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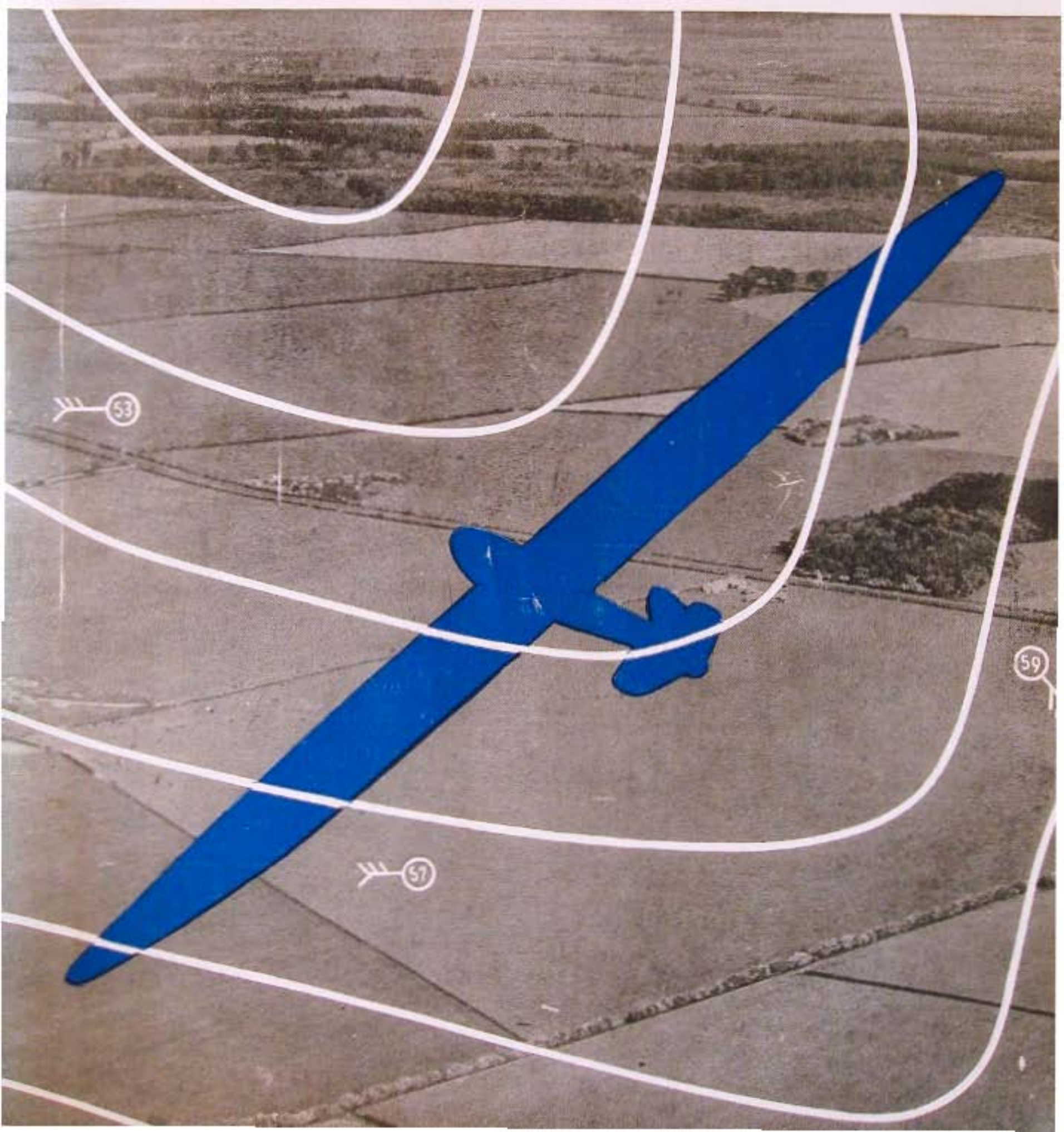
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EDITED BY ALAN E. SLATER



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Club Training to "Silver C" Standard

HOW came there to be an organised British Gliding movement?

Just over forty years ago Percy Pilcher was experimenting with his gliders in the hope that he would one day soar; but he was left alone to do the flying.

Thirty years ago José Weiss collected a tiny band of about two disciples to fly his gliders on Amberley Downs, and one of them managed to rise 100 feet and keep up for nearly a minute. But the aeronautical Press was occupied with the coming of the aeroplane.

In 1922 Arthur Martens, in Germany, soared for an hour. The British public began to sit up, and the *Daily Mail* meeting at Itford that autumn—the first British soaring meeting—was the consequence. A lot of talk was heard then about starting a British gliding movement. But after the meeting gliders and gliding men dispersed, and not a glider was seen in the place for nearly eight years. The reason for this collapse of interest was, apparently, the opinion that mere soaring along a hill became boring after the first novelty had worn off. The great question, whether human soaring flight were possible, lost its interest as soon as it had been answered in the affirmative.

The next chance for the establishment of a gliding movement came in 1926. In that year, in Germany, Dr. Lippisch designed the PRÜFLING, the earliest secondary-type training glider, and for the first time it became possible to train *ab initio* pilots right through to the soaring stage. This put an end to the obsession that soaring was a most difficult art, only possible for those with much previous aeroplane experience and with, in addition, something amounting almost to a bird-like instinct for "feeling out the invisible air-currents."

Here, then, was definite proof from Germany that impecunious people could learn to fly without paying exorbitant sums for aeroplane instruction—and not merely down a hill, but for hours on end in level flight. For those who yearned to get into the air, but had been hitherto prevented by lack of money, the chance had come at last. But what was done about it in Britain? Nothing at all. Nobody was interested.

Then came 1929, when, after a few tentative efforts in previous years, the art of cloud-soaring and storm-

riding became established in Germany, and a wonderful new technique of cross-country soaring flight was developed.

Now, at last, interest was aroused. So many people wrote to *The Aeroplane* about the new developments that its editor called them together to a "gliding lunch" at the end of the year. At that famous lunch the present British gliding movement was born.

Reviewing past history, therefore, it becomes obvious what was needed to start a gliding movement in Britain. Gliding down-hill did not start it. Hill-soaring flights did not start it. Nor did it begin when a way was found for enabling impecunious young people to fly. It was high-performance soaring which did the trick, and by this we mean soaring flights away above and beyond the circumscribed regions of mere "hill-lift." This is a fact, whatever the reason for it.

As to the reason, is it not that high-performance soaring has set for itself a goal that has never yet been reached? For a large body of people to strive towards a common end, they need the stimulus of constant progress—not merely progress in quantity, such as more "A" or "C" certificates, but progress in such things as the mastery of nature's forces and the wresting of nature's secrets from her.

The history of even the present British gliding movement bears this out with remarkable accuracy. The first club to emerge from a precarious existence and become a successful going concern was the London Gliding Club. The process began in 1933, the very year in which high-performance soaring from the club ground began in real earnest. The subsequent history of other clubs teaches the same lesson.

The upshot of all this argument is that a club, to be progressive, must encourage its members to explore the possibilities of soaring flight to the utmost of which they are capable, and must make every possible effort to provide them with facilities for doing so.

The question of what induces people to take up soaring flight is one upon which nobody can agree on the answer, and the reason, we believe, is that an answer is not to be found by confining the discussion to material things. The answer is one which may not easily be expressed in words, but it is unmistakably to be found in past history.

Coming Events

B.G.A. Annual Meeting

The 7th Annual General Meeting of the British Gliding Association, Ltd., will be held at 119, Piccadilly, London, W.1, on Friday, February 25th, 1938, at 6 p.m.

National Competitions

This year's National Soaring Competitions will be held at the London Gliding Club, Dunstable Downs, Bedfordshire, from Saturday, July 9th, to Sunday, July 17th, inclusive. Aeroplane-towing will be provided.

Club Meetings

Aero-towing at Leicester.

The London and the Derbyshire and Lancashire Gliding Clubs are combining at Easter to run an aero-towing meeting at Ratcliffe Aerodrome, Leicester, which has been kindly lent by Mr. W. Lindsay Everard, M.P. The inclusive dates are April 15th to 19th, which is from Good Friday until the Tuesday after Bank Holiday.

The two clubs are providing club aircraft for the use of their respective members. Other clubs and private owner groups are invited to make use of this opportunity of getting aero-tow practice, bringing their own machines.

The cost will be 10s. per tow to 2,000 feet. Those booking in advance may obtain books of ten vouchers for £4 4s.

Most of the towing will be done by an "Avro 504K" of Messrs. Air Publicity, Ltd., which is the ideal machine for the purpose, and whose pilots are very experienced in glider towing. Major J. E. D. Shaw has also promised that Mr. McMurdo can attend with his "Cadet" (if it is back from Germany by then).

Particulars and cost of local accommodation will be announced later by Basil Meads and Dudley Hiscox, who are in joint charge of the organisation on behalf of their respective clubs.

It is pretty certain that aero-towed starts will be a feature of this year's National Competitions in July, so there should be a rush to take advantage of this opportunity for practice and experience. Further, Leicester is so situated that fine long cross-country flights may be expected, especially if the wind is easterly as it often is at that time of the year.

The aerodrome is 7 miles N.N.E. of Leicester, adjoining the west side of the Foss Way (i.e. the Newark road). The furthest possible distance to the East Anglian coast is 120 miles; to the Kent coast, 150 miles; to the Pembrokeshire coast, 190 miles; to Land's End, 270 miles; and to John o' Groats, 420 miles. The nearest coast is a corner of the Wash, 46 miles distant to the E.N.E.

Other Easter Meetings.

The Cambridge University Gliding Club are holding a camp at Huish, Wiltshire, from Wednesday, April 6th, to Monday, April 18th. Launches will be by bungee, winch and aero-towing. Good hill-soaring is

possible in several wind directions. Private owners will be welcome. Anyone interested should apply to the Secretary of the club at 1, Benet Street, Cambridge.

The Midland Gliding Club is holding an Advanced East Camp from Friday, April 15th, to Sunday, April 24th, chiefly for advanced pilots and private owners who want to do "Silver C" qualifying flights. Apply to the Camps Secretary, R. B. Durose, 1, Newhall Street, Birmingham, 3.

The Yorkshire Club has an open meeting from April 16th to 19th, and the Southdown Club is arranging an Easter Camp in conjunction with the Croydon Gliding Club. The London Club has an instruction course from April 8th to 17th.

May.

The London Club has another instruction course from Friday, May 6th, to Sunday, May 15th.

At Empire Day week-end (May 28th and 29th), the Yorkshire Club holds an open meeting, and other clubs have, we understand, been asked by the Air League to give demonstrations to the public.

Whitsun and After.

Two instruction courses cover the Whitsun holidays. The Derbyshire and Lancashire Club's course is from June 6th to 19th, and the London Club's from June 3rd to 12th. The Derbyshire and Lancashire Club are holding an Open Meeting at Whitsun during which they will entertain a team from the Midland Club; there will be an inter-club contest, either in soaring or in spot-landing, according to the wind. The Yorkshire Club also has an Open Meeting at Whitsun.

Whit Sunday is June 5th.

Later, from June 18th to 26th, there comes the Newcastle Club's "Gipsy Meeting," at which visiting pilots will be able to try several different sites. Particulars from P. A. Wills, 3, Chapel Street, Milton Street, London, E.C.2.

From July 24th to August 1st the Yorkshire Club are holding their Annual Competitions combined with a high-efficiency training course which will include aero-towing, and for which a parachute, barograph and maps will be available for distance flights.

Further training camps are being held by the Derbyshire and Lancashire Club from June 27th to July 8th, by the London Club from July 29th to August 12th, by the Yorkshire Club from August 7th to August 20th, and again by the London Club from September 9th to 18th.

Applications to join the training courses should be made respectively to:—

The Secretary, London Gliding Club, Dunstable, Beds.;

Secretary, Yorkshire Gliding Club, 32, Wensley Green, Chapel Allerton, Leeds, 7;

Secretary, Derbyshire and Lancashire Gliding Club, 63, Clarkehouse Road, Sheffield, 10.

National Meetings Abroad

The American National Soaring Contest will be at Elmira, N.Y., from June 25th to July 10th.

The German National Soaring Contest is at the Wasserkuppe from July 23rd to August 7th; while the goal-flight circular tour is from June 26th to July 10th.

A Soaring Site on the North Downs



The south-west slope, which forms part of the proposed soaring site near Reigate, is well seen in these two photographs, which are combined to form a panorama, though their foregrounds do not quite fit. The field in which Mr. Hiscox's "Kirby Kite" has landed is so large as to form an almost "foolproof" landing ground.

[Photos by E. J. Furlong.]

THE photographs on this page show the first trial, on Sunday, January 9th, of a soaring site on the North Downs at Colley Hill, near Reigate, 17 miles south of London. From this point the line of hills stretches, with a few gaps, for about 25 miles in either direction, with steep slopes facing mostly between S. and S.S.E., and rising in places to 500 feet above the plain below.

Originally four people, Miss Ann Edmonds, Mr. and Mrs. R. D. Price, and Mr. S. Humphries, had the idea of forming a club here for "C" pilots and private owners, the launching being done by winch from a large field at the bottom, which would also serve as a landing field. Before long, many other members of the London Gliding Club became interested in the project, which has in consequence evolved into a scheme for providing the London Gliding Club with

an alternative site for use in southerly winds. The advantage of this is that those who fly there will be protected under the Companies Act, that the London Club's organisation and office can be used and much work thus saved, and that the club's repair facilities will be available.

It will be necessary, of course, for club members using the site to pay an extra subscription; however, new members wanting to fly only here and not at Dunstable will not have to pay the Dunstable subscription as well, but will be charged an entrance fee.

In addition to the winch, it is intended to equip the site with a hangar, 60 ft. by 30 ft., and a club sailplane, probably a GRUNAU or KITE, will be kept there permanently; for this reason, only pilots who have reached GRUNAU stage will be allowed to fly on the site. (No instruction of pupils will be done.) Private owners will be charged the same fee as at Dunstable for keeping their machines there.

To get the scheme going it will be necessary to secure a sufficient number of promises from club members and private owners to join. Then, if all goes well, an opening meeting will be held—at Whitsun, it is hoped.

Although the best soaring wind for the site is south, there is a bowl facing south-east and one facing south-west. The latter was used by Mr. Hiscox when the accompanying photos were taken, the wind at the time blowing strongly from W.S.W.; to reach the bowl he had first to fly up-wind round a projecting spur, losing height to below the top of the hill, but there was excellent lift as soon as he got round the corner, though he could only fly on a short beat with such a wind direction. But with a south wind, as already stated, a really long slope-soaring flight should be possible, and anyone able to bridge the two awkward gaps at Dorking and Guildford should be able to reach the far end of the Hog's Back near Aldershot. As for thermal and cloud flights there is the trouble that south winds tend to bring stable air when they herald the advance of a depression, but not all south winds are of this kind, and if there are any thermals going a south-facing sun-baked slope should provide a goodly quantity of them.



Above: Mr. Hiscox's "Kirby Kite" about to be launched from Colley Hill, Reigate. Below, soaring in the up-current after getting round the corner.

[Photos by E. J. Furlong.]

Soaring Across Poland

[In the summer of 1936 three members of the London Gliding Club visited the Polish soaring centre at Bezmiechowa, and their exploits were described in THE SAILPLANE for December of that year. In 1937 a much larger party made a similar visit; they were: Harold and William Adcock, Barry Bucknell, Ernest Collins, Charles Ellis, Miss Huffam, Hugh Kendall, B. Lacey, F. W. West, Miss Wild, and John Wordsworth. Below, Mr. Bucknell gives a general account of the expedition, after which Mr. Collins and Mr. Wordsworth describe the cross-country flights they made, which got them their "Silver C" certificates.]

THERE is something about Poland. . . . In 1936 there were three pioneers of the England-to-Bezmiechowa movement and they flew just about the minimum time possible in a fortnight. Nevertheless two of the 1936 trio, grown rather proud in the meantime, returned in 1937 with a party of eleven.

Again, with the exception of one day, of which more anon, individual flying times could be recorded more easily in minutes than in hours, and still I'll wager there will be a party next year if they will have us.

The outward journey was much the same as last year, but crowded and, therefore, about 2,000 miles longer. Travelling third it is a long way, but it's worth it. We were so weary and hysterically gay on the long lap to Nowy-Zagorz that when we heard we had a four-hour wait we immediately sought a hotel. It was a tiny village hostel, but they made us thoroughly welcome and despatched us early the next morning very much refreshed.

We old hands welcomed the tortuous but sunlit five-mile journey in one of the world's most unroadworthy carts, and finally the glorious view of the clubhouse.

Perhaps the contrast between the primitive life of the country round Bezmiechowa—at least 100 years behind the times (this particular part of Poland being very poor)—and the culture and charm of those one meets in the Gliding School, and the farms round about, constitutes part of Poland's attraction.

Flying was held up for a few days, as our papers were not through; and here is some advice to next year's Polish Possibles: don't go for the first two weeks in August as the Polish competitions are taking place and the school is short of instructors and machines, and full of pupils. This gives the instructors little time for the sort of fraternising that was so pleasant last year.

However, we spent the first week and a half very pleasantly in spite of the bad weather. We visited the Government School at Ustjanowa, with its 300 machines and magnificent workshops. This is the surprising place where a crash figure of 15 per day is regarded as being well below the extravagant limit. It was in these workshops that we had the supreme pleasure of ripping plywood off a perfectly good German sailplane wing "just to show how poor the gluing was." There is, of course, great competition between Germany and Poland, and, having slight suspicions of this wing, the Works Department fell on it like vultures.



The clubhouse at Bezmiechowa.

We saw here the new training machine—the FROG—a beautifully made box-spar ZÖGLING type, but a very strong machine with an enormous oil and coil-spring shock-absorber supporting the skid. Even more important, we saw and dealt with a gargantuan lunch which was hospitably provided.

If ever you get bored in Bezmiechowa, wander off to Olczanica—a semi-upstage hotel in the vicinity. It's about the worst cart trek you can find on a muddy moonless night (the British Army would drop mechanisation if they saw these wire and matchwood chariots in action), but as Findandia, the mighty Finn, observed on crossing the threshold: "Much lawveley goirls."

Returning to flying: the most unfortunate member of our party was West, who arrived a week too early for the training group, and as they did nothing for the first few days he had no flying at all. We last saw him disappearing in a deluge, his cart broadsiding dangerously in the cascade pouring down the steep hill. The droge was lending him a tattered umbrella, and in the same breath saying the price would be more for bad weather. West used to say he had had so many disappointments in trying to get his "C" that the biggest disappointment of all would be to find he was annoyed at being disappointed. However, I believe a fruity train smash on the way home did much to compensate for a fruitless trip.

The rest of us and very many others carried out uphill landings on SALAMANDRAS and SROKAS. We got just a little bored, thinking we had this sort of thing pretty well in the bag, and attending all day without daring to ask when it was our turn. Then I underwent that essential piece of training which comes to every pilot who thinks he is becoming rather classy at manipulating sailing aircraft. I disgraced our crew. I had landed at the bottom, having scraped around precariously in the wake of some soap-bubble thermals just before a terrific slow moving front came over. About 30 machines sprang into the air like grasshoppers, and amongst them John Wordsworth in a KOMAR. However, to my delight stout fellah Ivanoff gave me another go in time for the tail end of the cold front. I flew for an hour and a half till the wind was a myth, slipped

off too much height in the calm, dived at the hill, saw some *Kartoffels* (potatoes) and thought (miserable wretch) "a shade to the right and you'll miss 'em"—everything fine except port wing slightly low on straightening up, hit some rough stuff—crack. Exit *Skrzydła* and self-respect. The tough weight-putter instructor Ivanoff sent to say one shouldn't be so miserable—it was only one KOMAR wing after all—a most noble gesture.

As usual we met charming Polish folk at the Club, and also four Finns and Mr. Boris Cijan, the leader of Jugo-Slavian Gliding, who reported good progress from that country. He spoke expressively of the British aero engines in use there.

Mention should be made of the famous Mynarski who heroically gave up his room for two non-flying friends of mine, and the really delightful hospitality these friends afterwards found at Mr. Maunthner's Rudenka house.

Mr. and Mrs. Baronowski and Panna Wisia were extremely kind to all of us.

We should like once again to thank all our Polish friends for their welcome, and now you should hear from those who waited for *der Tag* and did things.

BARRY BUCKNELL.

Bezmiechowa to Mistkowica

August 13th (the day after the main body of the English party had left) had a lot to live up to. Our instructor, Ivanoff, had assured Wordsworth, Kendall and me that it would be a good day for cross-country flying, and had persuaded us to stay behind for this last chance.

"Came the dawn" and—blessed be Ivanoff—the conditions, a moderate wind blowing almost straight up the hill, and a blue sky which by about 8 o'clock was showing all the signs of a good thermal day to come. Of course, by then all the machines were out and most of them flying. My early, happy frame of mind was slowly replaced by a less pleasant state of mingled suspense and disappointment, because by the time conditions had become really good all the machines suitable for cross-country were in the air and I was still on the ground.

Eleven o'clock came and the instructor also began to show signs of disquiet, for it appeared that two pilots had been sent off in KOMARS with instructions not to fly off across country and to land at given signals. These signals had been placed out on the hill, but instead of landing the two pilots had gone off into the blue. As one of these machines had been reserved for me, things looked black, because all the other high-performance sailplanes were up with orders to attempt "Silver C's" or stay up as long as they wished. John Wordsworth and Boris Cijan, the Jugo-Slavian, were trying for "Silver C's," and Hugh Kendall was attempting to gain his height qualification.

However, Ivanoff rose to the occasion, and the only available training machine fitted with instruments was hastily converted to take parachute and barograph; I was placed in it, given maps and instruction, and told that I was to be the first pilot to fly cross-country in a SALAMANDRA. Of course, the obvious happened, and I went almost immediately to the bottom.

Here just a note about the site; on the south slope in anything but a strong wind, the first few beats call for quite a considerable amount of judgment and practical knowledge. One has to turn hard on the launch and then almost immediately hard back again, then close up to the edge of the forest before turning again for the return beat. Sometimes only one of two beats are necessary before one can fly over the forest and increase the length of the beat fifty-fold, but sometimes one must battle about for a considerable time, concentrating on keeping just over the crest and making the beats as long as possible.

This time, after only two badly flown beats, I lost position and had to land well down the hill. As I sat there waiting for the horses to fetch me, and cursing myself for a bad pilot, a KOMAR landed further up the hill and was taken up to the top again. No sooner had it vanished over the top than someone came running down to tell me that I was to fly it. On getting to the



The upper two pictures show the "Salamandra," a nacelle type used for thermal soaring practice. Below is Mr. E. E. H. Collins about to start in a "Komar."

top I found that it was Kendall who had landed, very pleased with himself for having reached 1,000 metres.

I was bundled into the machine, given a compass course, and shot off.

This time no mistake, and there followed about half an hour touring up and down the slope, occasionally finding small thermals, sometimes up to about 300 ft. and sometimes down to only about 100 ft. Just when beginning to get a little despondent again, I struck something a little better, managing to get in three or four circles before it gave out or I lost it. Flying back from behind the hill, I ventured further out and again struck something. With the variometer showing $\frac{1}{2}$ to $\frac{3}{4}$ metre per sec., I circled for a considerable time, and when at last it faded out I found myself at nearly 1,100 metres and far behind the ridge.

This time I had no maps, so I ignored the ground and set off on the compass course. The air-speed indicator was not working, which made it difficult to judge the speed to put on. The KOMAR, although flying very well, had a distressing tendency to turn right; consequently I often found, on taking my eyes from the variometer or clouds, that I was heading in a totally wrong direction. From the top of this first thermal I descended steadily to 400 metres before I found the next one, which showed almost nothing on the clock to start with, and never at any time showed more than $\frac{1}{2}$ metre. However, it took me up to about 900 metres again, and I had only lost 200 metres before I found another which lasted to just over 1,000 metres. While circling in this thermal I caught glimpses, out of the corner of my eye, of a large bird of the falcon or hawk family, circling and swooping around me.

The end of this thermal found me facing a completely blue sky with a few scattered clouds to the south and behind me. I'd better mention here that my compass course was given me in the hope that it would lead me to the town of Sambor, and it meant that I had to fly almost dead across wind. I naturally made a large allowance for drift and an extra allowance for the machine's self-willed wandering, but, although I must have passed quite near, I never saw anything of Sambor.

To continue: I struck out into the blue with eyes glued on the variometer, except for an occasional glance at the compass and the sky, which remained blue. Ensued a steady descent until, just as I was despairing of finding anything else, and down to 400 metres again, the variometer showed a check in the rate of descent. Knowing the habits of that particular variometer, I gave it a couple of seconds and then, as it was still slowly moving up to zero, I took advantage of lessons learnt and turned as steeply as I could. Sure enough, after the first circle it read zero and it continued to rise slowly, although not until after about ten circles did it reach $\frac{1}{2}$ metre. After what seemed hours of circling I found I had reached 1,100 metres again, and I was still circling with the clock now showing $1\frac{1}{2}$ metres per sec.

After a few more circles the variometer needle started to move quite fast and in the space of two circles moved up to over 3 metres per sec. and was accelerating. This shook me a little and I decided it was about time I took a look around. A quick glance showed me nothing above but the blue sky, but underneath, and only just underneath, were black, turbulent clouds. (It seems that Wordsworth, flying on a more southerly



course, flew under these same clouds.) What to do? Here was I, at nearly 1,400 metres, in a machine in which it was forbidden to go near clouds (two had broken up in clouds that year). True, I had a parachute, but also I had the coveted "Silver C" within my grasp. A closer look round showed me that the cloud lay to the north and west, extending as far as I could see; that it was moving in a northerly direction, that I was only just over the edge, and that before me lay clear sky; so I decided to leave the chance of records and gratefully take what I had. Sometimes I wish I had taken the chance, but mostly I'm glad I didn't; with no A.S.I., an old machine, and the certainty of eventually having to go down through the cloud, I should have been lucky to get away with it.

Anyhow, I shot for the edge, all out; the barograph record showed that after the last, short, almost vertical ascent, there followed an equally steep descent of some 100 metres.

Followed a long steady glide over a very changed world; in place of mountains and forests, flat land, straight roads, small villages and small woods. Afterwards I discovered the reason for the lack of thermals over this last part of the flight: this district, over which I was flying, was the marshy one north-east of Sambor, which never gave off thermals, and always had to be avoided on long flights.

When down to zero on the altimeter I was still at a good height, and not until it showed 300 metres under start did I have to look for a landing place. I picked out a fairly long green strip among the small cultivated patches by a village, and made my approach. Just as I was entering it at one end, a couple of horses got up from beside some small bushes and ran into the middle. I had to make a last-minute change of plan, turning across wind and between the bushes, over a ditch, and finished up in the middle of a potato patch, with no damage to anything but the potatoes.

What followed is, as the novelists say, another story. Suffice it to say, all the hundred-and-one difficulties were eventually overcome, the people were very considerate, if a little fearful, and that Friday the 13th was my lucky day after all, the distance being 62 kilometres.

As I had previously flown the 5 hours at Bezmiechowa that completed, if the worst, the first "Silver C" by an English pilot, or for that matter any foreign pilot, in Poland.

To Barry Bucknell's I add my own thanks to my instructors and all my other friends at the Aeroklub Lwowski, Szkoła, Syzbowcowa w Bezmiechowej, for a grand time, of which this flight and the other 10 hours' soaring were only a part.

ERNEST E. H. COLLINS.

Bezmiechova to Jaroslaw

When Kendall and I decided to stay another day at Bezmiechova after the rest of our party had left, in the hope of a soaring wind, we had the feeling that we were stretching the acknowledged "cuckoo-ness" of all gliding people just a little further than had been done before. The one half-day's soaring of the previous fortnight had given us an idea of the pleasure to be had from flying over the site, although thermal conditions had been absent, and anyway, we said, "If we didn't get any more flying, at least it postponed our parting with the many friends we had made of more than half a dozen nationalities."

The morning of Friday the 13th came (I think we could not have noticed the date until after the Thursday night train had left), and with it a very light south wind, but our instructor said, "Not a cross-country day."

Kendall was one of the first "off" in a KOMAR and was soon well over the 1,000-foot mark, and circling merrily. I was launched at approximately 11 a.m. in one of the two S.G.3's, a machine of full cantilever construction and 60-foot wing span, which looked to me very much like a RHÖNADLER, but may have been entirely different in construction. Whatever its technical details, it was a dream to fly, and furthermore it soon became evident that, contrary to forecast, there was something in the air besides hill-lift.

The first thermal I hit was over a clearing in the forest on the south slope, and this took me up to about 500 metres. Another immediately after seemed to be going to complete the good work, but, very surprisingly, faded out to nothing at 900 metres, about 70 or 80 metres below cloud base. (I apologise for the metric figures used here; my instruments, all Askania and very good, were calibrated metrically, and I am no mathematician.) However, it was not until two and three-quarter hours after my launch that I managed the 1,000 metres. I had actually been up to 950 metres four times, only to find the thermals fading out just below cloud base, and in each case I came down to hill-lift, of about 200 metres, before finding another thermal. This was very disheartening, particularly as several of the KOMARS had already disappeared in a northerly direction. The only conclusion I can come to is that there was deceleration of the thermals conse-



An "S.G. 3" sailplane.

quent upon their spreading out at cloud-base, so that the rate of ascent was just sufficient to continue to take up the KOMARS but not quite sufficient to support the S.G.3 with its higher sinking speed. It's a very good excuse, anyway.

At 1.45 I joyfully watched the altimeter pass the 1,000-metre mark to 1,050, at which point I was in cloud, then turned my nose into a north-north-easterly direction, towards Przemyśl.

A quarter of an hour later, at a height of 130 metres, I was anxiously selecting a landing near the little village of Dobromil, not more than a third of the way to my 50 kilometres! Possibly a perspiring crowd, shoulder to shoulder in the street below, was the means of my salvation. At any rate I did the most careful circles I had ever done over an onion-shaped church dome, the Eastern glamour of which failed to impress me half so much as the spikiness of its spire; and soon found myself in the best thermal of the day, showing four metres per second rise. This took me up to 1,080 metres and again just into the cloud base.

Shortly after I passed over Przemyśl (pronounced "Shemmish"), with its wide river down which log-rafts were floating to the near-by paper mills, and altering my course to due north, made towards Jaroslaw, the next town of any size.

Conditions were not very good after Przemyśl. I ran into the tail end of a thunderstorm moving from west to east across my course, got into a violent hail-storm, and finally, when a black wall of cloud seemed to stretch right across my course and down to the ground, decided to make a landing.

There being no smoking chimneys, shadows or clouds, or other means of telling the wind direction, I decided to land in the opposite compass direction to that on which I had been flying, and was only saved from an unhappy fate at the last minute by a puff of smoke from a chimney, which went off quite heartily to the south. I put down in a very large field in the village of Munina, on the outskirts of Jaroslaw, at 3 p.m., and with the kindly help of scores of peasants, one of whom spoke French and, more surprisingly, understood mine, de-rigged the machine and stowed it safely in a large barn. I got soaked to the skin in a heavy thunder shower on my way to the nearest telephone, and fell in a pond, up to the knees, on the way back! In this state I travelled home non-stop from Jaroslaw all through Friday night, Saturday, Saturday night, Sunday and Sunday night to be at work on Monday morning, but, DID I CARE?! . . .



Mr. J. L. Wordsworth, of the Yorkshire Gliding Club, whose cross-country flight in Poland, described on this page, obtained for him the "Silver C" certificate.

I was very delighted, on rejoining Kendall, to hear that he had managed his thousand metres and that Collins had completed his "Silver C." It was hard luck on Kendall that he was debarred from going cross-country owing to the fact that he had not previously done his five hours.

In conclusion, I should like to add to that of Bucknell, my tribute to the courtesy of the Polish people we met, and the efficiency of their organisation. My greatest regret was that I had to come home direct from Jaroslaw without being able to say good-bye to them. Also, I should like to thank the other members of our party, all London Club Members, who were so kind as to take me with them.

JOHN L. WORDSWORTH.

Launching by Aero-Tow

I DO not entirely agree with "Corunus" in all the points of his article on launching by aero-tow in the January issue.

Perhaps if I give my ideas and the reasons for them, pilots will be able to weigh up the merits of each case and decide what really ought to be done.

When the aeroplane starts its run the sailplane should be climbed gently to 20 feet and held there. The cable will then be horizontal at the tail skid and it will not interfere with the fore-and-aft trim of the aeroplane. If the machine has to labour over trees the strain in the cable may be eased temporarily if the sailplane pilot dips the nose slightly.

If he is only six feet up he has no control over the cable, and cannot dip if a critical moment arrives. He is so low that he must watch the ground, instead of keeping an eye on the aeroplane and cable as he should.

This argument turns on control of the cable, which can be achieved after a little practice. The worst case I have experienced was when the aeroplane lost height to avoid entering clouds. The sailplane overtook badly following it down, and the two nearest flags on the cable were below me. The slack was taken up without snatch by diving slightly, doing "S" turns, and pushing the stick forward slightly before the snatch arrived.

A position to be avoided is well below the aeroplane with a slack cable. If the towing machine passes through a thermal it climbs, and the cable becomes slacker still, and it is very difficult to avoid a violent snatch which pulls the tail of the aeroplane down, slows it up, with another snatch to follow.

I see only disadvantages in doing flat skidding turns, outside the aeroplane's path. It feels more comfortable to do a correct turn, and if a violent snatch occurs when the sailplane is skidding, the sudden yaw must put undue strain on the wing root fittings.

If the sailplane is flown in line with the aeroplane pilot's head and rudder, and 20 feet above, it will be doing a slightly wider turn than the aeroplane, but will not be interfering with its fore-and-aft or directional trim.

Excluding thermals, the cable may be slackened if the aeroplane takes up a steeper angle of climb temporarily, or if the sailplane gains speed through the pilot's inattention to the cable. It follows that it is not always safe to assume that a slack cable indicates a thermal, and therefore the propitious moment to release.

Providing the sailplane pilot is flying correctly, a change of climbing attitude may be detected when more of the top of the fuselage is seen. In a thermal the aeroplane gains height without change of attitude.

Sailplane pilots should insist on having the cable flagged at intervals; it is more than half the battle and makes control over the cable much easier.

GAMEFEATHER.

There are only two details in "Gamefeather's" notes which vary with my suggestions; his remaining points are supplementary.

He prefers to climb the sailplane to the correct towing altitude immediately after the glider has taken off, and with the aeroplane still on the ground. Technically he is right, but my notes were expressly for beginners. A beginner will presumably be trained in a large field, avoiding risks of failing to clear surrounding trees.

If he tries to keep the glider below its correct final position during the take-off, he can at the worst prolong the take-off. If he tries to keep it at the correct height and goes in fact a little higher, he risks breaking the aeroplane's propeller. Therefore I advocate a learner to keep low until the aeroplane is off. Once in the air, though, it is safer to be too high than too low, as "Gamefeather" remarks.

Second point: flat turns. The point in flat turns is that they put up the drag of the sailplane and so tighten the cable and thus lessen possibility of a slack developing, which in a turn is awkward.

There are two further points I failed to make in my notes. First, that a common fault of an aeroplane pilot new to the job is to fly too slow. He knows the sailplane's normal flying speed is much less than his, so tries to help by flying in a semi-stalled condition, hanging on his prop. and yawing wildly about the sky. This keeps the sailplane pilot too busy even to curse. It is far better for the aeroplane to put on an extra 5 m.p.h. and fly smoothly and under full control. Even intermediate sailplanes are quite comfortable on the tow up to 55-60 m.p.h. and safe at much higher speeds.

Second, the matter of quick releases. Modern sailplanes often have a second quick-release on the nose, without a tunnel, for aero-towing. But in any case the link on the cable must for aero-towing be a really slack fit.

In a winch launch the downward pull on the cable at the moment of pulling the quick-release is tremendous; nothing short of acetylene welding the link to the sailplane is likely to cause a jam. But the drag on the cable during an aero-tow is of the order of 15 or 20 pounds. The link should be tested on the ground, and should fall out of the tunnel under its own weight when the release cable is pulled.

CORUNUS.

Fiction and Fact

Mr. E. R. Wilson, founder of the Pwllheli Gliding Club in Caernarvonshire, was in the news on January 10th as the result of a flight in his Scud I sailplane on the previous day near Abersoch. This, according to a national daily, is what happened:—

GLIDER SWAYS ON CLIFF

Mr. Wilson took off on high ground near Llanbedrog Head, overlooking Cardigan Bay. He rose about 20 feet, when his glider suddenly dived and crashed into a stone wall on the edge of the cliff.

The machine wobbled precariously for a few seconds and onlookers expected it to crash over the wall into the sea 800 feet below. Then it came to rest, and the pilot scrambled out unhurt.

And this is Mr. Wilson's own account of the affair, which he has sent us as a corrective to the Press version:—

"The site was a gentle slope with a stone wall well below on the edge of the main ridge of 300 feet. There were three excellent fields below.

"I made the mistake of climbing on the catapult—stalled—dived—recovered, and then, failing to clear the wall, pulled up the nose and struck it a glancing blow. I did not feel the bump and my variometer flasks are intact. Result: One longeron and two panels in the nose broken and one elevator written off.

"Had I kept my nose down all the way I should have cleared the wall easily, and I think that pilots should be reminded of this when they have been accustomed to climbing on a winch.

"I had previously flown the Scud I from Rhiw Mountain, 900 feet, and I find her delightful to fly. She came out of a partial stall in less than 20 feet."

Thermals from Alpine Peaks

While in Germany on a ski-ing holiday during the first two weeks of January, we had a couple of fine clear sunny days. And on each clear day, from about 9.30 a.m. until sunset, little cumulus clouds sat above each peak of the surrounding mountains. They stood straight up on their tails, and were about 200 to 300 feet high, and about 50 to 100 feet in diameter, with their bases about 30 feet above the rock.

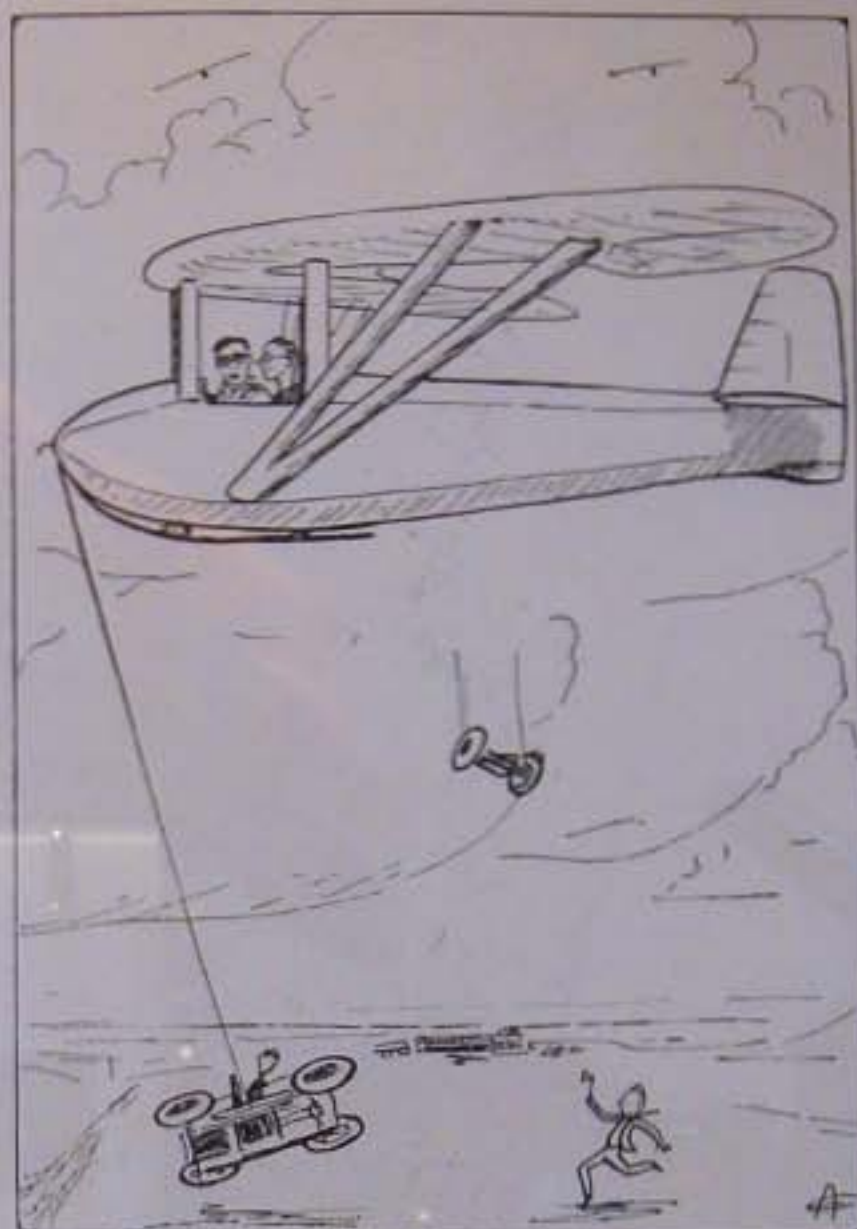
The thermals on the peaks remained stationary as long as the sun remained, but little cloudlets came off the foothills every three to five minutes.

The height of the peaks was roughly 5,000 feet and the shade temperature about -5 degrees F.

The underneath of these clouds, as seen from the valley, looked dark, and though a light wind was blowing, the cloud mass never moved, but could be seen forming and dissolving on the up and down-wind side respectively.

The thermals looked very weak, but it appeared possible to soar with a good machine as long as the sun lasted.

A. C. E.



"...AND SHALL WE PULL THE PLUG NOW?"

(Drawing by Ann C. Edmunds.)

Mr. Buxton's Lecture

A correction should be made to the report of the discussion after the lecture on "Development of Sailplanes" published last month (p. 11). Mr. L. E. Baynes should have been made to say that sinking speeds of sailplanes "were much increased by increasing speeds" (not spans), "owing to greater parasite drag and skin friction."

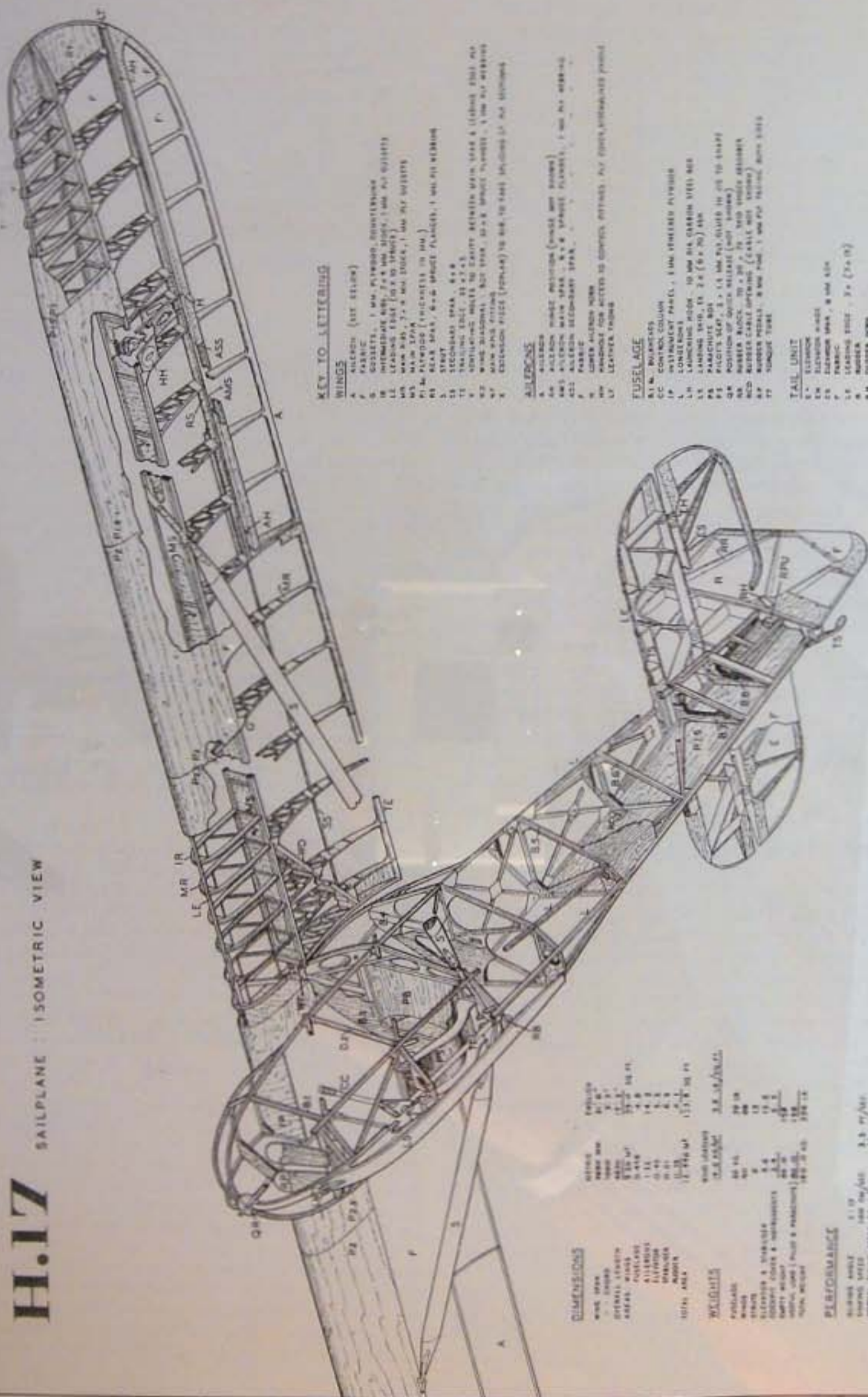
Two Parties

On Saturday, January 22nd, we attended by invitation the supper and dance given by the Derbyshire and Lancashire Gliding Club at the Marquis of Granby, Bamforth, a high-spirited affair in the best club tradition. Next day, on the site, we noticed transformations and extensions to the club buildings, resulting in a shed for the club cars and an extra dormy-house.

The Southdown Club's annual meeting, dinner and party, to which we were invited, was a most lively occasion, notable for the great variety of entertainment provided. This included some fine aviation films by Mr. G. A. Head. For the first time in England a toast was drunk to the success of THE SAILPLANE AND GLIDER.

ZI.17

SAILPLANE ISOMETRIC VIEW



CHURCHILL OF ALEX

WINGS

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FUSELAGE

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TABLE UNIT

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CLIMATE NEWS CENTER

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RESULTS

Available	80-94	95-10
males	400	100
total	5	15
Refugees & voluntary	5	5
economic cases & independent	5	5
family members	400	100
other cases (EURO & independent)	200	100
total request	605	310

PERFORMANCE

Receptor	Age	Sex	Weight (kg)	Height (cm)	Heart rate (b/min)	Stroke volume (ml)	Cardiac output (l/min)	Stroke index (ml/m ² /min)	Cardiac index (l/min/m ²)
1	25	M	70	175	75	100	7.5	100/70	1.0
2	25	F	55	160	70	80	5.6	80/55	0.8
3	25	M	80	180	80	110	8.0	110/80	1.1
4	25	F	60	165	75	90	6.8	90/60	0.9
5	25	M	75	170	78	105	7.8	105/75	1.0
6	25	F	58	162	72	85	5.8	85/58	0.8
7	25	M	72	172	76	102	7.6	102/72	1.0
8	25	F	56	161	71	82	5.7	82/56	0.8
9	25	M	78	178	82	115	8.2	115/78	1.1
10	25	F	62	168	78	95	7.0	95/62	0.9

Reviews

Wood. Issue of January, 1938. Obtainable from the publishers at 33, Tothill Street, London, S.W.1; price 1s. post free.

Last month's issue of *Wood* included, as already announced in *The Sailplane*, an article on the H-17. By the kindness of the Editor and of the artist, we have been able to reproduce on the opposite page a very fine drawing of the machine by Mr. Lawrence Wright, A.R.I.B.A., who also wrote the article and has illustrated it with photographs of his own taken in Messrs. Zander & Scott's works at Dunstable. Mr. Wright is, in his spare time, a member of the London Gliding Club.

The drawing is an "isometric" one: that is, all lines in three particular directions, at right angles to each other, are drawn to the same scale; these directions are: parallel to the span, parallel to the fuselage, and vertical. Only diagonals are not to scale.

The journal *Wood* is a finely got-up paper, the articles in each issue covering a wide range of subjects connected with the uses of wood, and anyone interested in this universal building material would find it well worth buying.

The popularity of the nimble little H-17 grows ever greater. The original design was by Ullrich Hütter, of Salzburg, and the type is now being marketed in Germany in enormous quantities by the Göppingen aircraft factory.

Messrs. Zander & Scott, of Dunstable, have the sole manufacturing rights for Britain, and the work keeps them pretty busy.

Mr. B. H. T. Oliver, of Birmingham, has the sole British rights for selling the working drawings for those who wish to build their own, and has already sold drawings to customers in Australia, South Africa, Devonshire, Cambridge, and to a private buyer at the De Havilland Technical School.

Planeurs de Performances: Caractéristiques Générales. Dossier Techniques. Obtainable from E. Spire, Section Aviation du C.O.B., 73 bis rue Danjou, Billancourt (Seine), France. Price 5s.

M. Spire, President of the *Section Aviation* of the *Club Olympique de Billancourt*, has sent us this most useful and interesting collection of sailplane plans, and offers to send it to any British reader for 5s. in English money.

The volume contains plans, on paper 10½ by 8 inches, of 30 well-known sailplanes of various nationalities, giving all the usual data in metric units. There are 20 German types, 3 Austrian (H-17, H-28 and Musger Mg 9), the Swiss *Spyr III*, Russian K.I.M.3, French *Avia 40 P*, Hungarian *Nemere*, British *King Kite*, Polish *P.W.S.101*, and Italian *Asiago G.P.2*.

In addition to the usual weights, dimensions and speeds, the data include wing sections and other special particulars where known.

This Gliding. Obtainable in quantities for re-sale to the public, from STANLEY D. DICKSON, 175, Savile Street East, Sheffield, 4.



The "King Kite" sailplane: an illustration from "This Gliding."
reviewed herewith.

(Drawing by S. D. Dickson.)

Wherever the public congregates to watch gliding, there is a demand for information about how it is done, and why. Any club which can satisfy this demand in printed form will not only benefit its funds but will save its members the boredom of constantly repeating the same answers to the same old questions.

Nearly four years ago a brochure called "Silent Wings" was sold in great numbers in this way for a shilling a time, but the supply has now run out. "This Gliding" is written to serve the same purpose; though more modest in size, it is also more modest in price, being designed to sell at 6d. It is illustrated by drawings of the various types of gliders and sailplanes, and the author has been so bold as to include diagrams showing how a glider keeps up.

The only paragraph in the booklet which we object to is that telling anyone who wants to know the address of the secretary of the nearest gliding club to "drop a line to the Editor of *The Sailplane*." What is the British Gliding Association for? The Editorial stamp bill for January, 1938, was fourteen shillings.

The Air Almanac (Air Publication 1602). Ephemeral Sheets (Air Publication 1602 A). H.M. Stationery Office, London, Edinburgh, Manchester, Cardiff and Belfast. Price 2s. 6d. each. Sunrise, Sunset, Moonrise and Moonset Tables. H.M.S.O. 1s. net (postage extra).

That these publications have been sent us for review is a sign of the increased prestige now enjoyed by sailing in official circles. They have had a very good press, so readers are probably already familiar with their purpose. It will be a great day when a sailplane pilot, lost on a goal flight, will make use of a bubble sextant and, with the help of this Almanac, find his way safely to port before the thermals give out.

The Sailplane and Glider. Bound volume for 1937 (Vol. 9). *The Sailplane* Office, 13, Victoria Street, London, S.W.1. Price 15s.

This volume is now obtainable from the Publisher; the binding is in blue cloth with gold lettering.

The charge for binding readers' own copies of *The Sailplane* is 6s. per annual volume.

Cross-Country Flights from Sutton Bank in 1937

The accompanying map shows the routes of cross-country flights made from the Yorkshire Gliding Club's site during the past year. Those of K. Lingford to Beverley and R. Haslinger to Hull were "Silver C" flights, and Mr. Lingford's to York was a goal flight.

In addition to those shown, there was a flight by R. F. Stedman in his two-seater to Oswaldkirk and back—12 miles out-and-return.

The machines used were Mr. Slingsby's FALCON III and KIRBY KITE, Mr. Lingford's KIRBY KITE, Mr. Barker's SCUD III, and the club GRUNAU BABY.

Two of the flights have not so far been fully described in *THE SAILPLANE*:—

On May 30th F. N. Slingsby, with G. A. Hinchcliffe as passenger, took off in his two-seater with barely enough "hill lift" to soar, and reached 2,400 feet by "picking bits out of a thermal here and there." They climbed to 3,600 feet south of Helmsley and "had a battle with about 50 acres of black cloud which tried to snatch us, but by increasing speed to 50 m.p.h. (though still climbing) managed to get clear of it." They were then 4,100 feet over Helmsley, so made for Welburn, where they wandered about for some time in thermals, watching the aero-towing going on below.

Mr. Barker's flight to Boroughbridge in his SCUD III on June 20th started with a winch launch into a patch of lift which immediately took him to 2,000 feet. There he suddenly looked to the north for the first time and "nearly fell out of the cockpit" with surprise, for there was the dark cloud of a "front" coming along and dirty-looking clouds were already forming below, while



he was still being carried rapidly upwards. But it moved only slowly, and after a time he left it, though he still kept height as far as Boroughbridge.

"Silver C" Certificates

To the list of British "Silver C" certificates published last November (p. 259) there are now three more to be added:—

No. 621. Mrs. Joan Price.

No. 622. G. M. Thompson.

No. 623. L. R. Robertson.

The test flights for all three were completed during the National Competitions last year.

Mrs. Price is the first Englishwoman to obtain the certificate in England (Miss Heron-Maxwell having flown the tests for hers in Germany). She did the distance flight in Germany last July as a member of the British team at the International Contest, and the height in Derbyshire on September 3rd.

Mr. Thompson completed his in two days, doing the duration on September 2nd and height and distance on the 3rd.

Mr. Robertson did the duration on September 1st and height and distance on September 3rd. He is a cousin of R. G. Robertson, who obtained "Silver C" No. 75 (in the international series) in 1935.

To all three we offer congratulations.

After the end of each year we usually tabulate the number of "A," "B," and "C" certificates earned by the different clubs. It is difficult to do so in the case of "Silver C's" since many of the pilots belong to more than one club; also, few of them have done all three test flights on the same site. In making up the following table we have entered each "Silver C" pilot under what may be called his "home club," irrespective of where the test flights were done. Only certificates granted in Britain are counted; not those granted to British subjects abroad.

Club	1934	'35	'36	'37	Total
London	2	2	1	8	13
Derby and Lancs.	—	1	2	2	5
Yorkshire	—	1	1	2	4
Cambridge Univ.	—	—	—	3	3
Midland	—	—	—	1	1
Southdown	—	—	—	1	1
Newcastle	—	—	—	1	1
Totals	2	4	4	18	28



Herr Rudolf Haslinger, of Königsberg, who made the longest cross-country flight from Sutton Bank during 1937, thereby becoming the first foreign pilot to complete his "Silver C" in Britain.

Gliding Certificates

The following gliding certificates, for which qualifying flights were made on the dates shown, were granted by the Royal Aero Club on January 19th:—

"A" Certificates

No.	Name.	Club.	Date.
864	T. H. Greenburg ...	Cambridge Univ. ...	8.12.37
865	T. H. W. Clark ...	Newcastle ...	5.12.37
866	R. R. A. Bratt ...	Cambridge Univ. ...	7.12.37
867	J. C. D. Langley ...	Derby and Lanes. ...	19.12.37
868	S. F. Broome ...	Derby and Lanes. ...	12.1.38
869	R. M. Lynn ...	Cambridge Univ. ...	9.12.37
870	Miss E. H. W. Rowan ...	Newcastle ...	19.12.37
871	B. Chalmers ...	Newcastle ...	13.12.37
872	E. A. Verdon-Roe ...	Yorkshire ...	7.3.37
873	H. Chater ...	Channel ...	2.1.38

"B" Certificates

617	L. H. Angus ...	Newcastle ...	19.12.37
856	C. J. E. Kendall ...	Derby and Lanes. ...	19.12.37
872	E. A. Verdon-Roe ...	Yorkshire ...	20.3.37
873	H. Chater ...	Channel ...	2.1.38

"C" Certificates

611	C. M. Ratcliff ...	London... ...	12.12.37
722	R. E. Smith ...	London... ...	12.12.37
797	Miss Z. Paddon ...	London... ...	12.12.37
872	E. A. Verdon-Roe ...	Yorkshire ...	21.4.37
873	H. Chater ...	Channel ...	9.1.38

An interesting name which appears three times in the above list is that of Flying Officer Eric Alliott Verdon-Roe, who is stationed at the new Dishforth Aerodrome near Boroughbridge, with a Bombing Squadron. He is the son of Sir Alliott Verdon-Roe, the famous pioneer aeroplane pilot and designer. It was Sir Alliott's observations of the flight of the albatross, during his early days at sea, which convinced him that human heavier-than-air flight was possible.

Table of Totals

The accompanying table of totals for the various clubs shows the total certificates qualified for during each of the past three years and granted so far at the present day. These totals are liable to be further increased by later applications for certificates qualified for during those years, but it may be taken that the 1935 figures are practically complete and 1936 nearly so, while there are still several additions to be made to 1937.

The Imperial College Club is now part of the London Gliding Club, but its separate figures are given below the table for interest. Similarly, the Ryedale Club (at Kirbymoorside) is now part of the Yorkshire Gliding Club. In 1935, however, it had a separate existence; allowing for this, it will be seen that, in that year, the Midland Club really came second in order of totals.

The figures given for the Derbyshire and Lancashire Club in 1935 were actually earned by the Manchester Club before the amalgamation which brought the present club into being.

The Cotswold Club only began flying in 1937.

The figures for Yorkshire include the "A" certificate of W. D. H. McCulloch (No. 778), which was wrongly attributed to London in the list we published last October.

There are, of course, certain anomalies, such as the certificates of Mr. J. V. Rushton, all three of which have been attributed to the Derbyshire and Lancashire Club, where he made some of the test flights during visits from his home club, the Midland.

After these explanations we will now leave the figures to speak for themselves.

Totals for Three Years

CLUB	1937				1936				1935			
	"A"	"B"	"C"	Total	"A"	"B"	"C"	Total	"A"	"B"	"C"	Total
London (including Imperial College)	81	72	42	195	53	30	25	108	60	54	29	143
Yorkshire (including Ryedale)	25	25	30	80	18	16	15	49	18	8	9	35
Derbyshire and Lancashire	26	22	19	67	18	12	12	42	2	1	1	4
Newcastle	27	23	6	56	5	—	—	5	—	—	—	—
Midland	11	9	13	33	19	14	24	57	20	6	2	28
Cambridge University	12	11	1	24	4	4	—	8	1	—	—	1
Ulster	6	7	9	22	—	—	—	—	—	—	—	—
Southdown	9	5	6	20	4	4	—	8	1	—	—	1
Furness	2	3	2	7	1	2	—	3	2	—	—	2
Channel	1	1	2	4	—	2	—	2	—	—	—	—
Kent	2	1	—	3	1	—	—	1	3	—	—	3
Essex	—	1	—	1	2	—	—	2	—	—	—	—
Cotswold	1	—	—	1	—	—	—	—	—	—	—	—
Cornwall	—	—	—	—	1	—	—	1	—	—	—	—
Dorset	—	—	—	—	—	—	—	—	5	5	—	10
TOTALS	203	180	130	513	126	84	76	286	112	75	44	231
Imperial College	3	3	1	7	4	4	3	11	—	—	1	1
Ryedale	1	1	—	2	1	1	1	3	10	—	—	10

Correspondence

The Wasserkuppe Report

SIR,

My club, I am sure, is not alone in viewing with concern the recent suggestions (mainly in the Wasserkuppe Report) for the use of the Gliding Subsidy. I am therefore asked to forward to you for publication in *THE SAILPLANE* the enclosed copy of a Memorandum on the subject which has been sent to the British Gliding Association by the Yorkshire Gliding Club.

LAURIE A. ALDERSON.

Hon. Secretary, Yorkshire Gliding Club.

Memorandum

The principles of Subsidy assistance which have been accepted and followed since the inception of the Subsidy are directed towards providing facilities for training in gliding and soaring up to the standard represented by the "C" certificate, and to provide for practice flying on club-type sailplanes for pilots when trained.

In accordance with these principles the following items have been adjudged eligible for percentage Subsidy help:—

Capital purchase of Training and Club-type Soaring machines, Sites, Site improvement, Hangars, Workshop, moderate sleeping accommodation and major flying equipment for club flying.

Items held *not* eligible for Subsidy assistance are: High-efficiency Sailplanes not suitable for ordinary club use and costing over £250. Any form of clubhouse accommodation other than sleeping accommodation, lavatories, etc.

We disapprove entirely the proposed changes in the above scheme as outlined in the Wasserkuppe Report, and refer again to the notes we unanimously agreed should be appended to our copy of that Report in the hands of our B.G.A. representative, Major Shaw.

The main consideration, and in our opinion the only purpose for which we can justify asking for the subsidy, is to maintain and improve ordinary club instruction and soaring facilities on the Quantitative basis.

The "Silver C" cannot properly be regarded as a flying certificate. It is rather an award for special performances for which there is no possible justification in asking for Government help to obtain. If the Treasury or any other Official Department have any misapprehensions on this point the position should be explained to them and no attempt should be made to take advantage of their lack of knowledge of the relative value of Gliding awards in order to secure public funds to subsidise purely high-efficiency and largely sporting flying.

There are indications that the present Subsidy is insufficient to maintain the present rate of club progress on the existing basis, and a larger grant may be justifiably applied for this purpose alone. It should be borne in mind that, quite apart from the suggested direct subsidising of high-efficiency flying, which we strongly disapprove, this type of flying is already receiving indirect subsidy assistance in the provision of hangars, flying equipment and helping to maintain strong efficient clubs as bases for operations.

Once the principle that the Subsidy should continue to be used solely as heretofore is adopted, the question

of whether any particular purchase can properly be subsidised is easily and accurately determined.

"Silver C" Facilities

SIR,

One can sympathise with Mr. Hardwick over the worries of Gliding Club management, and still remain convinced that he is wrong about this "Silver C" business.

It seems high time that the "Silver C" was debunked. The awe—even apprehension—with which cross-country flying is regarded is quite out of date. Not only that—it is pernicious. For this attitude of mind is, surely, largely responsible for our backwardness in this country as compared to Germany, Poland, and probably Russia. I remember reading that during the International Meeting last summer two pilots arrived at the Wasserkuppe on their "Silver C" distance flights. Doing goal flights right from the start! That's the spirit, and we shall never get it over here while people regard cross-country flying as a luxury only available to the idle and rich private owner.

Why on earth should the "C" certificate be considered the limit of club training? The most popular (and prosperous) light aeroplane clubs allow and encourage cross-country flying, blind flying instruction, advanced aerobatics, and everything. They regard these things as integral parts of flying and training for flying.

So, without a doubt, is cross-country flying. More can be learnt in one cross-country flight than in dozens of hours over the hill-top. And the club member has every right to grumble if he is denied this training solely because he is not rich enough to own a machine of his own.

After all, what is needed for a cross-country flight? A GRUNAU BABY, a variometer, a barograph, a trailer and a retrieving car. The club need not provide the last two—why not leave it to the pilot to persuade a friend to fetch him back? And what is there left that is beyond the reach of Mr. Hardwick's club?

Eighty per cent. of the fun of soaring (as of most other sports) is the fun of getting better at it. If a club wants to keep its old members, as well as attract new ones, it must offer almost unlimited chance for its members to get better and better. Otherwise there will be disillusionment, and a Bolshevik feeling against the rich private owner. And no club that is expecting to go on growing can build on such a foundation.

H. C. BERGEL.

Bradwell Edge to Great Driffield

SIR,

Apropos the opening remarks in the account by P. A. Wills in last month's issue, I would like to remind him that the "shrieking virgins" were flying machines with performances much lower than those of the HJORDIS. It is necessary in such machines to leave the hill with little height for the simple reason that a great height is unattainable.

The thermal in which I left unfortunately let me down, but had I been flying a HJORDIS, Stanage Edge would easily have been reached, thus we would have had a second chance. ONE OF THE SUNDRY INNOCENTS.

In Praise of "Scud III"

THE SCUD III sailplane was produced in 1935, and was described in THE SAILPLANE for June of that year, on page 85. It was designed by Mr. L. E. Baynes. The span is 45 ft. 6 ins., and area 120 sq. ft.

During the past year Mr. L. H. Barker, who owns a SCUD III, has done much flying on the machine, and has been so pleased with its performance that he recently wrote to Mr. Baynes to say exactly what he thought of it. Although this letter was not intended for publication, it has been suggested that its contents would interest readers of THE SAILPLANE, so we reproduce it herewith.

Mr. Barker, in forwarding a copy of the letter, writes: "May I say now that I would not swap the SCUD III for any machine in this country."

Mr. Barker's Letter

DEAR BAYNES,

I have been going to write to you for some time but I did not know your address. However, I saw Slingsby this afternoon and he gave it to me.

I have now done about 25 hours on the SCUD III, and I can congratulate you on designing so excellent a machine. The two most outstanding things about it are the sinking speed, which is very low, and the aileron control, which is perfect. It handles excellently and appears not to be vicious in any way, although I have never spun her, owing to the fact that I never have had 3,000 ft. that I wasn't keen to hang on to. I had mostly bad weather whenever I had the time for gliding last year, and so I'm afraid that my performance on the machine didn't give you the publicity you deserve, but I think that you will find that everyone who has seen the machine in the air in competition with other machines has been very impressed.

The minimum sinking speed occurs at 30 m.p.h., as measured by a specially calibrated venturi fixed about four inches forward of the position of the A.S.I. supplied, and about seven inches above the fuselage. The figure will be true to about plus or minus 1 m.p.h., I should say. Sinking speed is very nearly, but not quite, constant from 30 to 35 m.p.h.

What the stalling speed is exactly I don't know, largely because when flying straight the machine doesn't stall sharply at all. I should put the stall at about 26-28 m.p.h.

The elevator is just right, but there is not enough rudder; or, if you like, there is too much fixed surface for my taste. However, provided that there is ample rudder to get out of a spin, it is possible that for cloud flying the rudder is just right. It is noticeably weak compared with the ailerons in a side-slip. The machine is more stable than a GRUNAU, if you are sitting in the right place, and doesn't require so much flying attention as the SCUD II. Aileron control is very powerful. I think that this is largely due to the low lateral inertia of the machine, rather than to the aileron design, although I may be wrong about this.

The fuselage appears to be a trifle whippy at speeds above about 45-50 m.p.h., owing possibly to the high position of the elevator. This, and the use of very thin



Mr. L. H. Barker standing beside his "Scud III."

ply on the wing in positions of large curvature, are my only criticisms of the SCUD III. The thin ply in positions of high curvature is definitely a mistake, as where it leaves the spar it gets out of shape, apparently due to the pulling of glue.

[Mr. Barker now writes that, after corresponding with Mr. Baynes, he withdraws his objection to thin ply, as he sees now that "with care and good design the pulling of the wing contour by glue could be avoided."—Ed.]

All the foregoing remarks refer to the machine with a cockpit cover and carrying a parachute. I weigh about 150 lbs. in flying kit. I haven't weighed the machine since it has been completed, although I weighed it before Abbott's had quite finished it, but it will be about 300 lbs. The fuselage, I believe, is not light by modern standards, but the wings certainly are. I shall weigh the machine very shortly, as I have it here for a little spit-and-polishing. I'll send you the figures. If anyone is thinking of building a new machine he couldn't do better than the SCUD III wings and fittings on a pear-shaped fuselage.

The wheel, by the way, is very good, and takes a lot of shock off the machine. I have put a spike on the skid which I use as a brake. If there is anything more that I can tell you you have only to ask.

Yours sincerely,

LLEWELLYN H. BARKER.

Norton Hall, Norton-on-Tees,
Co. Durham.

Structural Failure

We regret to record a fatal accident on Sunday, January 9th, whereby Mr. T. E. Cocking, a former R.A.F. pilot, of Winterton, lost his life at Appleby, near Scunthorpe, Lincolnshire.

According to Press reports the glider, built to a primary design supplied by the B.G.A., had been constructed chiefly by Mr. Cocking. It was being launched by car for the fourth time that day, and had reached 50 feet when the left wing was seen to fold upwards.

Flight-Lieut. H. P. Davey, Inspector of Accidents to the Air Ministry, is reported to have given his opinion, at the inquest, that the lift wires had given way, due to faulty assembly owing to lack of experience. No official report has reached us so far.

News from the Clubs

Camphill, the site of the Derbyshire and Lancashire Club, photographed from the club's "Falcon III" two-seater by E. H. Taylor. Near the left bottom corner is the hangar, and to the right of it the clump of trees surrounding the club's headquarters. In the top right corner is the south slope of Eyam Edge, the crest of which runs diagonally across the picture, parallel to the "Falcon's" bracing wire.



Derbyshire and Lancashire Gliding Club

January.—One of the chief events of the month was undoubtedly the annual dance, which took place at the Marquis of Granby on January 22nd. Things went with a swing from the beginning, and we were delighted to have with us Dr. Slater and Dudley Hiscox, with Marshall Barnes and Phil Everall heading a large party from the Mynd.

Early in the month a west wind arrived, which was too strong to use. It is the first time that this has happened this winter, but in the morning 55-60 m.p.h. was recorded on the Edge, and late in the afternoon it was only down to 40 m.p.h. It was a pity, because between 11 hours and 14.30 hours long streets of cumulus (very similar to the Thursday of the Competitions) were passing over almost continuously.

It is a sign of the times and increasing prosperity of the club, we hope, that Basil Meads has found it impossible to carry on the two most arduous jobs in the club, those of Chairman and Chief Instructor, and so has relinquished the latter to Louis Slater. In the past the stern eye of the Chief Instructor has inspired one and all to greater efforts, and his successor, little in stature though he may be, has already acquired the reputation of being a holy terror. Good luck, Louis.

At long last L. R. Robertson and G. Thompson have been notified that their "Silver C's" have been granted in respect of flights made during the Competitions. Hearty congratulations to both of them.

Sunday, January 2nd.—Wind 15 m.p.h., N., and gusty. Broome obtained his "A." Shepard in the RHÖNBUSARD to-day made the first experimental flight to test the possibility of reaching Shotton Edge, which is nearly two miles to the north, from a high winch launch in a north wind, for it looks a grand north-soaring slope. He was launched to 1,000 feet, and flying at 40 m.p.h. was down to 400 feet by the time he had got a quarter of a mile beyond the club boundary against a much stronger wind higher up; he turned there and only lost 100 feet on the way back. With a more moderate wind and flying at, say, 45 m.p.h., it should be possible to reach Shotton Edge comfortably.

Saturday, January 8th.—Wind 5 m.p.h., W.S.W. Delightful training conditions. Late in the afternoon a low cloud formed overhead unnoticed, and some excitement was caused when Mills, on his first winch circuit, disappeared completely from view at about 200 feet. He emerged again in a few seconds in a steep diving turn and completed a good first circuit.

Sunday, January 9th.—Wind 50 m.p.h., W., gusty. Glorious thermal day with long streets of towering cumulus. Flights to Doncaster and the East Coast would have been a gift, but we felt safer on the ground!

Next week-end the wind was 60 m.p.h. plus on Saturday and 45 m.p.h. on Sunday; no flying.

Sunday, January 23rd.—Wind 15 m.p.h., S.W. First soaring of the New Year. Very little lift but rough. Maximum height of the day was 500 feet, and the average a scrappy 200 feet. Rather disappointing for our cheery crowd of visitors from the Mynd. Langley obtained his "B."

Next week-end the wind was 60 m.p.h. on Saturday and 50 m.p.h. on Sunday, from N.W.

Summary of Flying for January.—Bunty launches, 88; winch launches, 75. Flying time, 5 hours 2 minutes. Flying on 5 days. Certificates: 1 "A," 1 "B."

Cambridge University Gliding Club

Summer Vacation.—Two KIRBY KITES were flown in the National Competitions by club members. K. Lingford in his KITE gained third place in the final placing, and the club KITE was fifth, flown by K. W. Turner and J. E. Simpson.

Three "Silver C's" were obtained by members. All the qualifying flights for two of these were made in the club KITE. Incidentally, this machine has been flown a cross-country mileage of nearly 200 miles, has logged 100 hours, and been up to 7,000 feet. And we only received delivery at the beginning of the summer.

October Term.—On looking round the hangar we found that we possess:—

Two Open DAGGLINGS, 1 Nacelled DAGGLING, 1 TOTTERHOE, 1 CAMBRIDGE, 1 KIRBY KITE.

With this fleet training continued with a batch of new members making good progress. Thirteen "A's" and three "B's" were obtained. On some unrecorded Sunday, Rushton arrived and was launched in our KITE. He found lift in a cloudless sky and came down after 20 minutes to let the club members do the same. Unfortunately the club members did not do the same!

October 29th.—Miss Naomi Heron-Maxwell arrived to take up her position as instructress. Flying is now possible therefore on all week-days, and many lecturers are finding their audiences depleted in consequence.

October 31st.—We were very pleased to have a visit from the Editor, accompanied by the Grey KITE and its owners. Despite our repeated efforts to winch them into thermals they were unlucky as the air was completely "flat." Greig showed us some excellent slides in the club room, and the evening ended with the ceremonial consumption of a bottle of egg flip provided by the Editor. [It was a medical sample.—Ed.]

November 21st.—One DAGGLING was reduced to component parts by a pilot trying for his "A." A few weeks later he succeeded, this time in one piece.

Despite this, the total of flying for the term was high, the figures being:—

October, 166 launches.

November, 208 launches.

December (4 days), 57 launches.

During the vacations most of the club flew elsewhere, returning to find Payne installed as ground engineer, and doing great work.

Three members are building H17's at varying speeds.

Mr. Rushton's Thermal Flight.

[The date of Mr. Rushton's flight was October 16th—unusually late in the year for catching thermals from a winch launch. In response to our inquiry Mr. Rushton has kindly furnished the following particulars of his flight.—Ed.]

"The time of taking off was approximately 11.45 a.m.; time of landing, 12.15 p.m. The weather was bright, quite warm for the time of the year; wind approximately 5 m.p.h., clouds about 25 per cent. After dropping the cable at about 500 feet I made about 20 circles without any appreciable gain in height. Ascent was extremely slow until about the 1,000 feet mark, when the rate of 5 feet per second was reached.

"As the altimeter was sticking and I had no barograph, I cannot give the exact height figures but I played about at the cloud base, which I should say was well over 2,000 feet.

"A gull came to share my thermal on the way up and it was interesting to note that it occasionally had to put on its motor.

"After playing under the clouds for several minutes I decided to land in order to give the Cambridge boys, who had been so sporting to invite me to fly their KITTE, a chance to enjoy these conditions.

Mr. Rushton adds that he would like to express his thanks to the Cambridge Club for the welcome that was given him.



The name of Caxton Gibbet is familiar to readers as the site of the Cambridge University Gliding Club. Here is the actual gibbet from which highwaymen once hung, but we understand it is no longer used for disciplinary measures, even by the C.U. Gliding Club. In the background is the club's "Cambridge I" sailplane.

[Photo by J. E. Simpson.]

London Gliding Club

January 1st and 2nd.—The only week-end, out of the five this month, on which there wasn't a west wind. It was north, and fierce. We were pleased to see O'Grady and Miss Rowan from the Newcastle Club.

Sunday, January 9th.—Wind pretty strong from W.S.W., with large-scale gusts which heaved people up and down in a large-scale way. Humphries, trying to get round to Whipsnade against it, dropped quickly from 300 ft. to below the hill-top, and rose again as quickly when he rounded the corner. Morland, in his WHITE WREN, was just behind and above two other machines when he was struck by a downward gust before it had reached them; there was an awkward moment until they were struck by it too. (This should throw light on "gust structure.") Little scraps of fracto-cumulus went over, and some people felt lift under each one. Pasold got up to 1,500 ft. in his BUSSARD, and Stephenson to 1,000 ft. in the GREY KITE.

A KADET pilot got too far back by the Bowl and was pushed down on the edge of the road, where he turned over. Toth took up his KASSEL 25 on the winch in the twilight, and landed in company with the Two-seater, the pair of giant machines threading their way among each other with consummate skill. At the end of the day a FALCON I was noticed to have had a piece bitten out of its wing-tip, but nobody could explain why.

January 15th and 16th.—How many years is it since the weather was so bad as to prevent flying throughout a week-end, as it did this time? We can find no record of such a thing during the past year at least; and in fact such an occurrence brings to mind the early days of the club when a gale like this was called a "Full Morland," for reasons which beginners of that day will remember. On the Saturday it moderated a bit after dark, and a brilliant full moon came up. A deputation sent someone to Hervey's house to ask permission to soar in the moonlight; his answer was: "Yes, but in private machines only." Whereupon the deputation, which consisted mainly of private owners, for some reason changed its mind.

Wednesday, January 19th.—Over 12 hours' soaring—good for a January week-day. This included a flight of 5 hours 16 mins. by Lacey in a GRUNAU, towards a "Silver C."

Saturday, January 29th.—A gale from between W. and N.W., causing widespread havoc throughout north-western Europe. Gusts up to 80 m.p.h. were recorded at Pembroke, and 78 m.p.h. near Glasgow, where the Canadian Pavilion for the coming Exhibition was blown down. "Shipping due to leave port was held up, vessels at sea ran to harbour for shelter, trains were delayed, and all fishing was brought to a standstill. Several people lost their lives, and many more were injured by falling buildings or trees." (*The Observer*.)

O. H. Furlong chose this day to do a five-hour flight towards a "Silver C." He started off at 10.30 in the morning and stayed up 5 hrs. 29 mins., the odd 29 minutes being spent in trying to get down again. He was flying the Baker GRUNAU, which has a fairly reliable A.S.I. At one time this recorded 65 m.p.h., and yet the GRUNAU was drifting backwards. Saffery, who was up part of this time, found he had to fly at 70 m.p.h. at times to keep stationary. O.H. is a younger brother of E. J. Furlong; he got his "A," "B" and "C" in three days during the last August camp, being already an aeroplane pilot. Having so far done only 2½ hours' soaring, he thought his flying to-day was somewhat erratic, but after a time it dawned on him that perhaps conditions were a trifle rough.

Sunday, January 30th.—The wind had moderated just a little, and 48½ hours' soaring were put in. At one time we counted 13 machines in the air, not including the ground-hopper. Someone broke the nacelled DAGLING by going too far behind the Bastion. Previously another pilot had taken the machine to 600 or 700 ft. E. Read did 5 hrs. 9 mins. in his GREEN WREN. Pasold was up in his BUSSARD for 3 hrs. 7 mins.

An engagement has been announced between Lawrence N. Davis and Miss Freda Collins, both members of the club. Congratulations and best wishes for the future! Each has a brother who became a "Silver C" pilot last year, and L. N. Davis is part owner of the original SCUD II. He has not yet sold out and ordered a FALCON III.

We have received, on the club's behalf, a most appreciative letter from Mr. W. Butterfield, who has done so much for the Furness Club at Barrow for eight years past, and paid his first visit to the London Club last autumn. Dunstable Downs he describes as the Mecca of motorless flying, and "a monument to the efforts of those hardworking pioneers of 1929-30."

Summary of Flying.

Week ending:	Days of Flying	Ground-hops	Timed Flights	Flying Time hrs. mins.
January 2nd ...	2	—	12	1 48
January 9th ...	3	10	55	30 0
January 16th ...	1	—	3	3 52
January 23rd ...	3	124	73	30 33
January 30th ...	4	39	93	64 26

Total since January 1st: 409 launches; 127 hrs. 39 mins. flying time.

Certificate Flights.

January 9th.—Grierson, "A."

January 19th.—Lacey, part "Silver C" (duration).

January 29th.—O. H. Furlong, part "Silver C" (duration).

January 30th.—Mrs. Aspell, "A"; Lavington, "B"; Lowson, "C"; Konreid, "C"; E. Read, part "Silver C" (duration).

Yorkshire Gliding Club

December.—One of the lean months; opened with windless days, sometimes low cloud, sometimes down-right—or right down—fog, but training was possible the first week-end. With the ensuing week came snow, and at the week-end deep snow had drifted to the eaves of the club house in places and covered the ground at varying depths; the hangar doors were blocked and the winch stood immovable behind a towering white wall. As may be expected, a soaring wind, due west, steady and perfect, was blowing! Bungy launching was impossible with a crew knee-deep, or more. We had to be satisfied with impromptu winter sports such as auto-towed sledging on a sheet of plywood.

The following week-end, December 19th, a light north-easterly blew across hard-frozen snow, and circuits were flown.

On the 26th, in light variable winds—mainly north-east—circuits were flown, and Lingford managed to hold height for a short time at one period. This, incidentally, was the last flying of the year, perhaps a tame ending to twelve months of continuous activity with some 600 hours of logged flight!

January.—The first flying of the year was on the 2nd, and first soaring on the 6th, when Fisher, in KADET, flew twice for 15 minutes, but had to make a forced landing on the moor about half a mile away, conditions being somewhat rough.

January 9th.—Southerly wind, up to 30 m.p.h. Wordsworth and Barker flew the KITE for 20 minutes each, Pick (A. O.) flew his GRUNAU for 35 minutes. Locke also flew the KITE, and the FALCON III S was taken up by Heath with Billy Sharpe.

January 16th.—This week-end The Horse arrived, ridden all the way from Bradford by Billy Sharpe. People who know Boroughbridge—an old, typical "coaching town" on the Great North Road—might be surprised to learn that he could not find stabling for the animal when he wished to put up for the night! So much has mechanical transport done for us. Major (the horse) has now settled down in his new stable and is doing his new job in splendid style. The muddy wastes of the moor, churned up by the chained wheels of retrieving-cars, are already showing marked signs of improvement.

On the Sunday, a strong south wind gave Shaw 17 minutes in the KITE. However, he flew into low cloud at 400 feet and had to land in a field near the main road.

January 19th.—More mid-week activities! West wind, 10 to 20 m.p.h. A new member, having his first launch on the NACELLED DAGLING, stalled after casting off the cable and the machine was badly damaged. Dene-Drummond flew the KITE for 20 minutes; Fisher the KADET for an hour and three-quarters.

January 21st.—West wind. Joe Fisher again did 1½ hours in the KADET and reached 2,000 feet. This fortunate man has landed some job that makes it necessary for him to live quite near Sutton Bank, and is an object of considerable envy.

January 22nd.—South wind, 15 m.p.h. Shaw flew the KITE for 11 minutes. Hancock qualified for his "A"—the first certificate flight of the year.

January 23rd.—Variable south-westerly wind, 5 to 20 m.p.h., intermittent. Several soaring flights in KITE, GRUNAU, FALCON III S, and KADET.

The annual Christmas dinner was held in the club house, about 35 members and friends being present.

January 26th.—North-west wind. Dene-Drummond kept the mid-week flag flying in the KADET. We are especially anxious that this mid-week spirit should be encouraged; facilities are available all days except Monday. Visiting pilots please note!

January 30th.—Wind north-westerly. After gales throughout the week, in which three trailers were blown completely off the premises, and two of them pretty well smashed up, Sunday was gusty in the morning. In the afternoon conditions became steadier and Shaw flew the KITE for 1 hour and 10 minutes, performing several loops. Hastwell flew the GRUNAU, Renwick the KADET, and Slingsby the new extended-wing KADET for an hour. Stedman afterwards flew the same machine and was very pleased with the performance of this new type, which he had not previously flown. Further pilots flew the GRUNAU, KADET, KITE, and FALCON III S. Altogether, nearly five hours for the day.

The Sunderland gliding members, who have built a primary machine, were with us all day; we wish them every success and hope to have the privilege of giving them assistance from time to time.

Tailpiece.—Little Boy (with mother at the launching point): "I can't see the horse now, where is it?"

Mother: "It's gone to run down the other side of the hill with that long cable, to make the machine go up!"

Southdown Gliding Club

Seventh Annual Report.

[The following paragraphs are extracted from the full report.—Ed.]

The year 1937 has seen a maintenance of the club's steady progress in development and flying activity, and membership increased by about 50 per cent. during the period, is now approaching one-half of its former maximum of 120.

In particular the extension of the use of winch-launching for all grades of club flying, and the appointment of instructors-in-charge weekly, have had a marked influence, and records for the period show a total of nearly 2,000 launches.

Of certificate-qualifying flights officially observed the following are recorded: "A," 12; "B," 8; "C," 11; raising club aggregate at date to "A," 72; "B," 39; "C," 32. In addition one "Silver C" was gained (G. A. Little), and two other members have demonstrably reached that standard. The club was again represented at the Annual National Competitions, two machines being entered: TERN, G. A. Little; and GRUNAU II, H. J. Dunning. In the "Open" section of the Competitions, G. A. Little was placed third.

The sum of £50, payable through the continued generosity of Mr. R. F. Dagnall into club funds under claim by certificate winners, at the rate of £2 for a "B," and £3 for a "C," was fully won and received with deep appreciation. Only one claim for subsidy has been made and received up to December 31st: for £5 17s.; but five other claims for a total of about £90 are to be presented before the close of the current financial ("subsidy") year.

Club machines now comprise: two R.F.D. training machines (one new), one R.F.D. soaring-practice secondary machine, one B.A.C. sailplane with special skid-type landing gear (optional two-seater with dual control), and the R.F.D. variable-span high-efficiency sailplane. Members' machines include: TERN, KITE, two GRUNAU II sailplanes, and a nacelled DAGLING. Three other privately-owned machines are under construction: total of thirteen within the club.

Club transport comprises three retrieving cars, one winch-car, two trailers and a hand trolley. Launching gear includes that built-in upon the winch-car (with over 3,000 feet of cable).

All three of the club sites have been employed during the course of the year, and a fourth site has been tried out in favourable conditions and is reported to be markedly useful for slope-soaring in south-westerly winds, and even for a jumping-off place for flights in a north-easterly direction during favourable "thermal" conditions.

At the Annual General Meeting, held on January 30th, Mr. R. F. Dagnall was elected president, and Dr. V. C. Hackworth chairman. Mr. A. York Bramble continues as hon. general secretary, and Mr. G. A. Little as chief ground engineer.

List of Gliding Clubs

The following further corrections should be made to the list of British Gliding Clubs published last December:—

Cambridge University Gliding Club.—Subscription, three guineas p.a.; Country Membership, two guineas p.a. Associate Membership, one guinea p.a.; no entrance fee. Flying charges: 1s. to 1s. 9d. per winch launch; 7s. 6d. to 9s. per aero-tow. Flying seven days a week in term time. Resident instructress.

Beacon Hill Gliding and Aero Club.—Present Secretary: G. F. Harris, Eastwood Rise, Eastwood, Southend-on-Sea

Penrith Gliding Club.—The club has been dissolved, and its primary training machine, with trailer, is for sale (see advt.).

Jersey Gliding Club.—The club is apparently without a soaring site at present, and its FALCON I was advertised for sale in the December issue. From a Press report we learn that the Piers and Harbours Committee has refused to permit the use of the site at Les Landes.

A new club at Helensburgh was mentioned in the December SAILPLANE; here are official particulars and correct designation:—

Dumbartonshire Gliding Club.—Secretary: J. V. Campbell, Kirklea, Cardross Road, Dumbarton. Headquarters at Imperial Hotel, Helensburgh; primary training ground at Barrs Farm, Cardross. Subscription: two guineas p.a. (non-flying, one guinea). Flying charges: 1s. per day, 6d. per launch thereafter. Flying at week-ends.

The club's opening flying meeting was held on January 8th.

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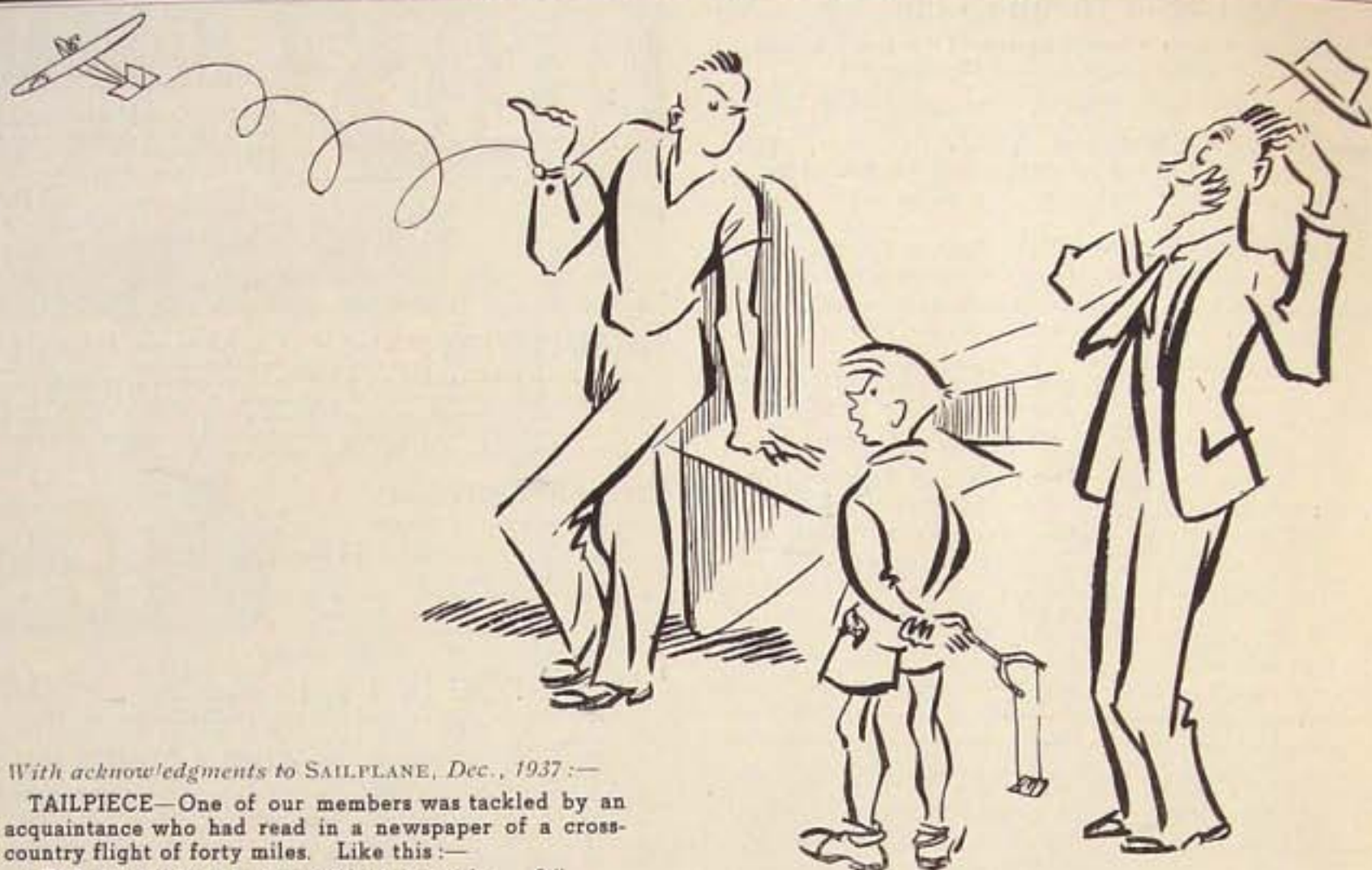
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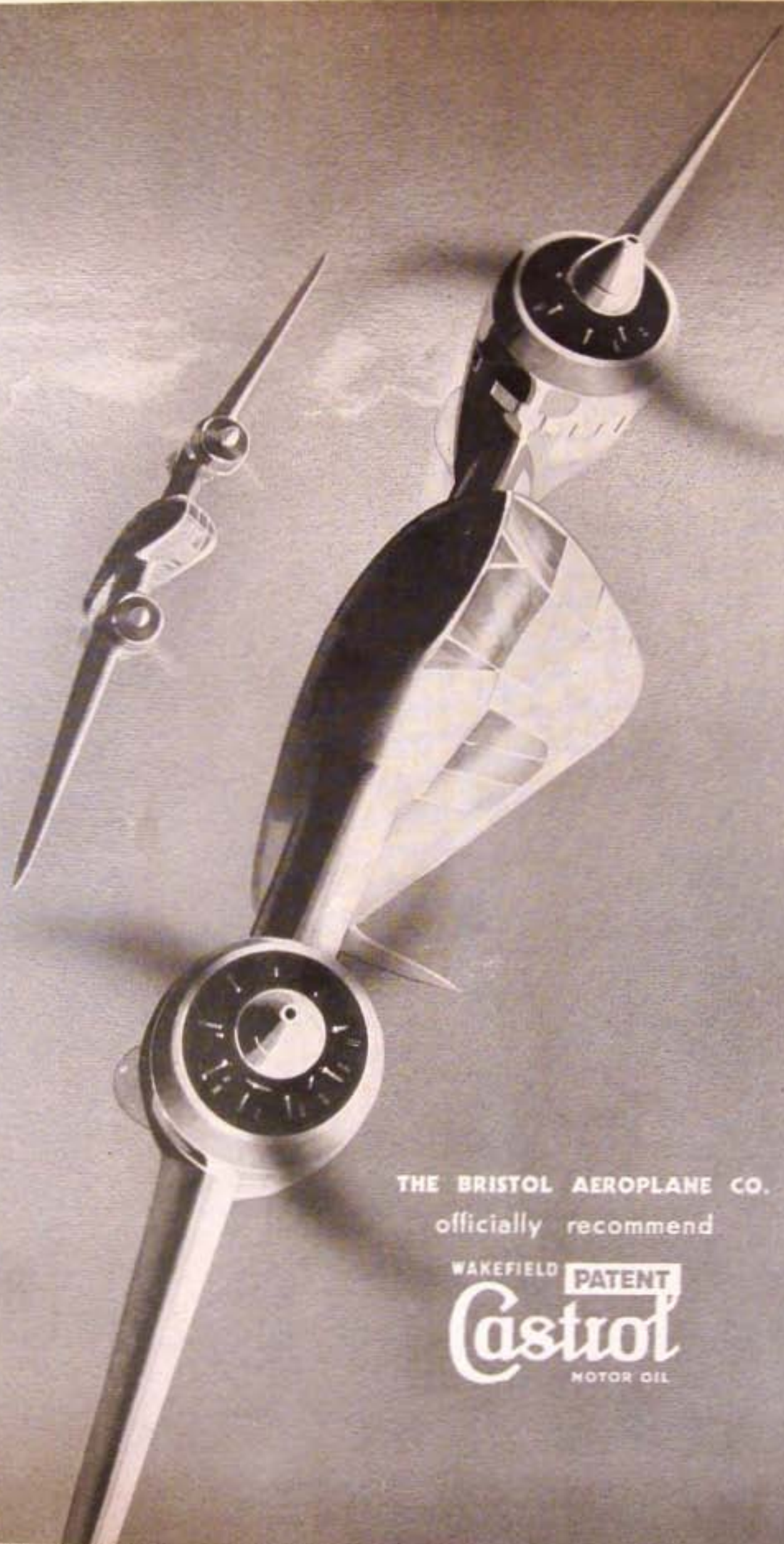
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