse and Whitestone Cliff: R. G. Robertson in GOLDEN WREN, 7 circuits.—£2 10s. 2nd. A. H. Reffell in TERN, 5 circuits.

Special Landing Prize offered by Mr. R. F. Dagnell: P. A. Wills, 10 landings.—£2 10s.



"Kassel 20" soaring over the White Horse: photographed by J. P. Dewsbery while flying "Blue Wren" at the Sutton Bank Competitions.

Our account of the meeting had to be cut down to the barest minimum, so much happened in the nine days and so little space had we in which to record it; many readers also were kind enough to send photographs, for most of which no room could be found. That the three thunderstorm flights could be described in such detail was due to the persistence of G. L. Bell, who held the pilots to their promise to hold an "inquest" on the storm on the following day. They were persuaded to substitute words for deeds, for a change, while Bell and the Editor scribbled hard in their notebooks and an occasional outsider pointed out some *double entendre* in the technical phrases used. The result (omitting the outsider's contribution) was the account given in our last issue, which can therefore be taken as authoritative, or Straight from the Pilot's Cockpit.

We have been saved by "Die-Hard," in an article published in this issue, from the unpleasant duty of discussing the minor crashery which gave the Press the opportunity for which it ever lies in wait. There is no doubt that it could have been largely reduced, perhaps even avoided altogether, by sufficiently taking thought. As it was, someone suggested that it would pay our sailplane manufacturers and repairers to organise a meeting at their own expense; with a little business acumen in the choice of a site, sufficient "business" would come in for them to recoup themselves handsomely for the initial outlay.

In this connection we must point out an error, in the last issue, in the "score," to which Mr. Baynes has drawn our attention. It was he who secured what was once the YELLOW WREN to take home to his repair shops. The corrected figures are therefore as follows:

September 1st: Slingsby secures GRUNAU BABY. Score, Fifteen—love.

September 2nd: Slingsby gets CRESTED WREN; Baynes gets Ulster SCUD. Thirty—fifteen.

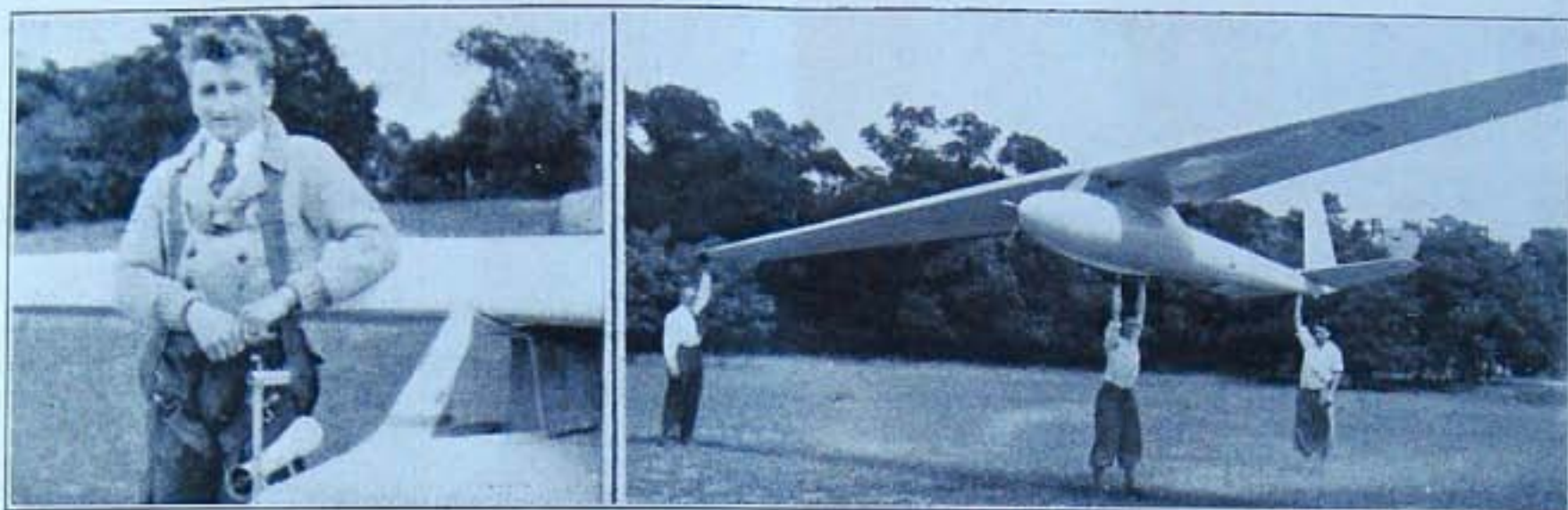
September 3rd: Spectacular rally by Baynes, who collars both YELLOW WREN and GREEN SCUD. Thirty—forty.

September 8th: GRUNAU BABY once more to Slingsby. Deuce.

A correspondent writes: "Buxton's barograph was sent off post-haste to the Royal Aero Club by train for homologation, but the journey did not have a good effect, and it was reported that the chart had been badly smudged. In future it would seem necessary to get some competent person to open the barograph and dry out the remaining ink in the needle before despatch. The Aero Club have suggested that the B.G.A. should buy an official barograph for these flights. Unfortunately it would be necessary for the association to have at least five barographs for such a meeting, and then the odds are that they would be given to the wrong machines, with consequent unpleasantness for all."

A final aftermath, from the Yorkshire Gliding Club: "It's almost embarrassing. We thought our efforts towards hospitality and a small measure of comfort were so puny, so uninviting, so lacking in welcome. But you should see the messages of thanks and appreciation which have reached us from those who glide, or don't, for gliding's sake. When the origin of the White Horse is as far buried in the mysterious past as that of Casten Dyke is to us now, then will our successors turn up our annals and say with awe: 'Ah, those pioneers of gliding. What lads. What lasses!'"

Soaring Flights in Germany



Hans Fischer and the lightly built "Windspiel" on which he has carried out some notable flights from Darmstadt.

UP till a year or two ago, nearly all the German soaring flights of outstanding interest had been made in the course of the annual Rhön Competitions. They were few in number, and, upon the slender evidence which they furnished, the most sweeping generalisations would be built up by technical experts, both the meteorologists and the designers of sailplanes.

Things must be very different now. People seem to go soaring about over Germany all the year round, often from new centres, any one of which shows greater activity than the Wasserkuppe did in the old days.

But the old Griesheim aerodrome at Darmstadt is still going strong, and from it some notable flights have been made this year by Hans Fischer in the lightweight and diminutive WINDSPIEL (starting, of course, by aero-tow), as the following list will show:—

- April 4th, 57 miles to Lahr (Hunsrück).
- May 13th, 37 miles to Rothenbuch (Spessart).
- May 15th, 65 miles to Vaihingen (Enz).
- May 16th, 76 miles goal-flight to Biedenkopf (Lahn).
- May 20th, 148½ miles to Weimar.
- June 16th, 149 miles to Montmédy (France).

The flight to Weimar was the result of an attempted "goal flight" from Darmstadt to the Wasserkuppe (80 miles), whereby the pilot well and truly overshot the mark. There was a south-west wind, and clouds began to form just as he started at 10 a.m. Casting off at 2,000 feet he flew below them for an hour and reached Seligenstadt, where he thought it safe to let himself into a cloud as he could see the light shining through from above. Inside it he rose from 4,000 to 5,250 ft., but later, when the clouds had thickened, their bases had risen to 6,500 ft. As there was no hurry and the going was good, he practised blind flying in various stationary upwind areas, coming out into the light now and then in case he should lose control and squander a lot of height. From 6,000 feet he caught sight of the Wasserkuppe in the distance through the rags of cloud covering it; but when, after a rough hour among and around the clouds, he could see again where he was, he found himself 7 miles to leeward of his destination. He wasted an hour trying to get back, but progressed less than two miles and

lost height to below the Kuppe's summit level. So he decided to go on to an aerodrome from which he could be towed back, passed over those at Meiningen and Erfurt at such a height that it seemed a pity to come down, and landed at the Webicht aerodrome at Weimar after being in the air over 6 hours.

His greatest height was 7,870 feet, by altimeter, but he had no barograph, otherwise the flight would have set up an official world's distance record. (Groenhoff's flight of 156 miles in 1931 was not recognised by the F.A.I.) But Fischer secured this honour on his next flight, though he did not keep it for long.

The flight which finished on French territory was intended to be a "goal flight" to Luxemburg. It was anti-cyclonic weather in the middle of June, with plenty of thermal activity but no clouds—in fact, precisely the kind of conditions for which the WINDSPIEL was designed. (It is a pity there were no heavy large-span sailplanes up at the same time, just to show whether the theoreticians of 3½ years ago were right in their ideas of what the sailplane of the future should be like.)

Fischer was towed up to 1,300 feet by Hanna Reitsch, from which height he got up in a thermal current to a maximum height of 4,300 ft. But here he noticed a curious thing: the light east wind at ground level, which was going to take him to Luxemburg, fell off above a height of 1,600 ft. So he had to adopt the curious technique of utilising only the bottom portion of each thermal, leaving it as soon as he had got to 1,600 feet, the top of the wind zone, and flying on to look for the next. In this he was successful, though it called for much alertness, and he crossed over Oppenheim, Kreuznach, the Hunsrück and Hochwald, where there was an anxious couple of minutes when he got down to only 65 feet above ground. As a reaction he let the next thermal take him up to its top at 5,040 ft., and he kept high till Luxemburg was reached. As it was only 3.30 there was still plenty of thermal lift, in which he played about until the sight of numerous smoke trails, which helped in identifying the thermals, tempted him once more into the lower regions. But the wind had changed to north-east, and it drifted him towards the prohibited zone. He therefore came down, but, having only a small scale map, unintentionally on the wrong side of the frontier.

Laucha, a new soaring centre established rather more than a year ago, is 35 miles W.S.W. of Leipzig. Robert Bley's factory is near by at Naumburg. Competitions were held there this year at Whitsun and again at the end of August.

At the Whitsun meeting 16 sailplanes turned up. Carius on a GRUNAU BABY soared to Leipzig, arriving at Mockau aerodrome at 3,000 feet above a large crowd who were expecting the GRAF ZEPPELIN. Kern in a RHÖNADLER had an adventure. He got up to nearly 6,000 feet in a cloud flight, but was then thrown out of his machine by downward gusts behind Merseburg; he landed safely with his parachute. There were two collisions in the air during the meeting, both unfortunately with fatal results. While 8 machines were up together, Jagstädt, of Bitterfeld (aged 19), after an hour's soaring, collided with another sailplane at 250 feet. He sustained a fractured skull. The other pilot landed safely in the valley with a broken wing. The very next day, May 21st, Arnold, of Leipzig, a prospective instructor, was badly injured as the result of a collision and died later in hospital. What happened to the other machine is not stated.

For the August meeting 29 sailplanes were entered. The winner of the "total duration" prize put in 32 hours 49 mins. flying, while Blanken in a RHÖNADLER flew 143 miles to Giessen on August 26th.

Hornisgrunde is in the Black Forest, 11 miles south of Baden-Baden. A meeting was held there from Ascension Day to Whit Monday, at which much soaring was done by Baden pilots. Ludwig Hofmann, of Mannheim, aged 21, especially distinguished himself. First, he did a 30-mile "goal flight" to Karlsruhe aerodrome, arriving at 4,000 ft. Then, on three successive days, he did (1) a goal-flight to Griesheim aerodrome, 87 miles, on May 20th; (2) 75 miles to Hall in Württemberg on May 21st; and (3) a slope-plus-thermal flight to Nürnberg aerodrome, 140 miles, on May 22nd.

The intervening nights were spent in coming home with the trailer, which prevented the pilot getting any proper sleep. Consequently, during the last flight, he admits to having fallen asleep three times, each time waking up to find his machine in a spin, which caused his head to bang against its cushion and thus roused him. But for his sleepiness, he could easily have gone further and put up a world's record, as he had 2,600 feet of height in hand at Nürnberg.

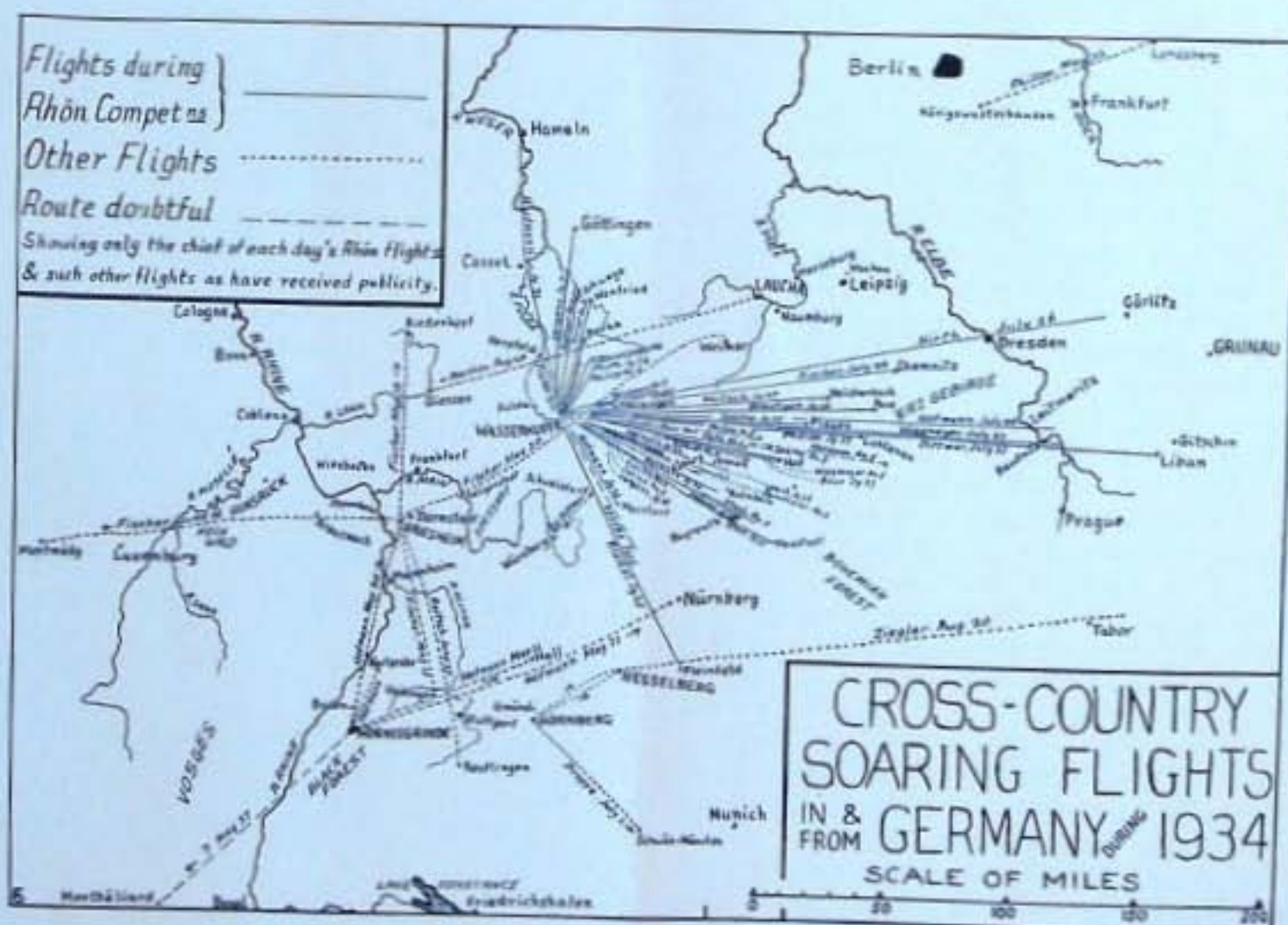
On May 27th, according to a newspaper report, a sailplane from this district flew to Monthliard, in France, about 110 miles away, and was there seized by the authorities, its pilot having explained that he had got lost, and flown over Alsace and Switzerland on the way. His identity was not stated, but presumably he and his machine have got home by now.

Another flight about this time was a goal-flight from Königswusterhausen to Landsberg, 75 miles, on May 22nd, by Ernst Philipp, designer of a once tail-less sailplane. He now flies a RHÖNADLER, which he won as a prize for some flight or flights on the other machine.

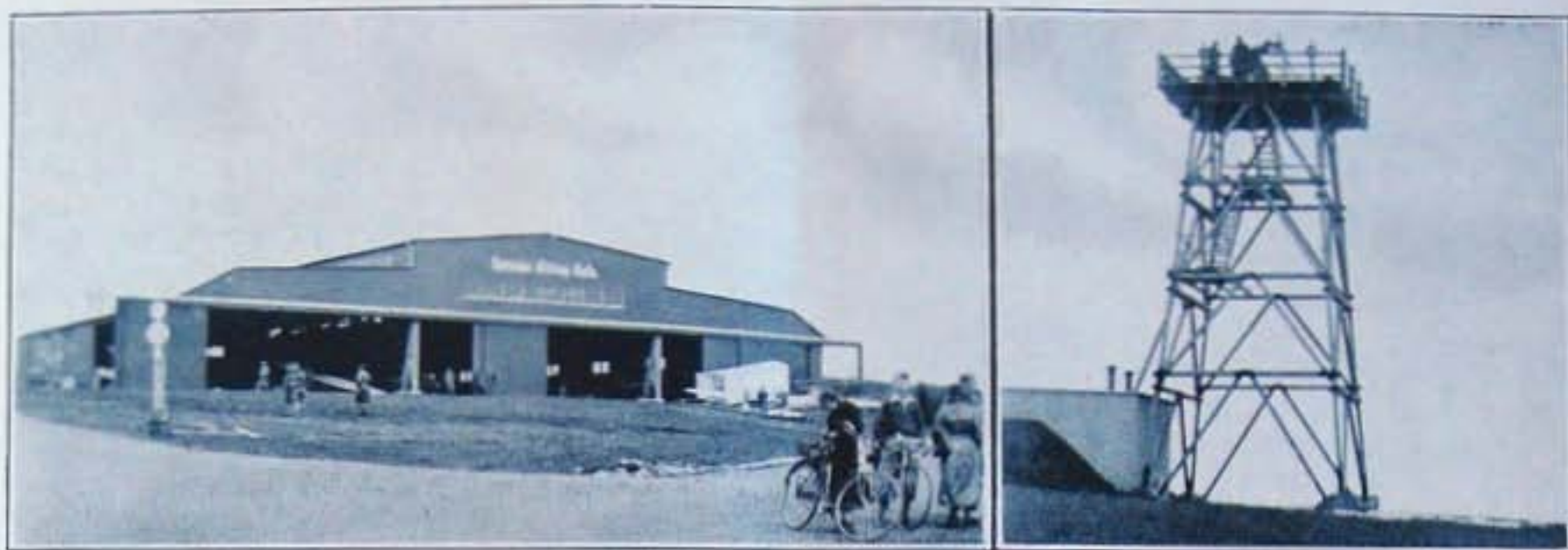
On June 27th Hanna Reitsch soared the FAFNIR from Griesheim to Reutlingen, 100 miles.

Edgar Dittmar, an old stager who has now been rather put in the shade by his younger brother, has done a creditable flight in the CONDOR (which he helped to design). He cast off at only 330 feet, after a launch by a winch of his own design, and climbed to about 6,500 feet, flying from Schweinfurt to Würzburg aerodrome.

Hesselberg, another new centre, is 80 miles N.W. of Munich, in Bavaria. The pilot Ziegler, flying the MILAN, a new two-seater with a welded steel tube fuselage, soared 203 miles from there into Czechoslovakia in 5½ hours, landing at Píseck, near Tabor. He climbed to 6,250 feet on the way. But this was on August 20th, after the National Competitions at the Rhön, which we must now proceed to describe.



The 1934 Rhön Competitions



Two new landmarks on the Wasserkuppe: the "Hermann Göring Halle," which will house 55 sailplanes fully rigged, and the observation tower, stout enough not to mind being glided into.

AFTER the promise of the earlier part of the year, it was only to be expected that great things would happen during the annual meeting held on the Wasserkuppe from July 22nd to August 5th. The great programme of expansion entered on by the German gliding movement early in 1933 made no noticeable difference to last year's competitions, but this year it has borne fruit at last.

Most of the old stagers among the pilots are still going strong, but many have made no further progress in their flying technique, and have consequently been overtaken by the newcomers. Wolf Hirth, however, has lost none of his old brilliance; Heinrich Dittmar was better than ever, while Peter Riedel was consistently good, if not a record-winner. Among those who showed promise last year and have now arrived in the front rank are Hanna Reitsch (the only lady pilot of any distinction), Fischer of the WINDSPIEL, Baur of the queer-shaped FLEDERMAUS, and Ernst Philipp, who has exchanged his hybrid invention for a respectable RHÖNADLER. New names which we must learn to conjure with are Carius, Ziegler, Späthe, Brandes, Fritz Schmidt (not the duration Schmidt), Holzbaur (aged 18, who got his "Silver C" at the meeting), Wiegmeier (who has glided down from the GRAF ZEPPELIN), and the incomparable Hofmann, whose distance flights during the fortnight totted up to 731 miles. Also a number of unknown pilots could manage comparatively modest distance flights such as would have broken last year's British record.

The blue-grey uniform of the Air Sport Federation was in evidence this year, but many members of the teams seemed to prefer the usual glider-pilot's get-up, or lack of it. Politics, however, found an entry in other ways. In order to foster the team spirit and all that, machines could only be entered by the local groups belonging to the Federation, not by individuals, and it was to the groups that the prizes were awarded. A further effort in this direction was to organise "chain flights," or flights in groups of three, for which two of the chief prizes were offered. One was for a flight to the Heidelberg (7 miles away) and back, the members of the "chain" or formation having to start and land within 10 minutes of each other; the other prize

was for a distance flight, in which the average direction of each must not diverge more than 15 deg. from that of the machine which went farthest. Whether these regulations were sufficient to submerge the pilots' individualities is doubtful, but it was evidently considered a step in the right direction.

The other main prizes were the usual ones, each divided among the first three competitors in the proportion of their performances. The winners were: distance, Dittmar, Hirth and Wiegmeier; height, minimum of 2,000 metres not reached; goal-flight (to pre-arranged destination), Hirth and Philipp; duration, Carius, Carli and Hakenjos; total duration, Fölsche (32 hrs. 24 mins.), Hofmann and Fischer; total height, awaiting homologation; total distance, Hofmann (731 miles), Utech (339 miles), and Philipp (294 miles). The total amount offered in prizes was RM. 55,000, which is more than ever before.

During the meeting 926 launches were made. There were 100 machines on the official entry list, and, as each had a team of 6, there must have been, including those organising the meeting or helping in other ways, about 1,000 people on the Wasserkuppe solely for the purposes of the meeting. (There was no Yorkshire Club to ask them all simultaneously to supper!)

Of the 100 machines, no less than 33 were GRUNAU BABIES. Next in frequency were 16 RHÖNBUSSARDS, 10 CONDORS, and 6 RHÖNADLERS. The CONDORS were poorly flown, while some of the very best pilots, such as Hofmann, Wiegmeier and Philipp had RHÖNADLERS, so there was no real opportunity of comparing the two types. No other designs appeared in quantity, and there was still only one each of the MOAZAGOTH, the ASKANIA, the light WINDSPIEL, the unconventional FLEDERMAUS, and the warping-winged THERMIKUS (which spun into a wood early in the meeting and wrote itself off). There were two new machines with fuselages of welded steel: the HELIOS, a sort of small-sized MOAZAGOTH with seagull wings, and the two-seater MILAN of Munich, which has distinguished itself since the meeting ended. There were also two whose wings were faired into the sides of the fuselage with wide sweeping curves; the NIEDERSACHSEN (type Göttingen IV.), looking remarkably bird-like, and the SAO PAULO

which Dittmar flew on his world's distance record. The latter is called "Fafnir II." type; it has much the same plan as the original FAFNIR, but the wings sprout from the body much lower down. When finished, it came out 50 kgs. too heavy, but its unexpectedly good aerodynamic performance cancelled this out. Two tail-less machines were entered; one arrived by aero-tow, but didn't do much after it got there. We hope later to describe some of these new machines in greater detail.

An immense general improvement in flying style was noticeable this year; and parachutes were compulsory for every pilot in the competitions.

During the second week-end J. P. Dewsbery, D. Hiscox and the Editor paid a visit in a hired LEOPARD MOH. We met Carli Magersuppe, who asked after his English friends, and wished he was here again, and, of course, Wolf Hirth, who had just got back from his world's distance record only to find it had been beaten the very next day. It was just like his luck, he said. (He once held the world's height record for just an hour before Kronfeld took it away from him.) He had not had such a strong wind as Dittmar, but it was quite strong enough to hamper his return from Görlitz, which was done in up-to-date manner by aero-tow. At 9 p.m., when it was almost dark, they had been still a long way from home, when the aeroplane signalled him to cast off. He did so, and found that there were still thermals about, so it took him a long time to get down. Then they couldn't find the towing cable in the dark, until an irate farmer appeared on the scene and complained that he had been tripped up by it.

We also met Warren Eaton, president of the Soaring Society of America, and Martin Schempp, who is visiting his native land for a few months, and intends to look in on England on his way back to the States.

Mr. G. L. Bell, of the London Club, who visited the Rhön later, wrote us a full account of the second week which we have unfortunately had to compress. He succeeded in gate-crashing the new control-tower, and found in use thereon a 2-metre range-finder, a $\frac{1}{2}$ -metre ditto, a pair of tripod field-glasses for identification of machines, a couple of theodolites and sextants, and an electrical anemometer. He also came across Hans Deutschmann, still limping with a stick. Last year, after being flung out of his machine in a storm and dragged half a mile over the ground by his parachute, Deutschmann nearly lost his life in the crash of an experimental tail-less machine.

We have only space to summarise briefly the daily doings at the meeting:—

July 22nd.—70 sailplanes had arrived. Weather bad till the afternoon, when 32 launches were made. Some slope soaring was done in a weak wind. Hofmann, alone among the experts, found thermal lift connected with a passing shower, and went 71 miles to Kronach.

July 23rd.—Rain and mist; no flying.

July 24th.—Hofmann, followed by Philipp and Bar-taune (aged 17), won the annual Milseburg Prize, given in memory of Nehring, the first to fly there and back. The goal-flight prize for this year, for a flight to the Oechsenberg (22 miles north) and back, was won to-day by Hirth. It is a most difficult flight, and Riedel, who also tried it, failed by 5 miles to get back. Philipp flew 96 miles and Hofmann 63.

July 25th.—Nearly 100 launches. Riedel made cloud contact and went 107 miles towards Nürnberg—the longest flight of the meeting so far. Späthe went 56 miles, Utech 55, and Hofmann 41. The "Daily Prize" was for distance, and in addition a special distance prize was offered for machines of under 48 ft. span. A "chain flight" was attempted by Hirth, Baur and Hakenjos (in the old LORE), but the weather conditions weren't good enough. Anyway, they must have looked an ill-assorted trio in the air together.

July 26th.—Wind blowing 31 m.p.h. but full of thermal lift. It took Hirth on a world's record flight all the way to Görlitz, 215 miles, in 6 hrs. 49 mins., and Hofmann 193 miles into Czecho-Slovakia in 5 hrs. 37 mins. Fischer did 132 miles, Bräutigam 123, and a number of others lesser distances.

July 27th.—Wind blowing even faster, took Dittmar 232 miles into foreign parts; also Wiegmeier, who only did 30 miles yesterday but to-day did 195! Philipp went 121 miles to Lichtenau, and numerous others did well, including Hanna Reitsch in the CONDOR. 33 distance flights in all. Carius won the duration prize with an 8 hrs. 59 mins. flight.

July 28th.—Chiefly slope soaring, but many tried the Himmeldankberg (5 miles) and back. 12 got there; 8 got back again.

July 29th.—First successful "chain flight"; Baur, Hakenjos and Proppe went off towards Berka and got 29, 28 and 17 miles respectively. Several other modest distance flights, although an "almost closed cloud sheet" was reported as covering the sky.

July 30th.—Hofmann went 84 miles to Bayreuth. "Daily Prize" for flight to Kreuzberg and back (beyond Himmeldankberg, 10 miles). 3 got there but none came back—at least, not by air.

July 31st.—Cloudless; strong thermals. Hofmann flew 104 miles in an unusual direction, to Hamelin, the Pied Piper's town. Next best was Vergens with 84 miles.

Aug. 1st.—Low clouds, into which pilots ascended at times while piling up "total duration." A few went distances up to 30 miles.

Aug. 2nd.—Hanna Reitsch, Riedel and Dittmar went for a "chain flight" in the CONDOR and two FAFNIRS, flying high above the Wasserkuppe in formation as they departed. But Hanna broke the chain by landing after 13 miles, leaving the others to carry on towards Cassel. Baur, Hakenjos and Proppe managed an out-and-return chain flight to the Heidelestein. One, Dr. Küttner, went 51 miles on a CONDOR. Hofmann and Fischer didn't get as far. Philipp achieved the difficult Oechsenberg flight.

Aug. 3rd.—One machine tried out short-wave wireless communication; otherwise no flying. All the prizes were laid out in a hangar for public inspection. They varied from a great portrait of Hitler in oils to statuettes and flying instruments.

Aug. 4th.—Rain and fog. Air-Sports President Loerzer inspected the camp. Uniformed ranks lined up in the "Göring Halle."

Aug. 5th.—Hofmann went 128 miles to an unreported destination. Next best were Utech, Wiegmeier, Schmidt, Philipp, followed by others too numerous to mention. It was a fine finish to a memorable fortnight.

As many as possible of the chief flights of the meeting have been entered on the map on page 174.



The four pilots who beat the previous World's Distance Record at this year's Rhön Competitions: all exceeded 300 kilometres. Left to right: Heinrich Dittmar (376 km.), Wolf Hirth (351 km.), Erich Wiegmeier (315 km.), Ludwig Hofmann (310 km.). From "Flugsport."

Those Northern Heights

Aftermath of the National Competitions (*sic*)

By DIE-HARD

THE gliding-ground at Sutton Bank consists of a fairly level forty-five-acre stretch of heather, more or less square. From a thousand feet it looks like a postage-stamp. In the centre is a patch of gorse and small bushes, and a bog. The south-west corner is cut off from the rest of the ground by a low stone wall. Elsewhere there are some rough places, but they are mercifully covered by the depth of heather.

The south and west edges overlook five-hundred-foot drops. The western edge is abrupt. Launches therefrom can be subtle. The launching-teams cannot be expected to hurl themselves over the edge without parachutes, so the machine leaves the rope long enough before reaching the brink. At that moment the machine is often struggling through a considerable burble, and shows an alarming reluctance to leave the ground. That burbles infest the edge was shown by the disaster which overtook the trial ground-hop of a SCUD, by the experience of Hardwick in August when he made his approach and landing parallel to the edge, by the queer behaviour of many machines taking off westward, and even by the catastrophic way in which the CRESTED WREN dropped slick out of the writer's hands from six feet while landing in the south-west corner.

The southerly edge is comparatively plain sailing. It is rounded off quite comfortably. The bump of the machine as it shoots out into space is sometimes enough to lift the pilot out of his seat, but there is never any doubt about the launch being thoroughly effective. It merely remains, at worst, for the pilot to bash his way out through the surf into smoother air.

Soaring on the west side can be entirely simple. With a true west wind the whole of a huge area, one and a half miles by about half a mile, enclosed by two headlands, is bursting with lift, and most of the lift is reasonably smooth. But once a machine has sunk below the level of the cliff-top, it certainly must keep well away from the cliff.

There is substantial evidence that the aerial tangle close to the cliff is sufficiently grim, the lower part of the stream of air being thoroughly jammed up and unable to escape freely in an upward direction. To a pilot soaring with little to spare in a westerly breeze, it is disquieting to see the ripples on Gormire Lake

steadily running from the south-east! The mind boggles at the thought of the intermediate tangle between these two extremes of direction, a tangle which seems to have been responsible for the disaster to the YELLOW WREN.

It is also rather disquieting, after a slightly dubious launch, to spend the first half-minute in a no-lift strip parallel to the cliff-top. The moral is that the cliff must be kept at a respectful distance. If the machine won't keep well above, it must be kept well up-wind.

Or if the machine should be run in close alongside the cliff, it is as well to keep on a slight outward bank ready for an emergency-turn up-wind into safety.

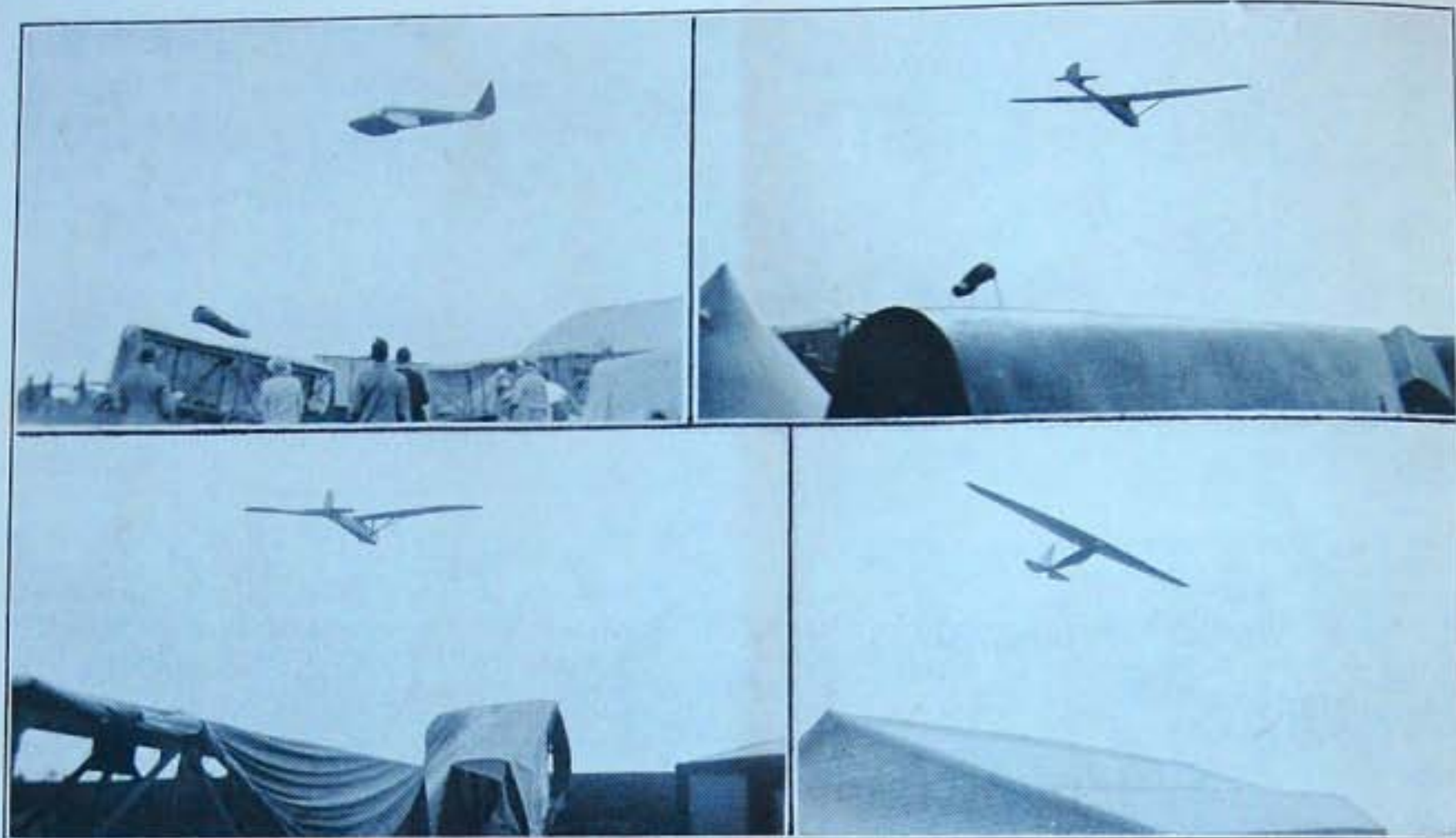
The only obvious snag in the south face is the shortness of the beat. At the west end the wind races round the corner, somewhat emotionally at times, while at the east end it tends to scoot up a valley. In between lie bumps.

Landing in the ground at the top ought not to be difficult. The area is large enough in all conscience. But the penalty of undershooting is so severe that the ordinary *ab initio*, as distinct from a born pilot, may excusably develop a pretty hectic style at times.

The approach from the east is over a valley, some trees and a wire fence, to which is added in times of national competing a marquee, a row of cars, and infinite spectators. Coming in from the north the shaken pilot has to cross an earth bank surmounted by a stone wall, and then a row of hangar and club-house buildings joining up with tents and reinforced by ranks of cars, trailers and humanity. Mental confusion is made worse confounded by the gusts which naturally swish over a plateau a thousand feet above sea-level and five hundred feet above the surrounding country, gusts which occasionally shift the machine's vertical position with no mean emphasis. And all this time the poor boob in the cockpit is hating the idea of overshooting, which may so easily mean a trickling over either precipice at the far end of his landing.

In the plain at the foot of each "slope" is an approved forced-landing field. Either is adequate for a machine of the HOL'S DER TEUFEL type, which can be stuffed down remorselessly and planted like a turnip. But with a fairly efficient machine the job is not so simple.

The western forced-landing can be comfortably approached from the south along a valley. But if it is attempted from the north the pilot suddenly finds that the contours prevent an approach-gliding-angle of anything less steep than about one in six, which means



"Coming in from the North": pilots make their approach over the obstructions at Sutton Bank. Above, left: Reffell in the "Tern"; right: Humphries in "Crested Wren." Below, left: Slingsby in "Falcon II"; right: Briscoe in "Scud II."

a violent side-slip and possibly a shocking final surplus of speed. Hence a hectic landing by an irreproachable pilot, as well as by your ham-handed correspondent, the machine in each case doing some remarkable country-dancing after impact.

The southern forced-landing field looks fairly straightforward from the hill-top, but is apparently deceptive, if one may judge from the results. Hedges suffered at both ends. Enough said. We did not visit this field by air, though we dropped most of the other bricks that were droppable.

All these landing troubles vanish if one is using a low-efficiency machine. One simply comes in at any height up to one hundred feet and pushes the stick forward. But the worst of it is that such machines, though landed so simply, are thoroughly alarming in the rough-stuff of launching. Here again only an unusual discretion forbids the quoting of chapter and verse.

The answer is, clearly, that the FALKE is the obvious machine for semi-skilled pilots on this site, inasmuch as she is efficient and handy but still can be stuffed down safely on to the ground with the gliding-angle of half a brick; that is to say, her terminal velocity is phenomenally low though her sinking-speed in normal flight is admirable. In addition, she can be slipped and turned with ease, grace, dignity and confidence. Further, she is charmingly steady in bumps, and altogether as near to being an aerial non-sinkable, non-breakable and non-capsizable life-boat as is hygienic.

These views may not be entirely popular, but they are expressed in all sincerity. There are three sections of our community who may disagree with them: arm-chair critics, reckless young bloods who still have a good crash coming to them, and first-class pilots. That the site is magnificent is made evident by the entirely

charming results obtained. That it must be treated with healthy trepidation is not so self-evident. Hence these words. In one week we saw and/or felt damage or damages to a PROFESSOR, two WRENS, TERN, two SCUDS, a GRUNAU BABY, and a two-seater, as well as near squeaks with at least three other machines, possibly many more.

What, then, is the reaction on the mind of a pilot who insists on learning to fly capably, regardless of record-breaking and chat in newspapers? Possibly:—

- (1) To learn to lose height by controlled slips in any direction.
- (2) To learn to lose speed by swish-tailing.
- (3) To learn to exorcise the clogging effect of emotion in tightish corners.
- (4) To learn to plan one's moves well ahead with the precision of a chess-player.
- (5) To learn what is impossible as well as what is possible.

(6) In short, to learn all the tricks of the trade, to use them legitimately and exactly, to fly with tranquillity, style and confidence.

(7) In fact, to DO ONE'S STUFF.

I, for one, having vulgarly spat on my hands, will run through this colossal programme in the next eleven months, or bust in the attempt. Flowers, but no mourning. All the same, I should feel grateful if the refreshment marquee and one hundred feet of wire fence were meanwhile abolished from the north-east corner. But that, maybe, is just a lovely dream.

Or perhaps that marquee is good for my moral fibre. Then let it fly the Skull and Crossbones on each mast-head, with malice aforethought. And let the wire fence be barbed and its stakes made of angle-iron. And let the loud speaker play martial airs. Then will we give passenger-rides to our technical advisers and ground organisers—if they will come!

Correspondence

The B.G.A. Imbroglio

[Most of our readers are probably still somewhat in the dark as to what the present lamentable dissension within the British Gliding Association is all about. The majority of those who fly want to have as little as possible to do with it, and to get on with the job of flying. Unfortunately the Clubs are all being held up now by this internal trouble of the B.G.A., and since its Council at present contains only 8 Club representatives and no less than 22 others, the Clubs are insufficiently strong to clear up the mess. The following letter from Mr. Wills may bring enlightenment. Mr. Wills is well known to readers as having made several fine soaring flights this year, and as one of the only two British "Silver C" pilots. In addition he played a large part in the organisation and building up of the Sutton Bank site and competitions and, further, it is chiefly owing to his work as Hon. Treasurer of the B.G.A. that the Association has been able to carry on at all this year. His letter therefore merits serious attention.—Ed.]

SIR,

The affairs of the Gliding Movement as regards the Government subsidy have now reached a position where it is important to put certain facts and points of view clearly before those bodies most interested.

I can report that what the Air Ministry (rightly) insist on before proceeding further is—Unity. They cannot do anything so long as the movement is divided within itself as at present.

At the beginning of this year I blundered happily into the maelstrom with the general hope of finding some way of mollifying the lacerated feelings all round and clearing up some of the brass rags littering the deck. I found the British Gliding Association split almost exactly in half, and the contestants were broadly divided into what for want of a better term I will call the "London group" and the "England group" (although the London group contained many adherents outside the London Club, and Mr. Gordon England's group some adherents within). The London group accused the England group of failure to run the B.G.A. efficiently, and went on to say from that that they had no practical knowledge of running Gliding in this country. On the other hand, the England group denied this hotly, and said that the whole thing was due to various personal and petty dislikes.

BUT BOTH SIDES ADMIT THE NECESSITY OF A CENTRAL BODY—i.e., any idea that the B.G.A. itself (i.e., the machine) should be wound up is simply a counsel of despair.

Now as regards the past running of the B.G.A. there is no longer room for two opinions. In the last six months first Mr. Briscoe and myself, and then Mr. Howard Flanders have done a great deal of work, and the mess is now laid out for all to see.

The impartiality of the dissection will not be questioned, as Briscoe and I have sympathies on the whole with the London group, whilst Mr. Flanders was a leading signatory (before his examination of the records) of a memorandum recently circulated by the England group.

Whatever the truth of the personal vendetta story, anyone can now examine the records and see for themselves how first one Club or person and then another became first irritated, then infuriated, by the incompetence of the B.G.A., until finally the largest Club disaffiliated. The sickening thing is that when a new Club affiliated it naturally heard the views of the England group (who were at that time in control of the B.G.A.) and so found itself up against the London group, so that in certain cases the fight spread between the Clubs. In general, however, it can be said that the more successful clubs favoured the London group because they at least have given proof that they can "deliver the goods," the England group containing few active flyers, or proved organisers of flying.

After all these statements it may be valuable to say how the situation affected my ideas, which were in the beginning quite impartial. It seems to me that the following is unescapable:—

(1) It would be far better if the lion and the lamb would lie down together. Well, after a very great deal of trying, I regret to report that they won't.

(2) Therefore it is necessary for one side to give way in good grace to the other. Now which side is essential to the Movement—the greater number of successful Clubs, headed by London and Yorkshire, or Messrs. England & Co.?

I have my own answer to that deeply unpleasant question; the more unpleasant to me because I happen to like various people on both sides.

Now a bad enemy to the London group has been the idea that because they have for various reasons out-distanced others, they must be out for full control of the B.G.A., the Gliding Movement, the subsidy, or what you will. That idea has been sedulously fostered in certain quarters, but it is absolutely false.

The London group have their whole time occupied in running their own clubs, and do not want to be mixed up or messed up in politics at all. They simply must, however, have someone they can trust, who knows the practical side of running a club, in charge at headquarters. All their endeavours to reconstitute the Association have been directed solely to reducing the numbers of non-club representatives on the Council, thereby increasing the proportion of those with actual experience of the running of Clubs.

This is all very dull stuff to those people who simply want to fly, and very bitter stuff to those who are also connected with the internal side of the movement, but it has to be written because until we can produce a united answer the whole movement must mark time.

My solution? Well, is it too much to hope that everyone should forget their fancied or personal dislikes and swallow the pill that those in the fight who are not essential to the movement should climb down? My own resignation has been in the hands of the President for some time. Air-Commodore Chamier has resigned. If the charger could also be loaded with the willing heads of Mr. England and a very few others the battle would die a natural death, and the movement could once more advance.

P. A. WILLS.

News from the Clubs

London Gliding Club

Sunday, September 30th.—Howling gale from south. No flying possible.

Sunday, October 14th.—Yesterday there was some soaring by the FALKE and WESTPREUSSEN, but conditions were pretty feeble. A large group of beginners ground-hopped.

To-day a gusty wind blew slap up the hill, producing several phenomena, e.g., Collins at 1,200 ft. in the RHÖNADLER; a new Collins, his namesake from the staff of the *Aeroplane*, flying backwards in the FALKE; the CRESTED WREN motionless at 600 ft., having risen there directly from the launching point immediately below; Dewsbery launched in the WREN by one man; the PRÜFLING and KASSEL 20 soaring all day; five machines flown by sixteen pilots in violent weather and not a ha'porth of damage done. We are at last coming to the time when decent pilots are counted in dozens and are no longer isolated gladiators, bull-fighters and/or national heroes.

The kind of thing that happens now is that a nice young man says: "Please can I fly something?" And you say: "What have you done?" And he says: "Fifteen hundred hours in the R.A.F. and a German gliding course." So you put him in the nearest machine, which he soars and lands immaculately, and we all live happily ever afterwards.

To their great credit, Challier and Kurt obtained their "C" certificates in the PRÜFLING on this emotioning day. A remarkably stout show, seeing that the machine was incapable of rising out of the rough air along the hill-top. Both are *ab initios*. The R.A.F. man was also successful.

The anonymous Irishman turned up once more, bringing his regular offering of five pounds in gold, and still refusing to accept a receipt. All he will take is tea. He is a very great man.

Saturday, October 20th.—A south-west wind, in which Briscoe soared the SCUD and the FALCON was flown by Hiscox, Bolton, Hafner, Dent, Thomas and perhaps others. It blew too much along the hill for all but one clever man to keep up the PRÜFLING. Hiscox's DUNSTABLE DEVIL nearly soared from a launch one-third of the way up.

Sunday, October 21st.—The wind had backed, but wobbled in direction, so that those who took the FALCON and CRESTED WREN off the top would either get wafted up over the bastion or lurch into a down-draught, not knowing beforehand which it was to be. PRÜFLING and DAGLING worked hard all day at ground-hops. Collins tried the D.D. The new green SCUD made its first appearance since Sutton Bank, and ground-hopped in exemplary style; Mr. Baynes went home pleased. Imperial College suffered misfortune with their DAGLING at the hands of a beginner. Club house visitors galore, and they came out and watched the flying.

The Melbourne Air Race.—T. Campbell Black, co-pilot of the winning machine in this race, is a member of the London Gliding Club. He has flown the SCUD II.

Dorset Gliding Club

Saturday, September 15th.—A moderate westerly wind again provided good flying conditions at Maiden Newton on Saturday afternoon, and the recent high standard of flying was well maintained. As it had been decided to concentrate on training, only three flights were made from the hill top, the pilots being Leak, Stephens and Frayling. Instruction was continued in the valley during the late afternoon and evening, Shelton performing well from a point some half way up the slope, whilst two new members, Lansdown and Dennis, showed steady improvement a little nearer the bottom.

Sunday, September 16th.—The return of the Yorkshire party resulted in a large assembly of members at the site on Sunday morning and flying was commenced almost immediately from near the hangar. Wind conditions were very similar to those of the previous day and good flights were made by Rolfe, Laver, Davis, Leak, Stevens and Frayling. Those who were not actually engaged in flying and launching operations unpacked the DORSLING from its trailer and commenced work on the landing skid, broken during the last day of the meeting at Sutton Bank. The finishing touch to an enjoyable day was supplied by Shelton, who qualified for his "A" licence with a particularly good flight of 34 secs. duration from the top of the northern ridge.

Saturday, September 22nd.—Very low clouds and intermittent rain made flying impossible during the early afternoon, but maintenance work was carried out in the hangar. A temporary improvement in the weather about 5.30 p.m., however, permitted a launch, and Leak took off into a rather boisterous westerly wind. This proved to be a most adventurous flight, the machine being caught in severe down currents, forcing the pilot to dive beneath some telephone wires and land amongst a herd of cows. Solomon concluded operations from the hill-top with a normal straight flight; Lansdown, Dennis and Clewlow receiving instruction on the lower slopes until dark.

Sunday, September 23rd.—As it had been found necessary to leave the mechanical launching apparatus in the valley the previous evening, the unusual procedure of morning training was adopted, Leak flying the machine to the bottom from a hand launch. Unfortunately, after some fifteen flights had been made by Sheldon, Lansdown and Dennis, the DAGLING was blown over by a sudden gust of wind, sustaining damage to rudder, ailerons and elevators. Repairs were commenced immediately and completed before nightfall.

Saturday, September 29th.—Due to heavy rain, the flying meeting at Maiden Newton was cancelled, but several Weymouth members took the opportunity of working on the two-seater, now nearing completion at Dorchester.

Sunday, September 30th, 1934.—Although conditions were somewhat rough, Leak was launched from near the hangar, eventually making a good landing after experiencing several severe bumps. Flying was abruptly terminated when Davis, caught in a very turbulent region of air, completely wrecked the starboard wing by side slipping into a tree.

Saturday, October 6th, and Sunday, October 7th.—A very busy week-end for all, Weymouth members continuing their work on the two-seater, while the Yeovil party concentrated on the new wing for the DAGLING.

Saturday, October 13th.—Finishing touches applied to the new wing, which had been conveyed to Maiden Newton the previous evening, and a new skid shoe fitted to the DAGLING.

Sunday, October 14th.—The return of dark evenings resulted in an early start on Sunday morning, and 2.30 p.m. found the DAGLING fully rigged, inspected and again quite airworthy. The construction of the new wing in nine days by the Yeovil members must constitute a record for spare time work. The actual time taken was 150 man-hours, which figure includes covering and doping. Leak, making the test flight, found flying trim good, but reported unfavourably upon the small spare rudder fitted as a result of the recent "blow-over." Rolfe, Davis, Stephens and Frayling, following in quick succession, contented themselves with normal straight flights, it being thought unwise to attempt turns, considering the rather gusty wind. The weather being unfit for training, flying was continued by the same pilots from the hill-top until dusk. A new and larger rudder is in course of construction and should be ready by next week-end.

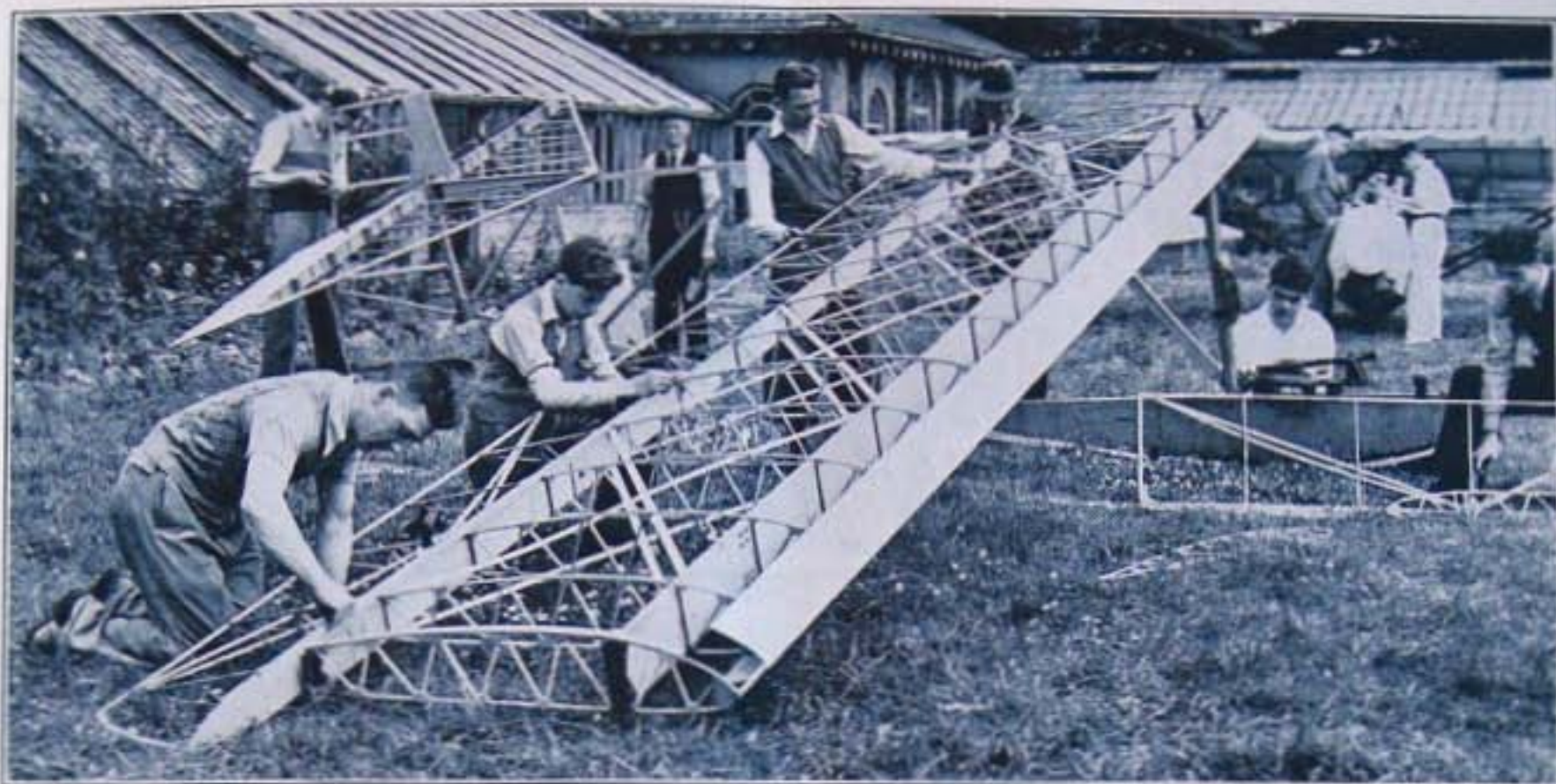
South Shields Gliding Club

History of the Club's Formation

Brief notes relating to gliding efforts carried on by the South Shields Gliding Club have occasionally appeared in the pages of *THE SAILPLANE AND GLIDER*, but until now no full report of the club's activities has been submitted.

Few clubs, we think, started under more modest circumstances. No blaze of glory heralded our arrival. The weight of civic dignity was not added to our opening day, nor had we a host of keen new members of the sort whose enthusiasm evaporates at the first crash. No "influential citizens" were interested. In fine, we were few in number, innocent of flying experience, and slender of purse.

In August, 1933, chiefly owing to the efforts of Mr. R. Renaut, about a dozen young fellows formed the South Shields Gliding Club. Previously we had loosely hung together in flying the primary machine Renaut had built, with quite good results considering the inexperience of the "pilots." The machine was completed by July, 1932, and represented the crowning achievement of almost two years of practically single-handed effort.



Members of the South Shields Gliding Club building their "Dickson" Primary.

It was a primary glider, the design of which was taken from an American magazine, but modifications were made with a view to its future conversion into a secondary. Its main features included a wing span of 30 feet and chord of 5 feet, giving a wing area of 150 square feet. The weight was in the region of 120 lbs., chiefly owing to the light and rigid methods used in construction. With a 10 stone pilot, the loading worked out at about 1½ lbs. per square foot. The wing section has a high lift co-efficient and, owing to the shape of the leading edge, it does not lose its lift at high angles of attack. At the same time it lent itself admirably to easy construction. Streamlined struts were substituted in place of flying and landing wires. These features combined to produce a very slow-flying machine, which would survive a stall from 20 or 30 feet without damage. To these factors we attribute much of the success we experienced in our first stages.

First Flights

The first test flights were carried out on a large field at Simon-side, adjoining our workshop. No one present had either the ability to fly the machine or even the experience of seeing a glider in flight, and it became apparent that the only means of getting the machine into the air would be by towing it behind a motor cycle, the only available motive power. Considered in the light of regular gliding practice, the position presented some elements of danger. The "pilot's" knowledge of piloting was totally theoretical; no instructor was there to impart steadying influence and give helpful advice; the field was ridged at right angles to the wind direction, making any speed on the part of the motor cycle a trying business; the tow-rope was short and in parts moth eaten. The day that had been looked forward to for months had arrived, the glider was finished, the weather was fine, the helpers were willing (but not to fly) and the railings were bowed 'neath the weight of gaping rustics. The moment demanded no less than that the glider should glide.

The pilot-builder took his courage in his hands, and the joystick between his knees, while the cyclist straddled his machine. The silence was broken by the stutter of the 2½ h.p. engine as it started forward. To our great delight the machine, on reaching flying speed, shot off the top of a ridge in a fierce climb. At about 15 ft. the earth, having disappeared from the pilot's ken, he deemed it safer to return, and accordingly pushed the stick hard forward. Seeing the ground rushing up to meet him, he "gently" eased the stick back and again climbed to 20 feet. After several such undulations the machine landed safely, to the heartfelt relief of the pilot. We afterwards realised that we had been treated to a polished exhibition of the art of "pump-handling." Thus was the ice broken.

Later, with the help of a borrowed shock-cord, we made good progress and spent many enjoyable days flying the machine.

Our first setback came after a few months' flying. One windy afternoon the machine, which was left unattended for a moment while we examined a break in the shock cord, was overturned by a severe gust of wind, the rear fuselage and tail unit being completely smashed and most of the wing ribs damaged. The dreary work of reconstruction was eventually completed, and in August, 1933, it was realised that if any progress was to be accomplished a club must be organised with properly constituted rules, etc.

Official Inauguration

The inaugural meeting, attended by about a dozen enthusiasts, was held on August 5th, 1933, and the South Shields Gliding Club was officially formed. Our headquarters were made at Simon-side, until such time as a more favourable site than the adjoining 30-acre field was available. There was also good workshop and storage accommodation here.

From this time onward training proceeded steadily, using a shock cord bought from a member of the disbanded Sunderland Club. During four months of flying, extending to about 400 launches, neither the machine nor the pilots were damaged in any way. At times heights of nearly 50 feet were attained by light pilots, although the slope of the field was almost negligible. Flying was suspended for the Christmas season and our first social effort, in the form of a dance, was held in February, our President, Dr. Charles Marks, being installed.

The building of a nacelle on the machine was commenced. Experience had taught us that the glider was slightly nose-heavy, therefore it was essential that the nacelle should be as light as possible compatible with the necessary strength. A light wooden framework with fabric covering was used together with plywood strengthening where necessary. A beaten-out aluminium nose-piece added to its smart streamlined appearance, the weight complete amounts to approximately 8 lbs. Easy access to the pilot's seat was necessary, owing to the lightness of the structure. The top of the nacelle was therefore made hinged at the front, being swung up to allow the pilot to be seated and clipped back into place with metal clips. The extra convenience has occasioned much appreciation from the pilots, and the performance of the machine has been materially improved.

The building of a modified DICKSON primary which our Mr. Coates had already commenced, formed a second big part of our constructional programme. All the main components are now complete, and we expect to have two machines in commission shortly. A new auto-towing site has been secured near Hylton, and good accommodation is available for machines, towing-car and gear. With these points in our favour we are now continuing our flying with much better prospects ahead of us, and hope to report our progress from time to time in the pages of THE SAILPLANE.

Derbyshire Gliding Club

Thursday, September 15th.—The GOLDEN WREN, belonging to Messrs. Smith, Slater, and Robertson, made its soaring debut in its native air after an extremely successful *première* at Sutton Bank.

Site: Cocking Tor, Ashover; site 400 ft. high. Slater took off in an east wind of about 10 m.p.h. and flew for 40 minutes, gaining 500 ft. It was getting late and the hillside was in shadow, nevertheless a very favourable first impression of the site was obtained. Smith then took off, but the wind having dropped a little he failed to soar and had to land at the bottom, damaging the skid and the keel. His impressions are not recorded, but the glue-pot we thought we had finished with was unearthed and in use again the following week-end.

Sunday, September 30th. Site: The Weaver Hills; wind S.S.W., 30 to 35 m.p.h. Robertson was first up, and he quickly reached 600 ft. The site was a little disappointing, however, in that the beat was not as long as had been expected owing to one end of the hill being shielded by an opposite hill. Robertson once tried this end, but received a good shaking-up and lost about 200 ft., so thereafter left it alone. Slater and Smith also flew, Slater practising circles by laboriously working his way out from the hill, then making one circle by which time he was back over the start. Smith was the most fortunate to-day, in that while he was up a large cloud came over and he ascended from 600 ft. (the approximate ceiling of hill left) to 1,300 ft. in approximately 5 mins, this without any circling or manoeuvring of any kind. It is almost certain that he could have circled up to a considerably greater height, but as he was flying at 37 m.p.h. and still creeping slowly backwards, he kept his nose religiously into the wind.

Total flying time for the day, 3 hours.

Sunday, October 14th.—A black day in the club annals. Four enthusiastic lads with the trailer travelled to Kirby Moorside and set off for Derby in good faith with a brand new primary in all its pristine glory. Two hours later four chastened individuals were surveying its wreckage, a howling wind, a stationary lorry and a violent rainstorm having contributed towards a completely smashed wing and the loss of half the trailer. The general views of the patiently waiting members are not fit for publication—"nuff sed."

Monday, October 15th.—Site: Riber Castle, Matlock, Derbyshire. Wind N.W., 10 to 15 m.p.h. Riber is a very steep hill of 400 ft. overlooking the town of Matlock; and it is here that Slater has intended to "show 'em" for the past three years. This he did in no uncertain fashion by rising 250 ft. above the Castle and flying actually over Matlock for 20 minutes. Curiously enough, he found most lift at each end of the hill, where one would have expected the wind to go round the sides instead of over the top.

We hope to demonstrate from time to time in these columns that we have a site for any wind within easy trailer distance of Matlock, and we therefore hope that before next summer we shall have visitors to help us with our efforts to forward the sport in Derbyshire and incidentally have a jolly good time themselves.

Week-ending October 24th.—A steady week at the workshop, repairing the trailer. We are really becoming quite proficient with the glue-pot, there being quite a competition for the privilege of mixing same; let us hope the enthusiasm continues.

Yorkshire Gliding Club

It is reported that the club has co-operated with the Bradford Civic Players in the production for the first time in England of the German play, "Under Europe's Heaven," by von B. Schwezen and J. B. Malina. The scene is laid in a German gliding school, and evidently the play is that described in THE SAILPLANE nearly a year ago. At the first performance on September 23rd, the German Vice-Consul at Bradford acknowledged on behalf of other representatives of foreign Governments present the courtesy of the management in inviting them to attend.

Tees-side Gliding Club

It is reported that, since July, members have been flying regularly every Saturday and Sunday at Aislaby. Their first crash occurred on September 30th, when C. Scott turned downwind just after a launch off the hill-top in a strong gusty wind, and hit a hedge and earth bank. He was carried off to a nursing home with concussion, but his injuries were not found to be serious. The machine was a primary, and should evidently not have been used at all in such a wind.

Midland Gliding Club

An informal flying meeting was held on the Long Mynd, Salop, on September 22nd and 23rd. The FALCON and BLUE WREN took part, the latter was damaged on landing (not by its owner). We believe the RHONADLER was there too.

The owner of the adjoining grouse moor has applied for an injunction that would restrain the club from using the site for gliding and soaring. An interlocutory application for the injunction was heard before Mr. Justice Crossman on October 18th. According to *The Times* report, Mr. F. R. Evershed, for the defendants, said that they would be able to satisfy the plaintiff that gliding over the moor was scientifically impossible because the gliders had to keep to certain earth formations. Mr. John Bennett, for the plaintiff, said that the defendants had agreed to do no gliding on the day of the shooting, but that, if they did so the day before, there would not be a bird within half a mile the next day, and the birds would be so frightened that they would not return for weeks. Mr. Evershed replied: "My friend makes statements about grouse which, I confess, I find startling." It was stated that, if the plaintiff would agree to expedite the trial, defendants would undertake not to hold a gliding meeting pending the trial. Mr. Justice Crossman gave liberty to apply for a speedy trial and the motion then stood over until the trial.

It is reported that a meeting to form the club was held on October 17th, at which Mr. C. Espin Hardwick was elected president, Mr. Guy Beeton hon. treasurer, and Mr. H. T. Testar, of 80, Gibson Road, Handsworth, Birmingham, hon. secretary. It was decided to open a fund to resist the application for the injunction.

Harrogate Aircraft Club

Mr. Addyman writes that he has circularised the clubs to obtain support for a scheme whereby a "Standard Training Glider" of his design (now in regular use by his own club) would be built in quantity. The idea is that, instead of building a complete machine, each club should concentrate on a particular part or parts and make large quantities of it; thus reducing the initial skill required and increasing the speed of production. In financing the scheme the co-operation of the Air Ministry has been sought, but so far without result.

Having now received replies from numerous clubs, Mr. Addyman comments: "The position is roughly that some clubs have dwindled down to two or three and, in one case, one active member. Some clubs are busy with their own construction schemes, others would like to purchase complete machines, and others think it more interesting to build a machine entirely themselves." Other clubs have expressed willingness to co-operate.

New Gliding Clubs

Coventry.—The Coventry Aviation Group has decided to form a new gliding section.

Burton-on-Trent.—It is reported that a movement is on foot to form a gliding club, following the exhibition given recently by Miss Meakin, who is a native of the town.

Fleet.—An R.F.D. primary glider has been loaned to the Fleet and District Gliding Club by Mr. E. Brame, of Farnborough (and formerly of the Surrey and London clubs). The club will eventually purchase it. Negotiations are going on for several sites, suitable for varying winds.

Orkney Islands.—An attempt is being made to form a gliding club. A former member of the Glasgow Gliding Club has settled in Kirkwall, and another enthusiast is one of three people who built and flew a "jump glider" in the district 18 years ago. This glider was largely made from materials thrown away by the R.N.A.S. men at Scapa Flow.

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