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OFFICIAL ORGAN of THE BRITISH GLIDING ASSOCIATION

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To Our Visitors

At the Opening of Sutton Bank as a Gliding Centre

VISITORS to the opening meeting which is to be held at Sutton Bank over August Bank holiday will probably realise that this is an event of considerable import to the gliding movement in this country.

In some ways it can be regarded as marking the "come-back" of the movement, which, opening in 1930 with a great burst of enthusiasm, fell into decay because its organisers in those times possessed greater enthusiasm than they did knowledge of how to run Gliding Clubs. No blame is due to them, because at that time no such knowledge existed but, founded on the mistakes of that time, a small band of dogged enthusiasts have now overcome that lack, and the time has come when the advance can be resumed.

The cardinal point to bear in mind for a gliding club is the question of site. In Sutton Bank we think we have found one of the finest sites for high-efficiency soaring flight in the country; and in many respects it surpasses some of the famous German schools.

It is probably unnecessary to remind readers that soaring flight is only possible when the wind is blowing up the slope from which the machines are launched. Now, Sutton Bank has two slopes, facing respectively west and south, consequently soaring is possible in winds ranging all the way from north-west to south-east. The westerly slope is of such extent that in favourable conditions an out and return flight of upward of 15 miles in solo or passenger machines may be quite easy of attainment.

The control of the site has been vested by the British Gliding Association in the hands of the Yorkshire Gliding Club, and they hope and expect that the provision of first-class soaring facilities will result in a large number of new members.

WILL YOU JOIN? Applications should be made to the Secretary of the Yorkshire Gliding Club, Overdale, Boston Avenue, Kirkstall, Leeds, or at the club-house. If you do not feel able to become a full flying member, an Associate Membership entitles you to full membership rights as regards club-house and other facilities, and passenger flights on a two-seater machine at a reduced rate.

Our visitors will be interested to know that NO ONE OF US IS PAID—all the officers and people doing the work are Honorary. We have been fortunate enough to raise a sum of money sufficient to enable us to make a

start with equipping the site: before we go any further we must pay it back. We know our visitors will be sportsmen and in these circumstances not grudge paying a small sum at this meeting for car-parking, etc. DONATIONS will be welcome. One of the best donations is a Life Membership, which can be acquired for £25. But that, to the majority of gliding enthusiasts, is an astronomical figure.

Prominent amongst our most urgent needs are more machines; and in this connection it is interesting to note that Yorkshire possesses one of the most capable of British glider manufacturers in Mr. F. Slingsby, of Scarborough. He is at the moment experiencing a boom, and can hardly turn out machines fast enough. If the movement goes as we all hope, he may any day now suddenly find he has two sixpences to rub together. Anyone who has stuck to the gliding movement through thick and thin (lots of thin) as he has deserves any success that may come to him. He is himself an enthusiastic pilot.

We must now repeat that: GLIDING, LIKE SAILING, DEPENDS ON THE WIND. So—

If the wind is anywhere from north-west, south-west, south or south-east, we will be able to demonstrate what soaring flight can offer. The best wind of all is west. But—

If the wind is from north to east, or if there is no wind at all, then we ask you to realise that we cannot do the impossible. We hope to have a specially constructed motor-winch which will show off the paces of certain machines, but *soaring* flight will not then be possible, only *gliding* flight.

In either case, you will be interested, and we hope you will come again.

THIS MEETING IS A PRACTICE ONE FOR THE BIG NATIONAL COMPETITIONS, WHICH WILL BE HELD HERE FROM SEPTEMBER 1ST TO 9TH. AT THAT MEETING WE EXPECT EVERY SOARING MACHINE IN THE COUNTRY, AND THE FINEST BRITISH PILOTS WILL BE FLYING THEM.

If conditions are favourable, we hope to have a two-seater machine operating, and in certain conditions, for the first time in history, it will be possible to take passengers for a FIFTEEN-MILE FLIGHT, and land them back at the starting point.

A complete plan for the future development of the centre has been drawn up, and will be put into operation as funds and opportunity are forthcoming.

The "Gorell" Report and the Subsidy

THE Committee on Control of Private Flying, set up under the chairmanship of Lord Gorell, has now had its report published, with the Air Council's comments thereon.

The committee recommended that towed gliders and gliders carrying passengers should possess certificates of airworthiness, to be issued by a newly-formed "Air Registration Board," and that their pilots should hold licences, to be issued by the Air Ministry on production of certificates of proficiency from the Royal Aero Club or other proofs of competency; also that gliders generally should be included in any scheme of compulsory third-party insurance.

They are not in favour of subsidising gliding for its value to aeronautical and meteorological research, but only of subsidies in respect of gliding certificates if the Air Ministry are satisfied that proficiency in gliding is of definite value as preparatory training for pilotage of a power-driven aeroplane.

The Air Council, however, appear to have taken rather a different view, for they propose subsidising the gliding movement. Moreover, we have good reason to believe that it is now unlikely that this will take the form of paying out so much for each gliding certificate.

This may as well be known, since we have heard of at least one club whose members are postponing the taking of their "C" certificates, in the hope that the taxpayers' money will soon come rolling along.

As to the allocation of the subsidy, we understand that no decision has been come to yet. Probably the Ministry wants to be sure of having fully representative bodies to negotiate with.

It may be recalled that the London Gliding Club is not affiliated to the British Gliding Association. The B.G.A. recently set up a Rules Committee, which has recommended some changes in the rules, chiefly as to the composition of the Council. The recommendations were stated to be framed "to reduce the size of the Council," and "to increase the representation of the clubs," and included proposals to reduce the representation of B.G.A. members on the Council, and that vice-presidents should only vote by invitation of the chairman. The recommended alterations, slightly amended, failed to secure the requisite two-thirds majority in their favour at a Special General Meeting called to consider them.

But rapid developments in the whole situation are probable in the near future.

Another British "Silver C"

WITH a flight of over 5 hours' duration on July 14th, Mr. P. A. Wills, of the London Gliding Club, has fulfilled the last of the qualifications for getting the "Silver C" certificate, the highest award a soaring pilot can earn. The flight was made at Dunstable Downs in the SCUD II. sailplane, the ownership of which he shares with Mr. G. M. Buxton.

The other two qualifications for this certificate were fulfilled on March 18th this year, when Mr. Wills flew 56 miles in the PROFESSOR and climbed 3,800 feet in the course of the flight, which was from Dunstable to

Latchingdon, near the Essex coast. Since that date he has been awaiting the opportunity of doing his five hours, but till now something has always prevented it: either there has been no machine available (since both SCUD and PROFESSOR have at times been put out of action by other pilots, and the other machines have been wanted for club use), or there has not been a soaring wind on the days when he could turn up. His achievement of the distance qualification, by the way, was the reward of equal persistence, starting with an attempt from Dunstable on September 1st last year, which ended prematurely at Markyate, and including two attempts later in the year on the South Downs west of Lewes. The latter were frustrated by the stable condition of the wintry atmosphere, which suppressed the lifting current above hill-top level, and so made it impossible to gain enough height to cross the gaps.

The day after this five-hour flight, Mr. Wills flew from Dunstable to Abridge, in Essex, also in the SCUD II., and it is worth noting that, if he had only had a barograph with him on this flight, it could also have been counted towards a "Silver C" if necessary, since it just exceeded the 50 kilometres (31 miles), and during it he rose to 6,000 feet, or almost double the 1,000 metres required.

The SCUD II. was designed by Mr. L. E. Baynes, and built by Messrs. E. D. Abbott, of Farnham, so it has now been proved that a machine of all-British design and manufacture is capable of earning this most coveted award for its pilot.

The first and only previous British pilot to earn the "Silver C" is Mr. G. E. Collins, who put up the required five hours' duration on April 20th, and the height and distance in a flight from Dunstable to Rayleigh, Essex, two days later. The distance and duration have to be done in separate flights, but the height test can be combined with either. There are only about 30 holders of this certificate in the world, and most of them are Germans.

Have you received your "Sailplane" Regularly?

It has come to our notice that, for some time past, persons who sent their SAILPLANE subscriptions to the British Gliding Association have not been put on the subscribers' list. It will save us much time and worry if all such subscribers who have not received their copies will drop us a post-card saying when they sent their subscriptions, how much they sent, and which copies they have missed. This will help us to look up particulars and set the matter to rights with the least possible delay.

Enquiries for copies of the SAILPLANE should not be addressed to the Editor, nor to the British Gliding Association, but to the Publisher of The Sailplane, 13, Victoria Street, London, S.W.1.

The Sutton Bank Meeting

PRIZES up to £30 have been offered by the B.G.A. for the Sutton Bank competitions, which are to be held from September 1st to 9th inclusive.

THREE MORE CROSS-COUNTRY FLIGHTS

THERE was a day in March when three pilots from the London Gliding Club left Dunstable behind in their sailplanes and carried on across country for 19, 46 and 56 miles respectively before landing. Though this record of three such flights in one day has not yet been surpassed or even equalled, something approaching it happened during the week-end July 14th-15th, when again three fine cross-country flights were made. Moreover, while the March flights were directly down-wind and therefore all covered much the same ground, two of those about to be described diverged not only from the wind direction but quite widely from each other, and the third was carried out in a different part of the country altogether.

We will take them in chronological order.

Miss Meakin Upsets the Programme

Early in April Miss Joan Meakin was towed by air in her newly-acquired sailplane from Germany to England—no mean feat. Since then she has been performing aerobatics on it all over the country as part



Miss Joan Meakin in her "Rhönbusard."

of Sir Alan Cobham's Aviation Display; the Press cuttings about it have been rolling in to us, but of her recent soaring flight from Bristol to Salisbury, a fine achievement for a first attempt at cross-country soaring, never a word have we seen outside the aeronautical papers.

As the Display works to a strict schedule, it is obvious that any attempt to use the RHÖNBUSARD for the purpose for which it was designed, *vis.*, soaring flight, would have to be sternly suppressed. However, Miss Meakin appears to have upset the time-table at last, much to our secret joy, and has sent us the following account of the day's doings.

"On Saturday, the 14th July," she writes, "I was towed in my RHÖNBUSARD sailplane by Capt. P. Phillips flying the 'Mongoose' AVRO, to a height of 1,500 feet, when I then released the towing cable, and was immediately able to take advantage of the strong up-currents under the cumulus clouds. I flew around Bristol, Bath and Clevedon, reaching a height of 4,900 feet, almost into the clouds. In one part of this soaring I found that, according to my variometer, I was able to rise at the rate of 4 metres per second. It was not until two of the Display pilots flew beside me, making

signals, which I interpreted as a request to land, that I came down.

"Immediately on landing I was asked if I would to make an attempt on the long-distance gliding record to which, of course, I said 'Yes.' I was then towed again to a height of 2,500 feet over the aerodrome and releasing the cable, headed towards the south-east following the line of clouds, and taking advantage of a following wind. I maintained a steady height of 3,000 feet, until I went through a rainstorm approximately ten miles west of Salisbury, when I lost all lift and made a steady glide down, landing in a field between Wilton and Salisbury."

Weather Conditions.—The nearest upper air records on this day were taken at South Farnborough at 10 a.m., and showed an average lapse-rate of $4\frac{1}{2}$ deg. 1,000 ft. between 2,000 and 4,000 feet. Higher up the rate was less, but cumulo-nimbus clouds were found to reach up to 10,000 ft., at which height there was inversion. Most stations in that part of England reported clouds of large cumulus or cumulo-nimbus type, combined with some strato-cumulus. At Boscombe Down, the nearest pilot balloon station, the wind at 3,000 feet was 32 m.p.h. at 13 hrs., dropping to 10 m.p.h. at 17 hrs., and it veered from W. to N. during the day.

Miss Meakin's experience of flying along under a line of clouds, finishing up with a rainstorm and then losing the lift, is remarkably similar to that of Mr. Humphries on March 18th—also a first attempt at cross-country work.

It should be noted that, if these flights had been officially observed and a barograph carried (which is doubtful), the first one would count towards a "Silver C" since a height of 3,400 feet above the release point was reached. Whether the flight to Salisbury would be recognised for the distance qualification is more doubtful, since, for an aero-towed start, the height of the release point above the ground must not exceed 1% of the distance flown. From the Whitchurch aerodrome near Bristol, where the flight probably started, to the point half-way between Wilton and Salisbury, is 10 miles, and 1% of this is only 2,112 feet.

Only one lady pilot has the "Silver C" so far—Hanna Reitsch, of Germany, who obtained it recently.

A Cross-Wind Flight to the Thames

On the following day the wind had backed to about W.S.W., though somewhat unsteady in direction. A clear sky in the morning became filled with cumulus clouds about noon, and shortly afterwards G. I. Collins took off in his RHÖNADLER and soon found himself under the growing cumulus.

He then proceeded to work his way southwards, at right-angles to the wind direction—that is, relative to the ground, though this entailed travelling a considerable way up-wind relative to the air in which he was flying. His object was to cross the Thames well to the



G. E. Collins making a low turn in his "Rhönadler."

west of London, and afterwards, if possible, proceed down-wind as far as he could, which might carry him well into Kent and even as far as the coast.

In a previous flight on April 20th Collins had tried to cross the river east of London, but had been prevented by the absence of cumulus clouds just where he wanted them most, although there were plenty of clouds elsewhere. He attributed this to the haze and smoke arising from London and drifting eastwards, where it cut off the sun's heat from the ground and thus prevented thermal currents from forming. Since it needs a westerly wind to get away from Dunstable at all, he formed the conclusion that it would never be much use trying to reach Kent except by going round London by the west and south.

So on this occasion he made off towards Watford, plunging in and out of three or four clouds on the way. Cloud level was at about 4,000 feet above the launch (750 ft.), and his height when crossing from one cloud to another dropped usually to about 3,000 feet. At Watford the RHÖNADLER was down to 2,500 feet, but here three separate lots of lift were encountered. Another cloud was utilised over Northolt, and then Collins proceeded to Heston. Here he found a strong thermal current above the famous gasometer, and in it he circled up from 3,000 to 4,200 ft. Hanworth was reached at 3,000 ft., and then the problem of crossing the Thames presented itself. While poised above the river, Collins had a good look round below, and found there was nothing in sight (except in an up-wind direction) but miles and miles of suburbs, the only visible landing spot being Hanworth aerodrome, which he had just left. As he was none too certain of finding any more lift, he decided on the safest course and returned to Hanworth, where he landed. The aerodrome is just over 30 miles from his starting point, but during the flight he got a few miles further than this when crossing the Thames. Duration of flight, 2½ hours.

At both Heston and Hanworth the aerodromes had been practically deserted, probably because everybody was in at lunch. However, he was shortly afterwards taken for a ride in the newest type of autogiro, and had an interesting discussion with its pilot on the possibilities of using the machine for towing sailplanes.

The remarkable thing about this flight was its direction; apparently the pilot had at least half the points of the compass to choose from, if not more, and could almost have answered in the affirmative the public's

stock question: "Can you go anywhere you want to in a glider?"

During the afternoon, at Dunstable, the cumulus clouds gradually deteriorated and gave place to strato-cumulus. The nearest pilot balloon observations were at Upper Heyford and South Farnborough at noon, both of which gave a wind of 8 m.p.h. at ground level, and 15 m.p.h. at 3,000 feet. At Dunstable, however, the surface wind was somewhat stronger, being about 10-15 m.p.h. at mid-day, and freshening to 20 m.p.h. in the afternoon.

Soon after 1 p.m. P. A. Wills went up in his SCUD II. He also tried to work southwards, but with the intention of crossing the Thames east of London, if at all; he was able to make his course over the ground diverge 45 deg. from the wind direction, and finished up likewise on an aerodrome—at Abridge, in Essex, about 32 miles from his starting point. His own description of the flight follows; it is to be noted that this is the longest flight yet carried out on a British sailplane, and that he set up a new unofficial British height record.

A Visit to the East Anglian Aero Club

By P. A. WILLS

ON Sunday, July 15th, conditions at Dunstable looked just about as good as I have ever seen them. There was a westerly wind of about 10 m.p.h. up the hill, and the streets of innumerable large cumuli at about 5,000 feet testified to a high lapse rate.

I arrived at about 12.30, and had already missed the RHÖNADLER's departure at 5,000 feet in a southerly direction. Making full use of the quick assemblability of the SCUD, I was at the top of the hill and ready for



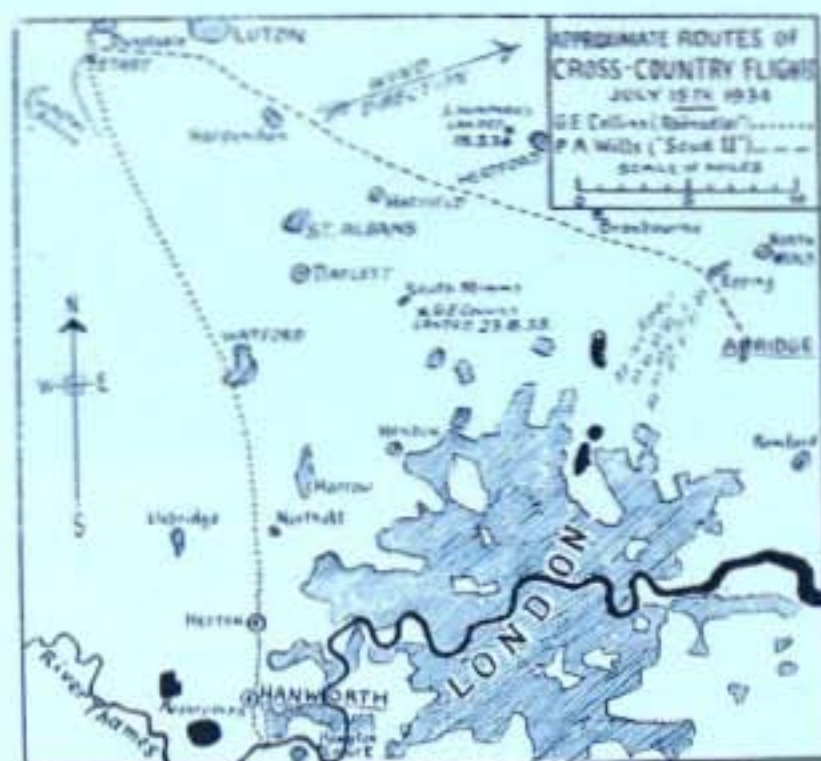
P. A. Wills starting for a flight in his "Scud II."

the launch by 12.50. The wind, as always at such a moment, seemed to have dropped, and it appeared "swank" to put on my newly acquired parachute, so that to my lasting regret it was left behind, together with my barograph.

It is one of the serious social problems ahead for the sailplane pilot: whether to earn the sneers and jeers of the bystanders by invariably and laboriously equipping oneself with heavy clothing, barographs, para-

chutes, and the like, before proceeding to glide rapidly to the bottom of the hill; or whether to prance gaily into the cockpit in a (so to speak) state of nature and then be caught out when the 500th flight proves a winner.

On this particular day it was soon evident that, with luck, something out of the ordinary was toward. The hill lift provided only about 150 feet of height in the absence of wind, but every few minutes the combined evidence of the senses and the rate-of-climb indicator showed sudden and considerable thermal uplift. By



tight and (at that height) nervous circles I managed twice to get to about 1,200 ft. before having to leave the rising column and return to the hill, and each time my situation was strengthened by my getting back to the hill with a little extra height still in hand; so that the next thermal found me in a less vulnerable position.

A third ascending column found me at 400 ft., and was so violent that by the time that the decision of whether to leave it and scuttle back, or whether to risk all and go on, had to be made, I was at 1,500 ft., and climbing at 6 feet per second. I decided to go on, and since the risk of dropping out of a thermal is always considerable up to at least 2,500 feet, I had a jumpy ten minutes; but the end of that period found my thermal still faithfully carrying me up and already nearly over Luton.

At 4,000 feet, however, it tired of the unaccustomed work and left me to my own devices, so I set off, taking as a general direction a south-easterly course, in order to try and cross the Thames just east of London. I found that between the areas of lift the whole atmosphere seemed to be descending gently but steadily, and my rate of descent registered at between 5 and 6 feet per second: about double the normal rate. This rather surprised me, and if this is the case on most unstable days, the hero who eventually crosses the Channel will not have quite so simple a mathematical problem to work out in his head as at first seems likely.

I glided on for about 5 miles, and was down to 3,000 feet before I struck my next lift, and this called for considerable manoeuvring, as the columns did not seem

very large in area: I suppose that by now they were beginning the afternoon process of dying down.

However, this thermal seemed inexhaustible, and soon I saw my altimeter registering 5,500 feet. Suddenly and absolutely without warning the scene below started to fade out, and a grey and moist mist appeared around me. The Scud's intervening centre-section had hidden from me the fact that my up-current at this level attained condensation point, and vanished into a large black cloud.

Instantaneously there was a violent heave on the machine, and the rate-of-climb needle jumped to 10 feet a second and over. With similar suddenness my idea of the cloud above me changed from a benevolent old genii bearing me aloft on kindly arms to a hideous octopus sucking me remorselessly into its interior, ready to throw out the bits it subsequently didn't like. I murmured to myself that the safety-factor of the good old Scud was 8: it meant nothing at all. For months and months I had been yearning for the experience of real cloud-flying—now here it was and I immediately decided to run away.

I pushed the stick hard forward—my speed went up to 50 m.p.h., which seemed a lot after my previous leisurely manner. The nose was well down, and I stole a look at the rate-of-climb: it registered a climb of 5 feet a second. With whatever sort of a noise one utters at such a moment I pushed the stick yet further forward. My speed was up to 70 m.p.h.—the speed at which the machine is C. of A'd for aero-towing. It seemed to be standing on its nose, and the howling wind threatened to take off my spectacles and so add to the confusion.

The rate-of-climb registered 2 feet per second-climb.

The position remained like this for about three and a half years, when suddenly the whole black veil rolled away and I shot out into a warm and sunlit world. I could not get out of the cloud below, but had shot out of its side like a cork out of a bottle. Simultaneously the rate-of-climb indicator unstuck itself from the top register and shot with a click to the bottom.

I adjusted matters, and abjured myself to be a man—but finally went sadly on, with the cloud at my back.

I found myself about 4 miles north-east of Hatfield aerodrome, and at approximately 6,000 feet, and life remained a quiet decline until I was vertically over Broxbourne aerodrome at 3,500 feet, watching its members doggedly practising landings. Here I found another, gentler, thermal; perhaps caused by the perspiring instructor below? Anyway, by easy stages I was up to 4,500 ft. again, and approaching Epping Forest, with North Weald aerodrome on my left. I expected to find something above the trees, but the air seemed to have died completely by then, and I found myself at 2,000 feet above an unknown aerodrome, with the Thames beckoning about 5 miles ahead. I let it beckon, and circled down. At about 400 feet I noticed considerable activity below, and a quantity of surprised looking people came out of the club-house. I swung back over the hedge, over an adjacent cornfield, to make my approach, and found myself busily circling at 200 feet in a hearty but rather rough up-current, which extended all over the field.

For about five minutes I floated to and fro at this height, without any apparent loss of height; finally I gave it up and came back over the aerodrome and landed.

A FLYING VISIT TO THE ULSTER CLUB

AS we emerged from a shallow depression over the Irish Sea and shook off the low clouds covering the hills of the Isle of Man, the coast-line of Ulster came into view. It was not long before we were over Belfast, looking down on a selection of the Ulster Gliding Club's many soaring sites—the Knockagh, Cave Hill, and the as yet untried Black Mountain.

But no sailplanes were in sight, for it was a Friday, and the club members have to earn their living on week-days like the rest of us. I did not know that one of them had played truant and was at that moment somewhere below in his car, vainly trying to reach Aldergrove before the arrival of our Midland and Scottish Airways' DRAGON.

However, we soon met in the hotel at Belfast instead, where by a strange coincidence an Auxiliary Air Force man from Durham shared our table. As a result, it wasn't long before there were three talking "shop" instead of only two, especially as our companion confessed to having soared on MORHS and AVROS with the engine cut off. This he had done over a steep escarpment which fell away from the very edge of his aerodrome; moreover, he and his friends at Durham got so keen on soaring that they clubbed together and bought a broken-down old primary; but, as nobody would repair it, it had not yet been pushed over the escarpment, which is perhaps just as well.

My host, Mr. Metcalfe, who incidentally was the first man ever to soar in Ireland, then bundled me into his car and announced that the afternoon would be spent in a conducted tour of all the club sites. That "all"

proved too optimistic. To do it, we should have had to start at sunrise. Still, we did our best.

In present-day Ulster Club parlance a "soaring site" means a complete mountain range, while an "auto-towing track" is a sandy beach many miles in length. Knowing this, it is hard to believe that in 1931, when the flying first began, they were content to hop about



Downhill, the Ulster Club's flying headquarters.

Left to right: the sea, the railway, the station, the road, and the Downhill Hotel with the sailplane shed in the foreground.

in small fields. Even among the members themselves the memory of those days is almost buried in the misty past, as was shown by their shocked surprise at seeing their past flying history divulged on the screen when we were treated to a cinema show at the Mackies' house. (And, by the way, I have never seen such sky-scapes in an amateur film before, and all from the intelligent use of a colour filter. The real essence of soaring flight can hardly be better portrayed to the ignorant than by showing a sailplane poised in space overhead while a slow procession of clouds drifts across the background.)

We passed by one of these early ground-hopping fields at Holesstone, in Co. Antrim. It was this field which showed the Ulster Club at last that it was growing out of its clothes—the "clothes" being a surrounding of trees combined with an 8-foot stone wall. The club at this time was operating with a DAGLING and a REYNARD, and it was when they had fitted the latter with a pilot's fairing that it refused to stay in the field, but tried to pass out between two of the trees. (It lost its wings in the attempt—one in each tree.)

Then from one extreme to the other: our next objective was the magnificent range of hills which form the northern branch of the Sperrin Mountains, shown along the east side of the accompanying map. Of these more later, but their northern extremity, where they come up to Magilligan Strand in the form of a line of cliffs some 400 feet high, is familiar enough in appearance from pictures in *THE SAILPLANE*.

Here, at the junction of hills and sea, is the tiny hamlet of Downhill, from which one has only to step back a few yards to get it all into the view-finder of one's camera. There may not be much of it, but what there is is good. I refer to the Downhill Hotel, whose



excellent meals any pilot can, after internal stowage, take safely up to 2,000 feet in the roughest weather; and to the shed which the landlord, Mr. McKay, has had built at his own expense and given to the club to house their gliders in. True, the machines cannot be kept rigged, but of that there is no need, because the only access to the beach is through a tunnel under the railway.

The Magilligan Strand, 6 or 7 miles from end to end, provides a perfect hard, smooth surface for the towing car. The cable is 1,000 feet long, and on it 600 or 700 feet of height can be attained, but usually 200 feet will bring the machine well into the rising current caused by the cliffs. A pilot who doesn't like going up steeply can choose his own angle of ascent—within limits, because if he hangs on too long he will find the cliffs gone for a stroll inland.

The way to get a really long flight at Magilligan, apparently, is to go up just before high tide; there is then no need to come down again for at least two hours, as the next man on the waiting list cannot in any case be launched until the hard portion of the beach is once more uncovered.

The vertical cliffs with their sharp-edged tops give an impression of none too smooth an air flow, but the belt of lift is so wide that there is no excuse for a pilot running into trouble. That the eddies are nevertheless there, however, was beautifully shown on our first visit by the smoke from a passing train. We had a perfect demonstration, not only of the curl-over at the top, but of the reverse circulation at the foot of the cliff. It was my first experience of this latter eddy, after many years' search for what the text-books would have us believe is a normal occurrence at the foot of a slope.

Not all the club machines are kept at Magilligan. The SCUD normally resides in its trailer on Mr. Metcalfe's front lawn, where it has for company his fishing punt, also on its own trailer. (It must be delightful to walk out of one's front door on a Sunday morning, eye the pair of them, and toss up which it shall be.) This sailplane and Mr. Liddell's new GRUNAU BABY, which was temporarily out of action, can be taken to any of the club's sites at a moment's notice, both being kept in Belfast. The two KASSELS, however, seem to have more or less settled down at Magilligan for life: the KASSEL 25, at any rate, would be an awkward customer to put down into a small field, which is all it is likely to find inland.

The club has, therefore, apart from the instruction machines, a magnificent fleet of four soaring planes, one of which is owned by an individual and the others by a syndicate—though even the latter may be used by members outside the syndicate when they are considered good enough. With one exception (and he only joined recently) they have had no aeroplane experience, and have entirely taught themselves to fly.

How comes it that, when so many clubs, started at the same time with just as little experience, are now no longer, while few of the remainder have got much beyond primary work, the Ulster Club has built itself up into such a flourishing condition? This mystery has puzzled many people, but I should put it down to two chief reasons. One is simply that, when the usual mob of half-hearteds had left the club on discovering after the usual few weeks that they would have to work for

their flying, a sufficiently large nucleus was left of people with the initiative to carry on. Especially possessed of this quality was Mr. H. C. Wynne, now no longer in Ulster; he picked up a smattering of knowledge from a few visits to the London Gliding Club in its early days, and used this as a foundation stone on which to build all the rest. It appears he could always make up the mind of anyone who vacillated about what to do next; and without someone of that kind about, no club can expect to get anywhere.

The second reason is simply the spirit in which the club goes about its business. They go for a day's soaring in the matter-of-fact way in which others would go for a day's sailing. And if, on the other hand, conditions are good for fishing, those who wish just go and fish instead (see Club News), without any of that feeling of the pious man running away from church which seems to obsess so many gliding men who miss a day at their club. And as for any worrying about the strength of the wind, beware how you mention this subject at the Ulster Club. It is "done" to discuss the wind *direction*, because that affects the possibility of soaring at all. It is even "done" to mention the wind's force—in so far as it concerns the technique of flying from one place to another. But one word of suggestion that the wind may be too strong for flying, and you will at once realise that you have committed a *faux pas*; you have treated soaring flight as if it was something out of the ordinary.

On the Saturday the wind was just right for Magilligan. So off we went with the SCUD in tow, and before long it and the KASSEL 25 were being rigged on the beach. Ladies first! Mrs. Mackie was soon off for a short flight in the SCUD. Later we tried to persuade her to go up again while her husband was soaring in the KASSEL 25, but she wouldn't, and I missed the opportunity of photographing both husband and wife in the air together. The rest of the Mackie family are not yet old enough to fly, but some day they will no doubt all have their own machines, and then there will be a sight worth seeing.



They both fly: above, J. P. Mackie ready to start; and below, Mrs. Mackie soaring in the "Scud."



The smoothness of the sea air at Magilligan makes flying a treat. (In order to corroborate this, I was offered a try in the KASSEL 20, but alas! it was discovered that the shed roof had leaked into the machine's wing, all among the glue, so that was "off.") Mr. Baster, in fact, announced his intention of getting up early next morning and doing his 5 hours towards a "Silver C." But his luck was out, for although he certainly got up early, it was for a hurried visit to the dentist. As to the prospects of any member of the club completing all three "Silver C" flights, this very smoothness of the air seems to militate against it, for it means an almost entire absence of thermals. The two barograms reproduced herewith show this well—compare them with the jerky records of inland flights published in April and May. The birds also confirm the fact; there are gulls, daws, and fulmar petrels along the cliffs, but none of them has ever been seen to gain height by circling. These conditions are in extraordinary contrast to the hills of Donegal on the opposite side of Lough Foyle, which are nearly always well covered with cumulus. In fact, I saw several small rain showers break off and come in our direction, but every one melted away before it reached us.

For cross-country flights from Magilligan, therefore, there remain the two possibilities of "cold fronts" and contour soaring, i.e., hopping from hill to hill. Such "fronts" are not often met with here, and, of course, there is no up-wind meteorological station to give warning of their approach; however, a series of them had passed over 10 days before while the GRUNAU BABY was having its first try-out. It is of interest that similar cold fronts arrived at Dunstable on the same day, where G. E. Collins was able to investigate them while soaring. There is little doubt that the atmosphere was behaving like this all the way between the two sites; this opens up vast possibilities for Ulster pilots!

As for working from hill to hill, it is not so easy as it looks on the map, since the gaps between the various heights are considerable. On the day I was there, Mr. Metcalfe made a gallant attempt to soar from end

to end of the range, and his barograph record is reproduced herewith. It will be seen that, after spending nearly half-an-hour working up height over Binevenagh, he lost it all in a few minutes on the way to Keady Mountain. He could not even keep height over a 1,000-foot slope facing the wind, apparently owing to a down-draught from Binevenagh. Only after coming out over the flat country did he get a bit of lift which he attributed to a thermal, after which he made for a landing at Limavady, as being the only well-inhabited place within reach. (The SCUD, upon landing, was immediately surrounded by a small herd of bullocks; but the moment its pilot showed signs of movement, they all rushed off with equal haste in the opposite direction.)

It would seem that, whenever the wind is north of west, it is impossible to gain height over Keady Mountain; yet it is only in such winds that there is any lift at the seaside cliffs for starting the flight, as was shown on the following day, when, in a due west



An evening scene at Magilligan, with the hills of Donegal on the skyline.

wind, the KASSEL 25 refused to make contact with any lift, and had to be landed far up the beach.

The alternative is to choose a more southerly wind and manhandle the machine up to Hell's Hole, launching from there by hand. But where is the launching team to come from? Tourists in plenty come to Downhill in the summer, but, from the little notice they took of the soaring, I should judge it unlikely that they would leave their games of rounders on the beach to do a spot of useful work 800 feet further up. (This indifference to the club's doings is common in Ulster; during 1933 eight different sites were used and only once did they get an enquiry from a member of the public wishing to glide.)

So Benbradagh will have to wait. But, when the time comes, it is to be hoped that it will be ready with a good supply of inland thermals and cumulus clouds, to speed the happy wanderer on his way across the frontier to the newly-formed National Gliding Club at Dublin.

The week-end came to a glorious finish with a drive round the north-east coast of Ulster and past the extraordinary soaring site of Sallagh Braes. It remains to mention one of the greatest of the club's many ambitions: to hold a meeting with representatives from all over the British Isles. Only get your sailplanes to Ulster (and it won't cost as much as you think), and the club will do the rest. They can raise enough transport between them to cope with anything likely to be required. Those who come will never regret it. Think it over!

A.E.S.



The "Scud" packed in its trailer ready to go home after a cross-country flight by N. P. Metcalfe (right)

Correspondence

Willi Farner's Ordeal

SIR,

I happen to have been a sort of witness after the fact of the accident to Farner, described in the May issue of *THE SAILPLANE* under the title of "What not to do."

Farner was not, as stated in *THE SAILPLANE*, trying to cross the Alps, but was being towed in a Secondary type GRANGES glider, the W.F.8, to the *Exposition Internationale d'Aviation* at Geneva. He was being towed low down over the lake by an aeroplane, when he happened to pass over a lake barge going towards Lausanne. The bargemen waved to him and he tried to wave back, but in doing so he inadvertently jogged the mechanism of the automatic release for the tow-rope, which in the W.F.8 is taken to a small lever on the left-hand side of the cockpit. The cable dropped off, and he tried to glide to the Swiss shore, but failed by a yard or two and landed in the shallow water. The glider overturned, smashing its nose on a submerged stone, but suffering no further damage. Farner succeeded in wading out and landing his glider, which he sent to the *Exposition* by road.

The aeroplane, apparently oblivious of the accident, turned inland and flew over the town of Rolle, trailing the wire tow-rope, which short-circuited our electric light, and only just missed the electric railway.

I happened to go to the *Exposition* to see what Swiss gliders were like, and I met Farner there and saw the damaged machine. The other GRANGES glider on show, the W.F.7, is a weird biplane training type, wing-warping, with a fuselage which could not possibly be repaired in any reasonable time if it was once broken. The only other glider was a home-made ZÖGLING of the Aero Club de Suisse, which had, instead of rubber blocks, six or seven old tennis balls between the skid and the fuselage to break the shock.

J. PHILIPPS.

The Future of the B.G.A.

SIR,

The somewhat inconclusive results of the Special General Meeting of Members of the British Gliding Association held on July 16th emphasises very clearly that it is the constitution and objects of the Association which cause dissatisfaction among the clubs. Any minor tinkering of the rules "cuts no ice."

It appears to be impossible to reconcile the conflicting temperaments of the sporting element with the practical technical side.

From the inception of the British Gliding Association this has been evident. Surely it is now time to have a divorce. The Association is entrusted by the Air Ministry with the task of safeguarding the lives of the "sportsmen" by seeing that their aircraft are air-worthy and that the pilots are qualified. This is sufficient work, and can be carried out without promoting sporting events.

The development and improvement of the technical qualities of motorless aircraft are undoubtedly fostered

by an annual contest. But why should the management of this be undertaken by the Association? Surely if the judges for the prizes offered by the British Gliding Association are appointed by the Association, the remainder of the meeting with the remaining contests and prizes can be conducted by the clubs.

In my opinion, if the clubs unite to form their own sporting association and the British Gliding Association attends to the technical duties entrusted to it by the Air Ministry, all friction would come to an end.

The present system is based on the Rhön-Rossitt Gesellschaft, but may we not cease to copy the German prototype?

As the direct contributions of the clubs to the B.G.A. have only amounted to about 8% of the income, it is obvious that the loss of such contributions will not greatly influence the opinion of those who consider the above suggestion.

L. HOWARD-FLANDERS.

The Wilts Club and Mr. Cuss

SIR,

To the best of my knowledge this is the first time I have "burst into print," but as a member of the Wilts Aviation & Gliding Club I really must take exception to the suggestive, misleading, and totally unnecessary letter from Mr. Cuss in your June issue, particularly as he saw fit to send a similar one to our local paper.

As a test of the effect of this letter, I have asked a member of another prominent Gliding Club what he thought when he read it, and he stated that it suggested to him that there was something "fishy" about the Wilts Club.

I wish to point out that Mr. Cuss was in full possession of all the facts appertaining to the formation and operation of our club when he accepted the office of vice-president, but when he discovered that the club was not going to be run by him alone, and entirely by his own pre-conceived ideas, he then became one of the dual minority who attempted to retard the progress of the club. This, of course, could not be tolerated.

To be fully expressive, and at the same time as brief as possible, the resignation of Mr. Cuss was the direct result of a meeting at which he was told exactly "when to get off." His resignation was accepted unanimously by the whole club, and from that moment we have made steady and commendable progress.

I have made it my business to thoroughly enquire into all the facts of this matter, and can assure you that at no time has Mr. Cuss been asked to accept any liability, neither has he at any time done anything for the club, and as a matter of fact he expected to be adopted as a member for life, without even paying a subscription, so that his suggested support has only amounted to "lip service."

I have no personal malice against Mr. Cuss, and my only object in writing is to inform your readers that the Wilts Aviation & Gliding Club is proving itself to be an unqualified success, and is being well and efficiently run.

A. E. FIRMIN.

News from the Clubs

Furness Gliding Club

April 21st and 22nd was the date of the last account of our activities which appeared in these columns. Since then we have been by no means idle. New members have been enrolled, and are making good progress; indeed they must be counted amongst the most reliable. Other members have been busy qualifying for minor certificates, and one member did both "A" and "B" flights on the same day; we believe he would have taken a "C" ticket had time permitted.

Auto-launching has been developed to a high degree, and flights from such starts have usually been in the region of 60 seconds' duration, and have been made by members who, before they joined the club, had no experience of flying whatever.

Progress is hampered for want of a hangar and shelter on the site. This is a real need if we are to make headway; at present much valuable time is wasted in assembling and dismantling machines. We have some stout-hearted members who turn up full of beans, yet they simply will not waste time hanging around. A shower at 11 a.m. and they clear off for the day. The club is well served by its officials, yet even they cannot undertake to provide transport and suitable entertainment on days when the weather is bad.

We claim to have the best all-round site in Britain. Our machines are well kept in flying trim, and we have mechanised equipment for launching, towing and recovery. "What more can you ask" for a guinea and a half? There are times when our pockets are empty and our spirit well-nigh broken, yet we carry on week after week until a spot of soaring comes our way and fills us once more with that determination to win through.

On July 14th Stevens treated us to a fine exhibition of soaring lasting 1½ hours. He easily beat all clubs' records for height, and taking advantage of the wide belt of lift (which is ever present on soaring days over this site), he travelled up-wind for considerable distances. He emulated G. M. Buxton's fine feat during the 1932 competitions, when he rounded the Dunnerholme Rock which stands out in the Duddon Estuary, and incidentally he turned circles to left and right (and now we fly in circles). These were the first turns of 360 degrees to be carried out intentionally by a member of our club—merely a milestone to be proud of—and this boy can land safely anywhere. He is worthy of a better machine.

We are on the threshold of greater things. Soon, very soon, a whole batch of "C's" are expected, several members are ready for the great adventure out over the front, where one must soar if one keeps conscious, and a clear head will bring one safely back on top. From then onwards the appeal of the heavens will be uppermost and the demand for the B.A.C. IV. will be great.



C. A. Cornell soaring in the "Kassel 20" at Dunstable.

London Gliding Club

Sunday, July 8th.—Hot, easterly breeze, with erratic down-draughts. The morning spent in ground-hopping the Hots without damage. The big group of owners have made astonishing progress, and are all up to "A" standard, some having progressed to a "B." It remains to be seen whether there is any truth in the classic German remark, published a long time ago in *The Sailplane*, that a Hot's pilot is liable to break his neck as soon as he passes on to a more normal machine.

In the afternoon and evening the primary R.F.D. endured beginners. What do you do with a man who, having left the ground a foot or two below him, saws feverishly at the stick, makes faces like a drowning man, and, as the ground comes up at various angles to meet the keel, takes his feet off the rudder bar and lands on said feet! This, of course, is an hypothetical case, a rhetorical question, and quite impersonal. Entirely without prejudice. The effect on the instructor is to rotate his stomach through one revolution in a fore-and-aft plane.

An auto-giro dropped in. A cabin KLM with wheels up, glorious to see, swooped to and fro over the landing ground at an incredible speed. The Desoutter brothers brought over a new Chrysler car shaped like a celestial hippopotamus. The Super-Hots is taking its own particular shape. Rude boys are collecting string to fly her on, but the owner is negotiating for an oxygen outfit, a sextant, and an atlas of the world. So the fun is general, which is as it should be. The Moxospat bellowed over on her way home from Sutton Bank, bearing the B.G.A.'s treasurer, the Editor, and a Southern Soarer.

July 11th to 13th.—As Imperial College were holding their fortnight's camp at the time, and sportingly provided launching assistance when required, isolated London members were able to turn up on these days and join in the fun.

On Wednesday some members of the Hots group flew it off the top until the wind changed to a down-hill direction.

On Thursday, Baker and Chalier passed their "B" tests, and on Friday A. N. Other (aeroplane pilot) soared twice for 32 and 35 minutes respectively and got his "C."

Saturday, July 14th.—Baker got into the air early in the Hots and obtained his "C" with a flight of 17 minutes. This pilot, who is an *ab initio*, had got his "A" only 2½ weeks before. Nobody seems to know when he first started flying—least of all himself, but the average of several estimates puts it at not more than two months ago. Anyhow, it is easily a record, beating the club's previous best by many weeks, if not months.

Hols was then flown by Van Marle, Sproule, and Hafnir, who all just failed to keep up, and later by Van Marle who, after nine minutes, suddenly landed on the top (unfortunately not getting his "C," as examination of the skid showed it had not been a "normal landing," and the Hols had to be manhandled home).

Wills went up about noon in his Scud and stayed up for five hours, thus obtaining the last requisite for his "Silver C." He had to struggle for it at times, especially about half way through, when the wind speed, and the Scud with it, dropped perilously low for a time. The end of the five hours were celebrated by the Scud going a mile or so down-wind in thermals (or something), regaining the ridge in apparent defiance of physical laws, and then wandering away up-wind and back to a final landing.

During the day Ivanoff had two longish soars in Kassel 20, and Collins went up three times in his Rhönradler. For the special delectation of the Secretary of the Hands Off Britain Air Defence League, Collins finished the day by taking his hands off Britain to the tune of some 600 feet and putting the Rhönradler through a course of aerobatics.

Primary instruction in the DAGLING went on stolidly as usual.

Sunday, July 15th.—A thoroughly good day, with such a lot going on that for that very reason we are unable to give a clear account of it all, since everybody was so busy flying that nobody was sure what anyone else had been up to.

Collins appears to have been first off under the gathering cumulus. Before long he had disappeared inside it and was later seen working his way southwards in a W.S.W. wind of 10 to 20 m.p.h. The wind fluctuated in direction all day, apparently deviating hither and thither into the various thermals, which those who know say were present till tea time.

The SCUD was taken up by Wills and before long was seen circling away to the E.S.E., proudly watched by Baynes, its designer, until distance lent invisibility to the view.

FALCON was busy all day and more than once reached 1,000 ft. above the start. Numerous pilots, whose names we could not discover.

KASSEL 20 was flown several times each by Ivanoff, Cornell, and Slater, the first reaching 450 ft.

WILLOW WREN was soared by MacClement and Nicholson; height not known.

In the CRESTED WREN Humphries had three flights totalling 2½ hours, and including visits to (over) the Zoo. He once circled up to 820 ft., but his other thermals were inclined to give out after about 300 ft.

THE PROFESSOR was put together by Morland and given a test flight by him.

HOLS DER TEUFEL was kept hard at work. Baker took it off the top to see what conditions were like for the others. Then Payne did his "B" in 1 minute 40 seconds; Chalier tried to soar it but didn't quite; Dickins took his "B"; Larmey did his "A" from only half-way up the hill; and O'Brien soared for 13 minutes and achieved a "C." Then—alas!—somebody trying for a "B" was not content with his S-turns but got into some other part of the alphabet, so the HOLS will not be flying again just yet.

The DAGLING steadily plodded away at primary hops, and Imperial College flew their machine off the top.

And what of anxious wives waiting at Mrs. Turvey's telephone? News was some time in coming, while we looked up at the cumulus clouds and argued with Mr. Nyborg about the possibility of thermal lift over the Channel. Then we heard it: Collins had landed at Hanworth and Wills at Abridge, in Essex, both coming down conveniently on to aerodromes and thus saving no end of bother. For details see elsewhere.

Ulster Gliding and Aviation Club

The Week-ends of June 2nd and 9th, although eminently suitable for our untried site on S.E. side of the Black Mountain, near Belfast, were wasted on account of the arrival of the mayfly in quantity. Attempts by various pilots at piscatorial dexterity left the rest short-handed, and we basked in the sun and hoped that someone somewhere was taking advantage of the apparently high lapse-rate.

Baster wrestled valiantly with GRUNAU BABY's nose, putting it very successfully back into joint once more. When a coat of varnish has been applied she will once again be ready for the air.

Saturday and Sunday, June 16th and 17th.—Beck had his second experience of a "Bell-Liffool" (with renewed acknowledgments

to Die-Hard for the expression) when he emerged intact after a numberless flights in (should one say "on") R.F.D. at Maggan.

Saturday, June 24th.—An easterly breeze of 10-15 m.p.h. tempted some of us to try the Black Mountain site, which for a long time has intrigued us with its potentialities. Lying as it does some few miles west of Belfast, it is a site over which we should have soared long ago, but for one reason or another it has, up to now, been untried.

Facing E.S.E. and starting from Black Hill (1,190 ft.), a two miles ridge runs to Black Mountain (some few feet higher) and then forms a bowl facing N.E., having Divis Mountain (1,570 ft.) for its northerly boundary.

SCUD II. was trailed to Black Hill and erected after a short carry from the road. Metcalfe was launched from a point some 900 ft. up the hill and reached 1,600 ft. without difficulty, retiring after twenty minutes or so to adjust ailerons.

A further flight of exploration into the bowl was disappointing, only 1,300 ft. above launch being obtained, and although an attempt at reaching the Cave Hill was made, the easterly wind was heading the machine too much and a point just beyond Ligoniel was the farthest reached. Here the machine seemed to come unstuck and a hasty retreat was made back to the ridge of the Black Mountain.

It is certainly a novel and at the same time not too hazardous experience to be soaring over a town! There may have been thermals, but a state of inversion with no sun and a faint drizzle must have damped out any there were.

Mackie was launched next, reached about the same height and admitted, like the first pilot, that he wasn't too happy. Mackie also had a flight, but confined it to the Black Hill and consequently didn't gain much over 700 ft.

We draw a veil over the last flight. Suffice it to say Metcalfe was launched again, circled over Dunmurry, some five miles to S.E., brazenly ignored the golf course as a landing ground, and chose instead a tall thorn hedge. As crashes go, this was a good one; that is, there was plenty of noise, a lot of damage to the machine, but no injury to the pilot (maybe it's as well it was a SCUD). A golfer coming along hot-foot to pick up his bits seemed shocked to find him (the pilot) doing it very well himself, thank you!

The rescue party was generously hilarious and a model of what such parties should be, no matter what the circumstances. Flight time, 2½ hours.

Wilts Aviation and Gliding Club

The above club commenced flying operations on Saturday, June 16th, some of the members having spent the previous week-end with the Dorset Club, from whom a warm welcome and much encouragement was received. The first week's work resulted in several good flights by Messrs. Foss, Firmin and Smith, but bungy soon proved to be very "second-hand." Instruction was given to *ab initios*, and about fifty members of the public were present.

Saturday, June 23rd, proved to be a drizzly day and, although the machine was out in readiness, no flying took place. In the evening R. Smith-Barry arrived with two passengers in his P. MOTH, landed on the site and inspected "Miss Fitz" (ZÖGLING).

On Sunday the day did not clear until tea-time, when a burst of bright sunshine brought over about 100 spectators. We have by now become possessed of the Buick towing car which the B.G.A. used at Huish last year, and also a new 60-yard burst. P. S. Foss tried out these for launching and did several good flights. The machine was then taken over by F. C. Smith who asked for a strong launch, and got it. After recovery from the stall Smith landed rather heavily, claimed the record for the steepest vertical climb, and took off again for a more northerly flight.

Saturday, June 30th, and Sunday, July 1st, proved to be exceptionally fine days. No appreciable wind was blowing, and full use was made of the extensive flying site which the club possesses. Much instructional work was done, and splendid flights were made during the week-end by Firmin and Smith. *Ab initios* made good progress, and Smith Jr. (who is only 14 years old) made his first two short flights on the level stretch. As larger numbers of the public arrived toward evening, instruction was curtailed and demonstration flights were given. Both Firmin and Smith covered amazing distances, flying with extreme steadiness.



The club now has a refreshment tent, and probably the most extensive site of any club, with a useful soaring site adjoining. We are now well equipped and insured, and have an excellent instructor in the person of P. S. Foss. Members are being added to, and now number 18. Although subscriptions come in promptly, the members paying same do not turn out in the numbers which they should.

The club would like to get in touch with anyone who has for sale the blue prints of a B.A.C. VII.

Yorkshire Gliding Club

Sunday, June 10th. was one of the Good Old Days of Gliding, on Baildon Moor. A dozen or so of our Primary Training Section turned out, and, since the wind was of no use for Sutton Bank, several members of the advanced section also arrived at Baildon to help. There was no wind at all during the morning, but about mid-day a very light wind came up from S.E., so several members approaching their "B" stage attempted "45's" on the east slope, but no one managed it. Then the wind went altogether, but after lunch it came again from N.E. We followed it round, still attempting "45's," and we persisted in following it round until it was blowing about five m.p.h. up the west slope, on which Roy Watson and A. S. Robertson achieved qualifying flights towards "B" and "C" certificates respectively. After tea the wind, so called, had gone round to east again, so we went to the east side of the plateau where several new members were initiated into the art of ground-hopping. Other more advanced ground-hoppers had to be launched from near the summit of Hope Hill in order to get them clear of the grass. We de-rigged about 9 p.m. thoroughly tired but completely happy. It had been a grand day.

On Sunday, June 17th, we made a delayed start at Sutton Bank, owing to the fact that our vigilant ground engineer expressed disapproval with a strut fitting on the Hots. This was renewed and replaced on the spot, and about 3 p.m. Sharpe was launched. He beat up and down the bay quite comfortably and when he landed Hastwell took over, performing quite the best flight of his career. Then came Holdsworth, who has made confident progress during the past few months. He always manages to get a few feet more

altitude than anyone else. To finish the day A. S. Robertson took Hots to the bottom on his first trip off the bank, and he obtained further thrills by doing a little tree-climbing, landing near the farm.

Sunday, June 24th, was another good day for the "primaries" at Baildon Moor. Several "B" qualifying flights were made on the east slope and Roy Watson took his "B" with a fine steady flight of 68 seconds.

On Sunday, July 1st, on arriving at Sutton Bank late in the afternoon after a bit of engine trouble on the road, I found Sharpe sitting on the hangar and club house gazing hopefully at the foundations. This is not as unlikely as it may appear, because the hangar was in bits stacked up on the ground in preparation for erection. This process looks as though it might take several weeks yet before completion. All the same, things are moving, and it is some consolation to be able to say that one has sat on the club house. The wind was blowing from S.E. so we went off for a ramble round the bay to see if there were, possibly, any up-current. To the north of the Thirsk-Helmsley road we found a considerable breeze blowing up the S.W. face of the promontory of Cold Kirby Moor. We had taken a two-foot model FALCON with us and she flew so well that we were considering fetching Hots to the spot, when a thunderstorm crossed the plain further north. After this had passed, the wind set well in the west, and at 8 o'clock we took Hots to the club launching ground. Sharpe was launched, but almost immediately the wind failed and after only 4 minutes he was obliged to land in the valley.

July 8th.—Training on primaries continued at Baildon, where most of the section received ground-hops. It is a long time since Zögling had a nasty bump, but she was severely damaged in the afternoon as the result of a stall by a "lighter than air" aspirant who landed her on a wing tip. He watched Zögling finally settle down from quite a detached position. The safety belt had broken owing to the severity of the impact and he was thrown clear.

July 15th.—A light S.W. wind gave promise of becoming stronger, but the promise was not fulfilled. In the afternoon Hastwell and Holdsworth performed very creditably, considering the wind strength, for about half-an-hour each. The wind failed early so Jowett took Hots to the bottom and she was packed up for the day.

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