THE SAILPLANE & GLIDER

(Founded in September, 1930, by THURSTAN JAMES*)*

The only Journal in the World devoted solely to Motorless Flight.

OFFICIAL ORGAN OF THE BRITISH GLIDING ASSOCIATION.
Editor: ALAN E. SLATER

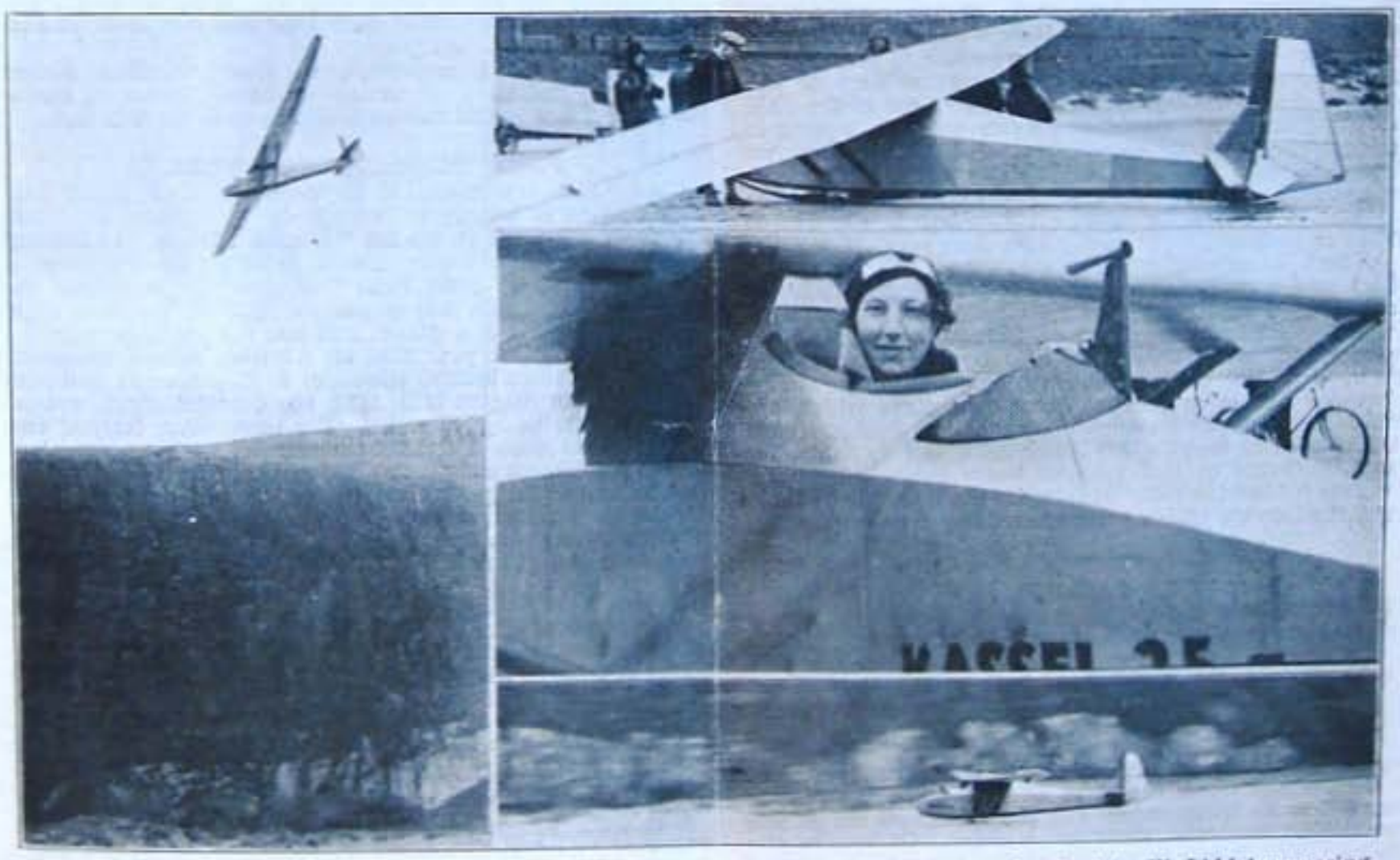
Editorial Offices: 43, CHANCERY LANE, W.C. 2. *Telephone:* HOLBORN 0309.
Subscription Rates [Post Free]: Annual 10s. 0d.; Half-Yearly, 5s. 6d., Single Copies 1s.

Vol. 5. No. 5. May 1934. **Published on the 2nd Tuesday of Each Month**

PRINCIPAL CONTENTS

	PAGE		PAGE
Editorial Comments	66	. . . . Or May (be) West: "*Live-soft Redilheface*" ...	72
The "Rhönadler's" First Cross-Country Flight ...	68	The "Rhönadler 32J-P2"	72
Weather Notes on April 22nd: *G. L. Bell*	69	Putting a Stop to It	72
Sutton Bank: *P. A. Wills*	70	Correspondence	73
Inventions and Experiments	71	News from the Clubs	74
Nightmare of a Glider Pilot's Wife: *Anon.*	72	Official Notices	78

THE ULSTER CLUB'S LATEST ACQUISITION.



The new "Kassel 25" has its aerial baptism at Magilligan Strand, Co. Londonderry. On the left: W. Liddel preparing to land. On the right: (centre) Mrs. Mackie about to start on a flight in it, and (below) H. C. Wynne landing it at speed (note the wings bent up by air pressure).

THE SAILPLANE AND GLIDER

43, CHANCERY LANE, W.C.2. MAY, 1934

The Silver Lining.

The time has come to retrieve that blessed word "milestone" from storage, wipe off the accumulated dust and display it once more in public. The milestone to which we refer is not the renewal of attempts in diverse quarters to get a State subsidy for gliding; it is the fact that a British pilot has at last qualified for the "Silver C" soaring badge, the highest award which a sailplane pilot can earn. And whereas, up to the present, a duplicate set of milestones has been needed to mark the progressive achievements of our pilots (one for those who have flown aeroplanes and one for those who have not), the roads along which they lie have now converged into a single highway. Mr. Collins has trained entirely on gliders and sailplanes. And when the list of British "Silver C's" begins to grow, as we are confident it shortly will, it will probably be found that power-trained pilots and *ab-initios* are about equally represented. The achievement of a "Silver C" demands other qualities than those which distinguish the one class from the other.

Cross Purposes.

Incidentally, a newspaper paragraphist claims to have been told by "The Gliding Association" (sic) that "the whole purpose of the promoters of the movement is to develop air-mindedness among the general public." So far as we are concerned, the whole purpose is the promotion of progress in the art of motorless flight. You can't build a flying movement out of people who walk about on the ground saying that they would prefer to get somebody else into the air.

It is pleasant to read in the Club News the congratulations which several Clubs have offered to the London Club and its pilots on the recent cross-country flights. It shows that the movement as a whole is ready to appreciate fine performances for their own sake, quite apart from the question of who did them. And as with clubs, so with individuals, the same principle should, and we hope always will, apply.

Sutton Bank.

All who are anxious to see a general raising of the standard of flying, in addition to the betterment of the skill of those "at the top," should give every possible support to making a success of the establishment of a soaring centre at Sutton Bank. The site has, to our mind, great similarity to that at the Hornberg in Germany, not only in the actual shape of the main soaring slope, but in the use to which it is proposed to be put. The Hornberg, it may be remembered, is intended not so much a school as a university, to which pupils repair when they have learned the elements of controlling a glider at their own local clubs. Not that beginners won't be catered for at Sutton Bank, but their instruction will necessarily be chiefly by dual control and winch towing. For more advanced people the site can offer the necessary room to practice those evolutions which are essential for high-performance soaring; any inexperienced pilot who tries to make a 360-degree turn at Dunstable, for instance, is liable to find himself badly bunkered on the golf course behind the hill. In fact, for the first two or three years of the London Club's existence nobody even tried.

THIS GLIDING.

"On good days going out to see the gliders might almost be said to rank as one of London's amusements. With a less virile people the amusement might be expected to pall, for the spectators are roped in to help at the start of the gliders. They are very willing. Experience never seems to damp their ardour. They tail on to the rope and pull by the half-dozen every time they are asked. Though some know what is about to happen, they never manage to avoid it. Part of the ritual seems to be that when the rope is drawn out to its fullest extent and the volunteers are pulling their hardest the rope shall be released. Of course the volunteers fall. It may be calculated that every glider started means that six good men and true shall be flung on their backs in the mud but—gliding goes on."—From the *Yorkshire Herald*.

THE GROWING LIST OF "SILVER C's."

In our issue of February, 1934, we set out the conditions for obtaining the "Silver C" soaring pilots badge, and gave a list of its first 18 holders. A 19th holder was announced in March; he is Dipl.-Ing. Ludwig Rotter, of Budapest. A German pilot, Karl Baur, completed the necessary qualifying flights at the Hornberg on March 8th, with a height and duration flight in the FLEDERMAUS, the experimental machine with vertical panels at the wing-tips. He had an exciting time going up inside a snowstorm.

In England, all three qualifying flights have now been made by G. E. Collins, to whom we offer congratulations. In his new RHÖNADLER, recently purchased from Germany, he soared for over 5 hours on April 20th and did the necessary height and distance two days later with a flight from Dunstable to near Southend, described elsewhere in this issue. He has now to wait for the badge to be officially granted, presumably by the Royal Aero Club.

Of British pilots who have partially qualified for it, only P. A. Wills has exceeded the necessary 1,000 metres' climb and 50 km. distance, while the 5 hours' duration have been done by R. L. Mole, S. Humphries, J. Laver, and R. G. Robertson.

A WORLD'S DISTANCE RECORD?

A press message from Buenos Aires on April 9th stated that Wilf (*sic*) Hirth had put up a new distance record with a flight from there to Rosario, a distance variously given as 165, 165½ and 167 miles. Another version stated that both Herr Hirth and Herr Riedel had covered that distance. (The German soaring expedition to South America does not include a two-seater.)

The *Kölnische Zeitung*, however, alleges that this report is incorrect, and states that the flight, though a very creditable one, was from Buenos Aires to Perez Millan, a distance of only 165 km. (102½ miles).

Now come another press report, on April 25th, stating that Herr Riedel has done a record flight of 167 miles from El Palomar (the aerodrome at Buenos Aires) to Rosario.

Riedel flies the FAFNIR sailplane. An earlier report, in March, stated that "a German glider, Herr Fafnir," while gliding at El Palomar, had been "carried away by a strong gust" and had disappeared, and that a search had proved fruitless.

The world's distance record for sailplanes has stood at 265 km. (nearly 165 miles) since May 4th, 1931, on which date the late Gunter Groenhoff flew that distance from Munich to Kaaden in Czeckoslovakia.

We have some further news of the South American soaring expedition, including an article by Peter Riedel on one of his flights, but it was not available in time for this issue.

FROM DENMARK TO SWEDEN.

Otto Veibel, an electrical engineer, aged 28, living near Copenhagen, is shortly to attempt to fly a glider from Helsingor in Denmark across the "Danish Riviera" to Helsingborg in Sweden, a distance of about 2½ miles. He is attempting to win the "Oere Sund Prize" of 1,000 crowns, which was offered by a Danish newspaper in 1922 for the first flight across the Straits in a glider, and has not yet been won.

We reported last year that an Austrian named Sparmann had crossed from Malmö (Sweden) to Copenhagen and back in a glider on August 12th, 1933, the distance across the sea at that point being 16 miles. We have since learned that the flight in each direction commenced with an aeroplane tow to a sufficient height to glide across, and the pilot therefore failed to qualify for the newspaper's prize, the conditions for which do not allow of an external source of power. Sparmann has now become a Swedish subject; he runs an aeroplane and glider factory in Sweden.

GLIDING IN EGYPT.

It is reported that Mohamed Taher Pasha, Vice-Chairman of Misr-Airwork, had instructed the Company in its workshops at Almaza Airport to make an airworthy glider out of the damaged remains of a PRÜFLING and a ZÖGLING. Another repaired machine, a PROFESSOR, has been delivered to Mr. Marlia, of the Cairo Gliding Club, and was successfully flown early in February.

IN THE IRISH FREE STATE.

The development of gliding in the Irish Free State is expected to begin this summer, according to reports from Dublin. The Minister for Defence and the Army Air Corps are said to be interested. A glider is now being constructed at Baldonnel Aerdrome, near Dublin, "built on a famous model by Kronfeld."

JANE'S JOURNAL—Or the Diary of a Bright Young Thing - - - - Going Down



(Reproduced by courtesy of "The Daily Mirror.")

A TOW FROM GERMANY TO ENGLAND.

Miss Joan Meakin, who took up gliding at the Wasserkuppe school in 1931 as a result of visiting the Rhön meeting of that year, has now bought a sailplane of RHÖNBUSSARD type from Germany. (The first RHÖNBUSSARD made its appearance at last year's Rhön meeting; we will be giving a full description of it shortly.)

In order to bring it to England, where she had contracted to fly it in Sir Alan Cobham's Air Circus, Miss Meakin was towed in it by a KLEMM-HIRTH aeroplane all the way from Griesheim Aerodrome, Darmstadt, to Heston. In the aeroplane were Herren Maier (pilot) and Roeder (observer).

The flight was carried out by stages. The party left Griesheim on April 3rd and flew to Brussels with an intermediate stop at Cologne. Next day they flew 75 miles from there to Ostend, and on April 5th on to Heston, with a stop at Lympne, the Channel being crossed between Calais and Dover at about 3,000 feet. At Heston Miss Meakin cast off at 2,000 feet and performed several loops on the way down to land.

The sailplane is now on tour with Sir Alan Cobham's Air Circus. Miss Meakin is towed up by aeroplane, casts off, and loops the loop all the way down. We understand she has strict instructions not to soar (the RHÖNBUSSARD was designed for soaring) as it would upset the programme.

We are reminded, however, of what happened to Martin Schempp in America. He had been engaged to give a display of sailplane aerobatics, but there were thunderstorms about on that day, and when Schempp cast off from the towing aeroplane, instead of gliding down, he found himself going up, and up, and up. He continued to rise through the storm till he had got up to 8,000 feet. He then managed to get down again and landed far from anywhere.

Miss Meakin has expressed a wish to enthuse young people in the art of gliding *and* soaring. Could she not one day, quite inadvertently of course, get lost in the clouds, to turn up later at some distant spot, over the hills and far away? That would enthuse the young ones, good and proper.

Anyway, we hope that Miss Meakin, when she is finished with circus life, will bring the RHÖNBUSSARD along to a good soaring site and show us what it can do. Besides, there is a "milestone" waiting to be passed. Of the 19 "Silver C" pilots to date, all are males.

A SUGGESTION FROM CUMBERLAND.

At a meeting of the Cumberland Education Committee at Carlisle on April 20th, Brigadier-General Spedding (Keswick) suggested that the Further Education Committee should include instruction in flying and gliding in their classes for young men, "particularly those who had never done a day's work since they left school." A member objected that flying was not part of the Education Committee's business, while another suggested that "they should get down to something more solid than flying," and concern themselves with finding employment for the men who were already trained and could not get work.

The General may have heard something about doings in Germany, where large numbers of gliding groups are recruited solely from among the youthful unemployed.

He also alleged that "hardly a man in Cumberland could fly." The Furness Gliding Club have one of their sites (near Black Combe) in Cumberland; their members, however, come from Barrow district, which is in Lancashire.

IN PARLIAMENT.

On March 21st, Commander O. Locker-Lampson (Birmingham, Handsworth, U.) asked the Under-Secretary for Air whether he was aware that over 10,000 gliding certificates had been granted to German airmen and only 350 to English airmen; and what steps he would take to improve home conditions.

Sir P. Sassoon said that he had no up-to-date information showing the number of glider pilot certificates issued in Germany, but the number of individuals holding certificates issued in this country was approximately as stated by his hon. and gallant friend. The question of gliding in this country had been remitted to the Committee on the Control of Private Flying, under the chairmanship of Lord Gorell.

On April 25 Sir Philip Sassoon, answering a question by Commander Locker-Lampson, said that there were 22 gliding clubs in Britain, though not all of them were active. The matters raised in the latter part of the question (what steps were being taken to organise competitions between these clubs, and whether a day could be set aside for a national gliding contest) primarily concerned the Royal Aero Club and the British Gliding Association.

On April 30th Commander Locker-Lampson asked the Under-Secretary for Air whether he would make arrangements to subsidize a national gliding week in this country this summer under proper authorities. He also asked if the Government would assist the gliding authorities to open camps this summer on the Brighton Downs, where instruction could be given in gliding for several weeks on end and not at week-ends only, as hitherto.

Sir Victor Warrender, replying for Sir Philip Sassoon, said that the inauguration of a national gliding week and of gliding camps were matters for the Royal Aero Club and the National Gliding Association in the first instance. While his noble friend (the Air Minister) would welcome any measures which those authorities might be able to take for the furtherance of the gliding movement, he regretted that he was not in a position to give any undertaking to afford financial assistance.

Commander Locker-Lampson gave notice that, in view of the inadequacy of the answer, he would raise the matter on the motion for the adjournment.

On May 2nd Sir Philip Sassoon stated, in reply to a question, that the report of the "Gorrell" Committee had now been received by the Air Minister, but some weeks must elapse before it could be published.

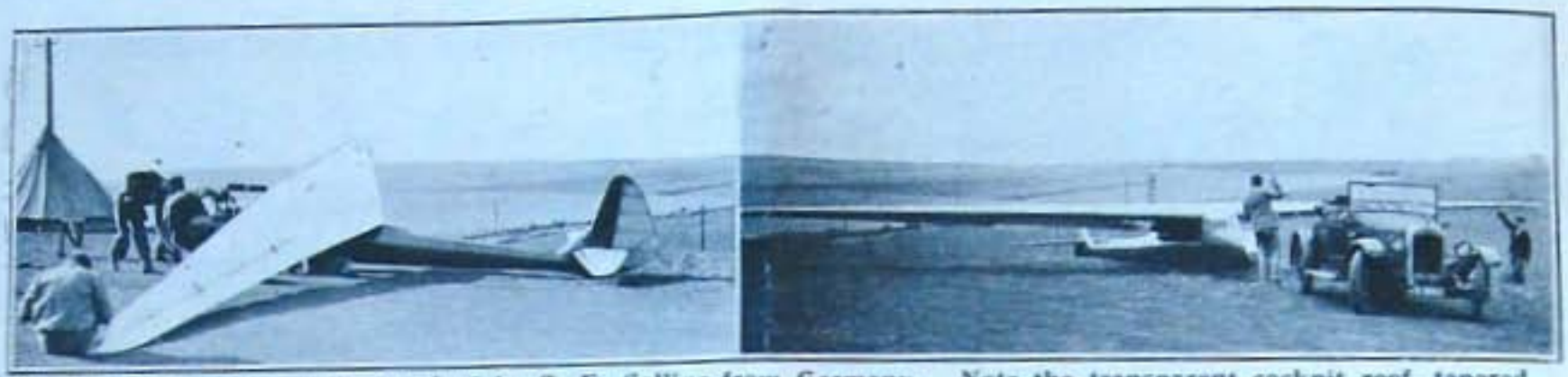
The *Evening News* Parliamentary Correspondent "understands" that the Committee has recommended a grant of £5 for every member of a gliding club who qualifies for a gliding certificate, but another inspired rumour states that this is a minority recommendation.

Letters to "The Sailplane and Glider" should be written or typed on one side of the paper only. Anonymous letters cannot be published unless the writer's identity is known to the Editor.

Questions upon matters which are the concern of the British Gliding Association should not be addressed to the Editor, but to the Hon. Secretary of the British Gliding Association, 19, Berkeley St., W.1. A stamped addressed envelope must be enclosed.

Subscriptions, and enquiries concerning subscriptions, should be sent to the Publishers of "The Sailplane and Glider," 43, Chancery Lane, W.C.2.

THE RHONADLER'S FIRST CROSS-COUNTRY FLIGHT



The "Rhönadler," recently acquired by G. E. Collins from Germany. Note the transparent cockpit roof, tapered wings, oval section fuselage and raised elevator. Further illustrations of the machine are on pages 72 and 73.
(Photos by J. C. Neilan).

On April 22nd Mr. G. E. Collins, of the London Gliding Club, flew in his recently acquired sailplane RHÖNADLER from the Club's ground at Dunstable to Rayleigh in Essex. The distance from the starting point to the place agreed on, by himself and one of the retrieving party, as the landing spot works out at 52.3 miles on the map. This figure is subject to confirmation.

Collins took off at noon in a wind of about 8 m.p.h. After some three or four minutes of soaring along Dunstable Downs in the lift caused by the wind blowing up the slope, he felt some extra lift, when about 100 ft. above the hill-top, and circled to about 1,500 ft. (The barograph was out of sight, and the figures here given are readings, from memory, from an altimeter carried in his hand.) There was at the time a small ragged cumulus overhead.

Having reached 1,500 ft., Collins saw a fat cumulus cloud to windward, so went towards it, losing some height on the way. Arrived under it, he nosed round for the best spots of lift, and then circled up and entered the cloud base at about 3,500 ft. He circled a little in the cloud and then came out of its side and flew into another one close by, this happening when near the Whipsnade Zoo. Circling was resumed in this cloud, and a strong acceleration upwards was felt, though the air speed was apparently rising. This was Collins's first experience of a really thick cloud. On previous occasions, when in thin cloud, it had always been possible to get a sense of orientation by the cloud being brighter in the direction of the sun; in this case it was not so, for the cloud was equally dark all round until he was about to come out of it.

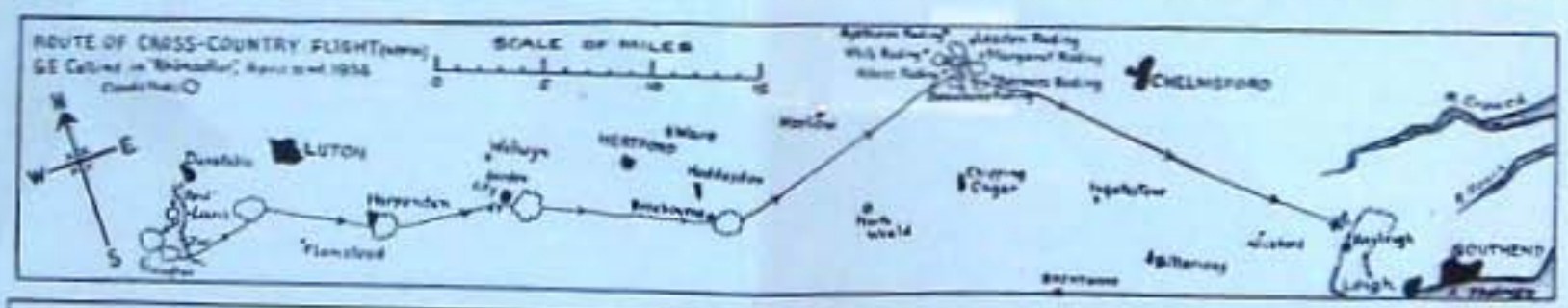
The RHÖNADLER now came out into a sort of valley between two tall clouds; it was a striking spectacle, as the cloud wall on one side was dazzlingly bright in the sun, while the other, towards the Zoo, was in deep shadow.

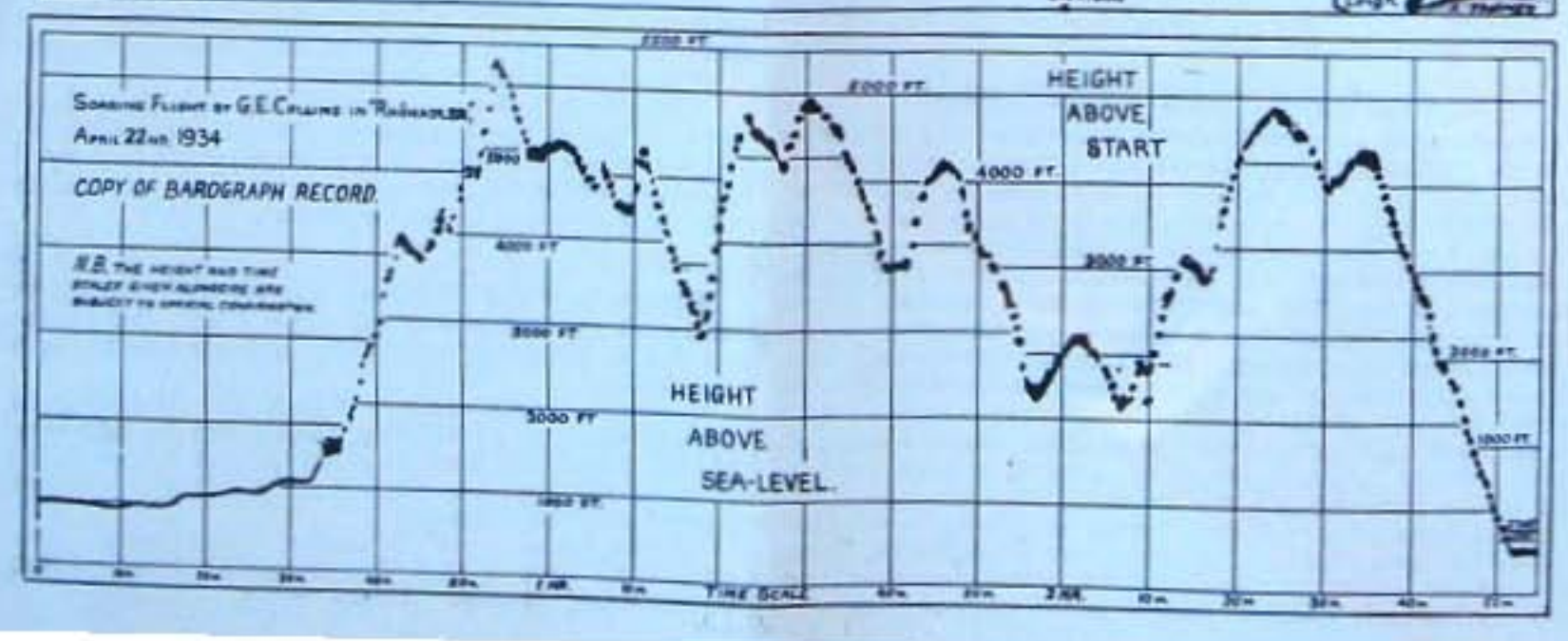
When these clouds were left, Collins steered roughly south-east, then circled under a cloud which was observed towards Luton and went up into it for a bit, afterwards gliding out and losing height towards Harpenden, where another cloud was picked up. (From here his home at Flamstead was visible.) Under the Harpenden cloud some height was gained, then a glide was made to Welwyn. Here he circled for 15 or twenty minutes and finally entered a cloud there, rising to probably 5,000 ft. This was followed by a glide to Broxbourne aerodrome, above which more circling was done, at a slow rate of rise, up into another cloud, reaching a height of approaching 4,500 ft. Below was a MOTH flying, but it was too far off for identification.

The object in gradually working S.E. was to try to get south of the Thames, so as to avoid having to cut short the flight by a too soon approach to the coastline. But at this point the only promising clouds visible were in a direction N.E. and E.N.E., probably over the collection of villages named Roding. (We have collected all the available Rodings and put them on the map.)

Some time was spent among them looking for lift, but, as there were several clouds overhead, it was not possible to attribute any patch of lift to a particular cloud. At last, however, a cloud was entered after height had been worked up from quite a low altitude to about 4,900 feet. After this there remained a long glide to the south-east, with occasional patches of lift all the way. But the clouds were giving out; there seemed to be an end of them beyond this point.

Collins was actually at about 1,500 ft. when he arrived over what was to prove the landing place. Just beyond was an area of high ground, covered with woods and other obstructions, and the air was so hazy that it was impossible to see whether there were any suitable fields for landing beyond. So the landing was made about one mile north of Rayleigh.





A retrieving party came out from Dunstable with the two-seater's trailer, and the expedition got home at 3 a.m.

It is noteworthy that this flight was made without the help of a variometer, as also in the case of the three flights made from Dunstable on March 18th.

The copy of the barograph record here reproduced has been made from the actual record. It will be seen that, where the pen moved rapidly, it left only a trail of dots. It is usual for such an apparatus to make one dot every half minute, and we have drawn in the time scale on this assumption. By this means the actual rate of climb is easy to find; the steepest rates appear to have been at 0h. 53m. (520 ft. per minute) and 1h. 42m. (600 ft. per minute).

As to the technique of the flight, it is obvious that, in order to get any distance, the pilot had to make several deliberate glides to the south-east (he had a compass), and not wait for the wind to carry him at its own pace, for the wind, as pilot balloon ascents at various meteorological stations showed, was only blowing at 10 to 15 m.p.h. even up to considerable heights. The flight was only cut short by the supply of clouds giving out. We were at Dartford, just south of the Thames, that day, and noticed that, though large cumulus could be seen north of the river, it hardly encroached southwards at all. The high sheet of alto-cumulus, mentioned by Mr. Bell in his account which follows, also covered all North Kent; it was moving from S.W., whereas the surface wind was N.W.

WEATHER NOTES ON APRIL 22nd

By G. L. Bell.

General Conditions.

Considering first the weather conditions in general: a depression began to form S.W. of Iceland on Thursday (April 19th) and deepened from 1,008 to 1,000 millibars at the inner isobar in 5 hours (8 millibars is equivalent to 0.24 in.). It deepened further to 988 millibars by 7 a.m. on Friday, and then decided it was old enough to leave home and start for the Continent. Its course was about E.S.E. and of low to moderate speed. Warm and cold fronts are first marked on the map at 6 p.m. on Friday, and are occluded in the northern half. This occluded front passed over Dunstable on the Saturday afternoon (by map), and is no longer marked on the map at 6 p.m. on Saturday. The depression was then centered about 200 miles N.W. of Scotland and continuing to bring S.W. winds. The passage of the occluded front was doubtlessly associated with some interesting clouds which passed over. These were of heavy cumulus type, arranged apparently parallel to the wind direction in a line—not across it as one would expect; but their motion was later seen to be slightly "crabwise," i.e., they were moving from, say, S.W., but the line lay more like S.S.W. to N.N.E. (See photo.) There was no flying at the time, and the wind continued to be too southerly. Also there were no signs of violent lift in this cloud, only one fragment was observed to be forming at all quickly.

By Sunday morning (April 22nd) the depression had already begun to weaken, but at 7 a.m. the centre had arrived just north of Scotland, and was at last bringing westerly, if light, winds. At 1 p.m. it had divided in two, a northern and southern part, and by the end of the day it had passed away. (That doesn't scan too well, but it rhymes.)

It was not possible to make trajectories for certain on the International Section Weather Maps, but the air which passed over Dunstable on Sunday probably came down from somewhere S. or E. of Greenland, which it would have left about Friday morning. As it passed over the much warmer ocean in coming S. and E., its lower layers would be warmed



An example of the cloud distribution at Dunstable on April 22nd. Drawing made from a photograph (which could not be reproduced as the film was ruined by a chemist).

(From a photo by G. L. Bell).

and so a high lapse rate might be set up. (Thus the weather forecast for the week-end talked of hail, thunder and such typical results of an unstable atmosphere.)

Conditions at Dunstable on April 22nd.

Cumulus clouds began to form quite early with regard to the sun. Also there were some magnificent alto-cumulus higher up—the sky made one long for one of those little super-super German cameras and super film (and a super girl to put in as foreground). There was no suggestion of "street" formation (except perhaps temporarily at about 3 o'clock) till considerably later—unusually late, considering the general activity.

The clouds have a curious habit of forming well to the west (of Dunstable) only for perhaps half-an-hour to an hour before forming over Dunstable itself. This was observed to-day. Though there was no observable regularity in arrangement of the clouds, they were yet regularly scattered, or to use a simile to make it more logical, they were arranged like a crowd of people; there was little tendency for big clouds to develop locally as there is in thundery weather.

The first one saw of the Rhönadler was at about 200 feet above the hill—obviously happy. The next impression was seeing Collins circle away to windward from the Bowl, working his way up and arriving under a fairly small cloud to windward of the launching site—south of the Bowl. Here he circled once or twice and then flew a little down wind below another slightly smaller cloud.

Here one left him for a while. When next seen he was in much the same position relative to the ground (i.e., to windward of the launching spot), and circling under a large cumulus with a fine dark base. He disappeared in this once or twice. Once, having flown through a patch so that he was partly obscured, and come out on the other side (but still in the centre of the cloud base), he retraced his course with advantage. Soon after this he disappeared for good, still to windward. This cloud continued "virile," and possibly grew, for some time; but, with shame, one must confess to ignorance of its ultimate fate. One watched with interest the attempt of other machines to get "unstuck" from the hill, but they never came anywhere near it. It almost seemed as if thermal activity was periodic, for both the Professor and Wren actually failed to keep up. Professor, however, had a loose wing-centre fairing acting as a lift-spoiler. Later in the day most machines soared in a normal fashion. Probably even Prüfling would have done so with skilled piloting.



A panoramic view taken from S. through W. to N., showing an "occluded front" slowly approaching Dunstable Downs at 3 p.m. on April 21st (referred to in accompanying article). Dunstable was just north of the point where the warm front and cold front joined to form the occluded front, so the "warm sector" of the depression could have been lifted only a short way off the ground. Note the ragged portion of cloud base at centre of picture; the rags were ascending rapidly into the cloud, showing presence of strong up-current, but most of the cloud line showed no such visible evidence of rising air.

(Photo by A. E. Slater).

SUTTON BANK

By P. A. Wills.



Sutton Bank, looking north.

It is with some joy that we can report that the negotiations with the Ecclesiastical Commissioners have been successfully concluded, and a lease has now been obtained for the British Gliding Association for this site on satisfactory terms.

A Council meeting of the B.G.A. was immediately held, and full control, both active and financial, was delegated to Messrs. Sharpe, Slingsby and Wills, of course all honorary. A special account has been opened for the financial side of the scheme; money paid in to this can only be withdrawn over the signature of two of these three.

Administration of the flying side of the scheme must be delegated to the Bradford Club, who are within reasonable distance of the site, and who will obviously have to do a large part of the donkey work in connection with equipping it. It is proposed to alter the title of this Club to the "Yorkshire Gliding Club," and those wishing to become members should write to their Secretary, or to N. H. Sharpe, Stephenroyd, Apperley Bridge, Bradford. We earnestly hope that people will flock valiantly in, in order to make use of the first equipped high-efficiency site in the country. MEMBERS ARE NEEDED.

We propose to make the scheme stand on its own feet from the start, and the idea of a public appeal for funds was discarded at once. We believe that the movement has reached a stage where it should support itself, consequently only people within it, or connected with it, have been asked to subscribe. We propose to pay 5 per cent. interest on subscriptions, and we believe, and are aiming, to amortise the whole sum within 4½ years. It is extremely heartening to report that our appeal has, at the time of writing, already resulted in promises of subscriptions amounting to more than half the sum required; and we are therefore able without delay to proceed with the necessary work.

Obviously one principle has to be borne in mind here: since we must pay interest and amortisation on the money subscribed, we can expend it *only on revenue-producing* assets; all other necessaries must be provided by those using the site. Thus we hope to provide the following: Hangar and workshop, Club-house, fence, winch, 2-seater machine. We are already actively at work on all these, and are rather staggered at the amount of detail involved. Nevertheless, we hope to get something achieved with the minimum of delay; the season is upon us, and every week gone is a week wasted.

Since this land is a well-known beauty spot, and has been open to the public for many years, we do not mean to put an impassable fence round it. On the contrary, we will probably leave entrance quite free except on the few occasions when meetings are held, when we expect our light fence will be sufficient a hint that sight-seers owe us a small entrance fee for putting up as good a show as we are able for their (and our) delectation.

We regard the essentials as follows:—

(1) WE MUST RETAIN THE GOODWILL OF OUR NEIGHBOURS AND LANDOWNERS AND THE PUBLIC GENERALLY.

(2) WE RELY IMPLICITLY ON THE SUPPORT OF ALL PILOTS AND CLUBS THROUGHOUT THE COUNTRY.

(3) NOBODY IS TRYING TO MAKE ANY MONEY OUT OF THIS: WE ARE SIMPLY GOING TO TRY TO TO PAY OUR WAY HONESTLY. ANY INCOME OBTAINED WILL BE USED IN THE FOLLOWING ORDER:—

(a) To secure our subscribers.
(b) To build up our facilities.
(c) In the case of money obtained at competitions, the remainder to go to participating clubs, and the upkeep of the SAILPLANE.

This leads to

(4) DO NOT THEREFORE TRY TO COME IN "ON THE CHEAP." PAY FOR YOUR FUN LIKE A MAN. THE GLIDING MOVEMENT IS NOT AN ELEEMOSYNARY INSTITUTION. NOBODY WILL BE ABLE TO SAY WE ARE EXPENSIVE ANYWAY.

We are, of course, already assured of the full support of the London Gliding Club; we could not move without their advice and co-operation. In fact this scheme is complementary, not additional to them. Its success will result not in doubling, but in squaring, the influence and prosperity of the movement. Any increase in the activities at Dunstable will result in a larger number of visiting pilots and competitors at Sutton Bank, and vice versa.

The Annual Competitions held by the B.G.A. have been fixed at Sutton Bank from September 1st-9th inclusive. It is VITAL that every possible pilot and machine should attend. We intend to try and run a really well organised meeting on a *properly equipped* site, a thing which has obviously not been possible before. And we believe that this will prove a landmark in our progress as a result.



Sutton Bank, looking south; and a "Scud II." soaring.

LOCAL REACTIONS TO SUTTON BANK SCHEME.

A correspondent of the *Yorkshire Herald* has sought the opinions of prominent Thirsk people on the prospect of a gliding school being established in the neighbourhood. Here are some extracts from their replies:—

Mr. G. A. Lomas, Chairman of the Thirsk Rural District Council: "Anything of a progressive nature that is likely to help Thirsk in any way should be welcomed. There must be some work attached to establishing hangars and sheds that will alleviate the local unemployment problem."

The Vicar of Felixkirk (and may his village never belie its fair name): "With regard to Sunday flying, the crowds who will attend as spectators are people who do not attend my church, and I certainly have no objection. The gliding is a considerable distance from Felixkirk, and I cannot see the village being affected." [This is simply asking for it. True, to reach Felixkirk from Sutton Bank in still air would require a gliding angle of 1 in 32, but in a west wind there would be rising currents all the way. No prize is offered for the first pilot to make an out-and-return flight over the happy edifice.—ED.]

Mrs. Gertrude Foggitt, of Stonybrough, Thirsk, who claims to be the first woman to ascend in a dirigible: "This is the only form of flying I have not yet sampled, but I should like the opportunity of adding gliding to my experiences when the centre is inaugurated."

Mr. W. L. Jervis, Chairman of the Thirsk Licensed Victuallers' Association: "This is great news."

INVENTIONS AND EXPERIMENTS

TO FLY LIKE A BEE.

An Austrian scientist, Dr. Raymund Nimfuhr, is building a flying machine designed to fly in the manner of a bee, according to *Popular Mechanics*. It is to weigh 2,200 lbs., and will be a sort of tandem monoplane; the rear wings, somewhat smaller than the front ones, are situated immediately behind them, and will "serve as propellers." An original feature is that the wings will contain pneumatic cells, and their under surfaces will be of rubber; there is a cell between each pair of ribs, and a small engine will alternately compress and evacuate the air from them in such a way that, when one cell is filled, its neighbour will be empty. A photograph shows the construction to be well advanced. It is claimed that the machine will go backwards or forwards and can hover, so we might be able to learn something useful from it, *if* it is successful.

TO REDUCE AIR RESISTANCE.

By applying a coat of wax to the wings and fuselage, three miles an hour has been added to the speed of United Air Lines machines (U.S.A.), according to *Popular Mechanics*. The wax is applied with a brush to the wing surface and polishing is done with an electric motor. How about trying the idea on sailplanes to improve their gliding angle?

SAFETY FIRST.

The accompanying picture gives an American inventor's idea of how gliding should be taught. The apparatus permits the pupil to maltreat his machine in the most shocking manner without incurring the just retribution for his sins which rightly overtakes anyone who behaves similarly in free flight.

The glider is fixed by a universal joint to the top of a sort of trestle, which allows it to be manœuvred into any altitude, within limits. The trestle is supported on two long arms; these remain horizontal until the car has got up a speed of 25 m.p.h., when the glider can be zoomed up into the position shown,

It is claimed that "the instruction the student receives is identical with that he would get if the machine were actually flying." It is not stated whether the wearing of the costume shown in the picture is a necessary adjunct to proper training of the pupil.

We would not like readers to get away with the idea that this sort of thing is typical of American gliding. On the contrary, the soaring movement in the United States is in a very flourishing condition, and some fine performances have been put up in past months. We will shortly be publishing an article on the subject.



KITING OVER THE SEA.

A correspondent of the *Observer* draws attention to a new form of sport that was successfully tried out on the South Coast last summer. He says:

"There is on the market a patented giant kite—up to 14 ft. in height—which was designed, among other things, to act as a towing medium for boats and canoes. . . . The idea is that canoeists—preferably having safety tubes for their canoes—should launch their portable craft at a point on the coast where the wind is running parallel to the coast, or is in a direction towards a distant headland. If the wind is strong, the monster kites will tow them at a thrilling speed, and a few hours' race would provide a most delightful experience. When the journey is ended the party turn in to the coast, pack up their boats and kites and take or send them home by train. In these days, when mechanical propulsion is so much the vogue, it is a great delight to get back to nature, as it were, and use the forces which are free to all."

It seems to us that here is a sport which should particularly appeal to gliding men, who will no doubt echo the sentiments expressed in the last sentence. There is, of course, a difference between Sailing Flight and a Flying Sail. Nevertheless, it should be possible to combine pleasure with instruction and learn quite a lot about the wind and its ways during the voyage.

The writer adds that "the limitation of this form of sailing, of course, is that you can only sail with the wind. On the other hand, you can sail a light collapsible craft in heavy seas and a strong wind without the danger of capsizing."

ANOTHER KITE-LIKE FLIGHT IN FRANCE.

In the February issue we described a flight by the French pilot Abrial, whereby he rose in a glider to 2,030 feet while still attached to the cable from a winch, and remained thus, flying like a kite, for several minutes. He was in the air for 8 mins. 7 secs., but this "record" has now been beaten by the pilot Viel, of the Aviation-Club de Touraine.

Viel went up in a squally wind which was too rough for elementary training. He used a three-year-old glider of XI-A type, with cable attachment near the centre of gravity, and was launched by winch with 900 metres (nearly 3,000 ft.) of cable. When he had got up to 200 metres, it was possible to let out gradually another 150 metres of cable, but the pilot found that, after he had climbed to a certain height, the machine refused to go any higher and started oscillating to right and left.

At the end of 12½ minutes Viel was frozen stiff (it was a N.N.E. wind) so he cast off and took another 1½ minutes to glide down again; total time, 14 minutes.

Viel's friend, J. Bideau, who reports the flight in *Les Ailes*, admits that such feats have no particular value, but says it is good fun and requires skill. The pair of them intend, when opportunity offers, to kite up in their two-seater 20-A, some day when a high wind is blowing; they will then stay put at the end of the cable, taking turns at the controls, until either the wind dies down or the glider breaks up, whichever happens first.

GLIDER TO BE LAUNCHED FROM AIRSHIP.

A glider piloted by Herr Wiegmeyer is to be released from the GRAF ZEPPELIN when flying over Berlin. This is one of the events in a big programme of aerial activities all over Germany which has been arranged for the week June 1st to 8th. The airship is to tour over Germany on June 2nd and 3rd, and the glider release will take place on one of these dates. Another report says Whitsun, but perhaps that is a dress rehearsal.

The statement, made in several newspapers, that this will be the first time such a thing has been done, is not correct. In 1930, or thereabouts, Lieut. Ralph Barnaby was suspended in a PRÜFLING below the American airship LOS ANGLES, and cast off at 3,000 ft. above Lakehurst flying field. During the glide down, which took 13 minutes, he tried to soar over the airship shed. Perhaps Herr Wiegmeyer will also do a spot of soaring. (Theoretically, it should be possible to perform slope-soaring in the up-current over the airship's nose.) But he will probably perform acrobatics, since he is the pilot who tested out the aerobatic qualities of the RHÖNBUSSARD.

WHAT NOT TO DO.

Willi Farner, the Swiss airman whose towed glider flights across the Alps were described in our issue of March 17th last year, has had an unfortunate experience while doing it again, according to a report. He waved to some fishermen below, and the movement broke the tow rope. His glider is stated to have crashed, but he was unhurt.

NIGHTMARE OF A GLIDER PILOT'S WIFE

Stumbling along over a cold, rough field; biting wind . . . head down . . . cold front . . . fall down . . . cold behind . . . where is my hubby? . . . WHERE'S MY HENRY? . . . Up in the PIFFLING? Oh Henry! It wasn't like this when we first got married! . . . people talking . . . about CHEELS? . . . What *is* cheels? . . . like worms? . . . is it? . . . how *distressing* . . . Oh, I'm sorry . . . I see, are they? . . . Leels, chee-chooping . . . am I sane? . . . One challed on top of a stoop . . . and woke up in its dear old mammy's lapse-rate . . . my cheel, my cheel, she was crooning . . . *gercher*, he chooped . . . go up in the POPANDAM? No . . . No . . . Help . . . Help . . . We're up . . . we're down . . . we're up . . . what was that? . . . a line squall in our sinking speed? . . . you wait till I get down, young man . . . I'll squall you . . . leeloopoolooing all over the sky with a quiet, *respectable*, young-married LADY . . . what's that? *Not* young-married? . . . Widow? . . . HENRY? Bashed the PIFFLING into the Crastion? WHAT'S HAPPENED? . . . CHOOP . . . Where am I? . . . On the floor? . . . What's happened? . . . Fallen out of bed? . . . Made a perfect three-pointer? . . . HENRY . . . leave the room . . . *leave the room* . . . It's either me or your rotten PIFFLING, you can't have both. Get out! GET OUT! . . .

ANON.

. . . OR MAY (BE) WEST

BY LIVE-SOFT REDITHEFACE.

It was a roasting hot day in next December, and conditions were colossal. I was launched in the CRESTED PRUNE, which was positively shimmering in its new coat of Solignum. Immediately in front of me I saw the tail. I knew there was something wrong, so I turned round and flew the other way. Actually, I am literally and morally convinced that I ought not to have done this, but then one is young, and has a *very* charming girl friend to show off to. After pottering up and down the ridge for a few hours, I suddenly found myself in a cloud. My entry into this had been so amazingly sudden that I could not quite read its name, but it felt like what a Tomato-Tumultuous cloud ought to feel like. I swore a mental oath, which had the desired effect of bringing me out at the top of the cloud. I looked at the aneroid; it said 3.0 p.m., and I swore again, as that meant that it would not be worthington while coming down again till 6.0, which, I calculated roughly, using the cockpit cover as a writing desk, gave me exactly three hours to while away.

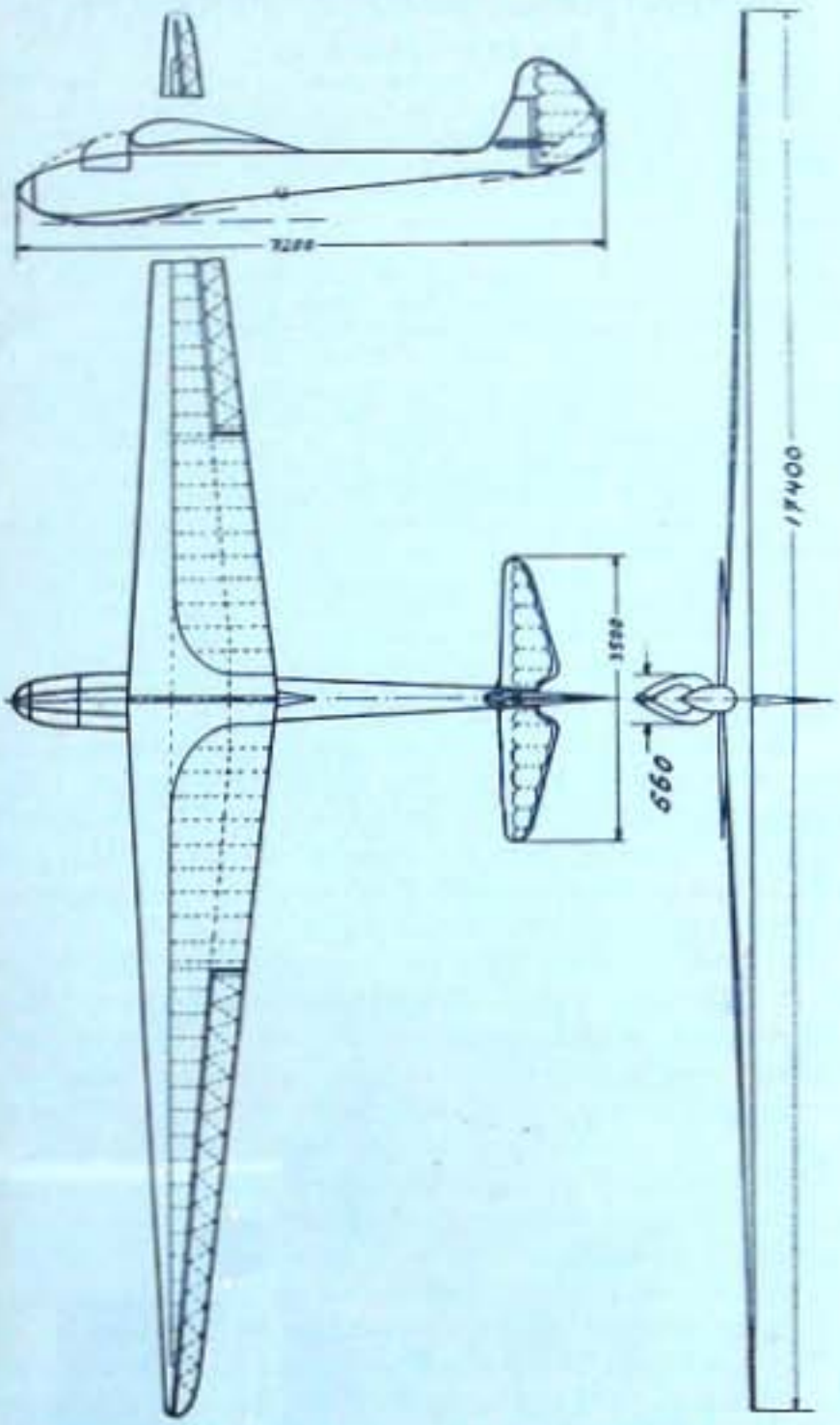
By the time I had finished this, I found that I was flying in a hailstorm which was HAILING UPWARDS. This, I confess, confused me a little, but half an hour later I had worked it out. One gets up-currents in hailstorms downwards, so obviously one got down-currents in hailstorms upwards, so I flew upwind to get out of it. I looked at my watch. Excelsior! Eureka! Spreken ze doitch! It indicated a height of 5,000 feet *below sea level*! I looked up. There sure enough was old Mother Earth smiling down at me. Once more I settled down to a good old think. Brain-wave! I proceded to perform a half-roll, a manœuvre I had carefully practised a year previously while being autotowed by an autogiro over Berisinedman. Naturally I lost a few hundred feet doing this, but when finished, I found that my height was now well over 5,000 feet.

About this time, I thought I had better turn round and start going home, but I overshot the mark and landed just after opening time in Ireland or somewhere. A peach of a landing too. Afterwards one could not find a single sign of the landing skid. One is now hoping to win the Irish Sweep so as to be able to pay the trusty CRESTED PRUNE'S passage back to England. Or should one fly it back?

PASSED BY THE DOCTOR.

The gliding group at Moisselles, in France, have instituted an informal medical examination for would-be pilots. The standard is not as rigorous as that officially required for power pilots, but the object is to avoid sending up pupils who are liable to such things as attacks of syncope while flying. The examination is carried out by the group's Hon. Medical Officer, Mlle. Saury, a qualified lady-doctor.

THE "RHONADLER 32J-P2."



Span 57.1 ft., wing area 193.8 sq. ft.; weight empty, 364 lbs.; flying weight, 540 lbs.; wing loading 2.79 lbs. per sq. ft. Permissible aero-towed speed, 75 m.p.h.; sinking speed about 23.6 ins. per second. Many German clubs have built it themselves. Slight differences from original 1932 model, such as higher elevator, larger rudder, higher fuselage, span nearly 2 ft. less but area the same.

PUTTING A STOP TO IT

FROM A CORRESPONDENT.

Over a friendly glass of beer I was chatting the other day to an aged farm hand in a country pub. The talk working round to haymaking and kindred subjects, I happened to mention the account given in the January SAILPLANE of hay being carried some distance by thermal currents, and asked him if he had ever come across anything of the kind.

"Oh, you mean one of them 'orrible whirlywinds you gets in stuffy weather," he said. "You can get half the top lifted off of a hayrick if you ain't careful."

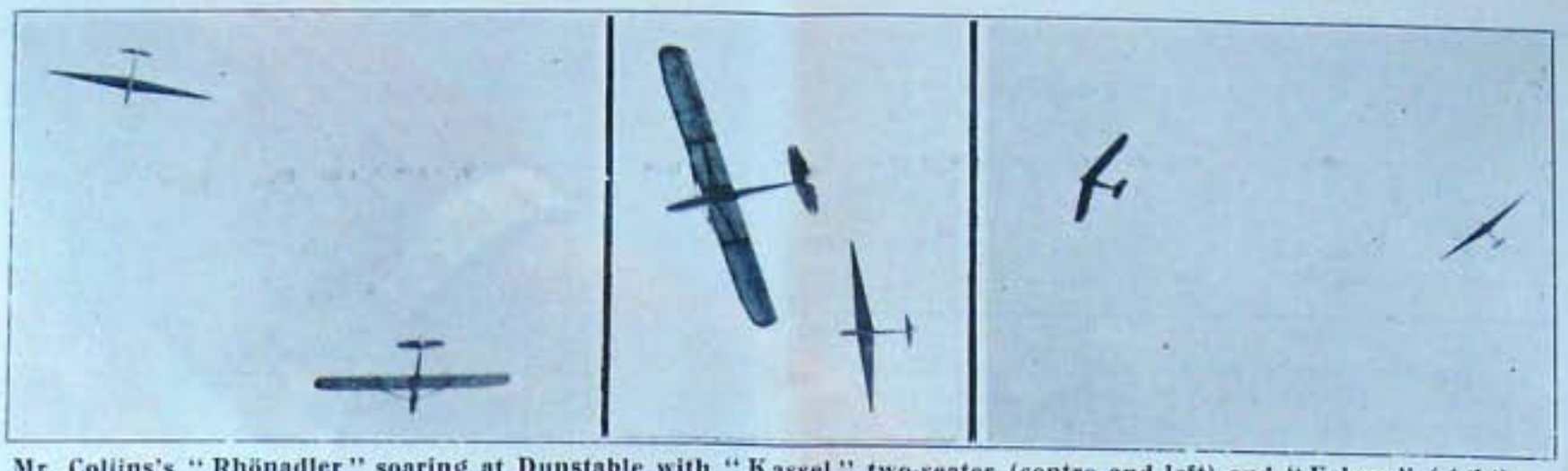
"But what has being careful got to do with it?" I asked. "Surely it's the kind of thing you can't either start or stop?"

"Oh, can't you?" said the old man. "Why, praper thing to do is shoot 'em. I ain't never done it myself, mind you, but I've always unnerstood as a couple of rounds of shot 'll blow the nasty thing to pieces if she ain't too strong, and bring all yer hay down again."

The idea of potting at thermals with a shot-gun struck me as being so exceedingly funny that I'm afraid I laughed rather more violently than the old boy's dignity would stand, and *that* cost me another glass of "'alf and 'alf."

[We are reminded of the traditional belief among sailors, that you can break a waterspout with a well-placed cannon-ball.—ED.]

COMPANY FOR THE "RHONADLER."



Mr. Collins's "Rhönadler" soaring at Dunstable with "Kassel" two-seater (centre and left) and "Falcon" (right).

CORRESPONDENCE

"THE SOARING FLIGHT OF BIRDS."

Sir,

In the first column of page 56 of your April issue, in articles which all must follow with interest, Captain Latimer Needham seems to be a supporter of one exposition of soaring which I rendered and developed many years ago, chiefly in connection with a book called "Aeroplanes in Gusts and Soaring Flight." What I refer to is this: So long as a bird, by wheeling about, finds and faces a gust, or air accelerating from in front at *a* feet per second per second, it *must* continually tend to gain velocity relative to the air, air-speed, or *headway* as I prefer to call it, at the rate of *a* feet per second in each second; and so long as this exceeds the rate at which the drag or friction tends to destroy the headway, which is demonstrably the rate of g/n, or $g/(K_L/K_D)$ feet per second per second, the bird can glide level or even uphill without loss of headway. It can do that just as well and just as *smoothly* as if furnished with a propeller to counteract the drag resistance.

Accordingly this soaring condition, for level or better than level soaring, is very precisely expressible by—

$$a \leqslant g/n, \text{ or } \leqslant g/(K_L/K_D),$$

where a is the needed acceleration of the gust in feet per second per second; g is the gravitational acceleration of 32.2 feet per second per second; n is 20 for the bird that glides at as gentle a slope as 1 in 20, or has $K_D/K_L = 1/20$; and, of course, $\leqslant$ signifies the words "*not less than.*" Then, using these values, we have $a \leqslant 32.2/20$, or $\leqslant 1.61$ feet per second per second, which is 1.1 miles an hour per second. This is only a small acceleration, which it already appears the air will average for hours at a time on windy days. For instance, air quietly swaying round in a circle two yards in diameter, in the time of eight seconds, would have a movement furnishing all the air acceleration needed by the given slow bird, and even allow it to climb, so there is little doubt a great deal of the soaring of some birds is of this ever-available character. The acceleration gust energy of the air is doubtless more universally spread within the air, and less patchily and inconveniently localised, than the upcurrent energy. Probably, as Captain Needham well notices, some of the most practised soaring pilots of the world are already, unconsciously if not consciously, helping themselves by this kind of soaring; and though the large size of gliders may make the soaring less easy for pilots than for birds, a success rivalling, if not exceeding, that in upcurrent soaring seems not at all unlikely in the future.

There are some differences to note. In acceleration soaring the glider must be allowed to point up, and the glider travels level or climbs relatively to the air, exactly as if propeller-driven. In the ordinary upcurrent soaring the glider, of course, always points down, and sinks relatively to the air, exactly as in the ordinary still-air glide.

The essential dynamics of the acceleration soaring is nothing more unfamiliar than that which explains the circular "soaring" of a lady's tapered sewing thimble kept rolling upon a flat and level card surface which is worked round in a small circle. If we moved the card surface about irregularly the "soaring" could continue, provided the thimble were replaced by an intelligent, Lilliputian, free-wheel cyclist, for ever steering to face the direction from which he could feel the card surface to be at each moment accelerating—the cyclist's "gust."

S. L. WALKDEN.

IMPORT DUTIES ON GLIDERS.

On March 7th the Hon. Secretary of the British Gliding Association addressed the following letter to the Secretary of the Import Duties Advisory Committee:—

"Sir,—I am requested by my Association to make application to your Committee for the withdrawal, or reduction, of the present import duties on Gliders and Sailplanes.

"In support of this application, I am to point out that although the Air Ministry classifies gliders and sailplanes as 'aircraft,' the Customs Authorities regard them as 'sporting accessories,' and charge duty on them accordingly.

"It is apparent that for some time to come, Germany will remain the 'country of origin' of all gliders and sailplanes imported into this country, and the 25 per cent. duty imposed is proving a serious obstacle to the development of the gliding movement in the United Kingdom.

"Many foreign countries place the greatest importance on the development of motorless flying and now that the British Government is taking a definite interest in the matter, we feel justified in claiming relief from a form of taxation that is proving a serious burden to the Gliding Movement."

The following reply, dated April 19th, 1934, was received from the Secretary of the Imports Duties Advisory Committee:—

"Sir,—I am directed by the Import Duties Advisory Committee to refer to your Association's application for the withdrawal or reduction of the duty on gliders and sailplanes, and I am to state that they have given careful consideration thereto, but they do not see their way to take any action in the matter."

[In actual practice, however, we understand that the actual duty charged depends upon whether the foreign manufacturer declares the goods as "gliders" or as "aircraft." We therefore advise anyone who is ordering a machine or parts thereof from abroad to ask the manufacturer to declare the material as "aircraft," which of course it is.—ED.]

A TRIBUTE TO LORD WAKEFIELD.

The following letter was published in *The Times* of April 25th:—

"Sir—Now that British gliding appears to be firmly established, I would like through the medium of your columns to emphasize two points which I think are not generally known. After the first wave of enthusiasm had subsided the practical gliding movement in this country was carried on only by a relatively small number of clubs, the leader of these being the London Gliding Club, who accomplished splendid unaided work entirely by the individual efforts of the members. However, even these efforts would not have been productive without the timely help of that patron saint of British aviation, Lord Wakefield, and I have been asked by the committee to take this opportunity of paying tribute to the help he gave in a time of real need.

"I am, Sir, yours faithfully,

"A. G. LAMPLUGH, President.

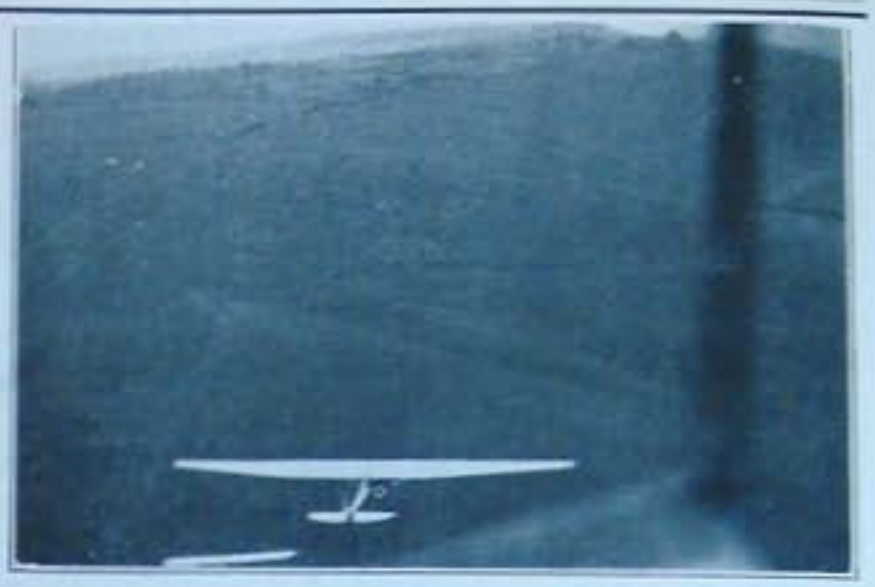
"The London Gliding Club, 13, Victoria Street, S.W.1."

THERMALS IN INDIA.

In a letter to a member of the London Gliding Club, Mr. W. B. Murray, formerly of the Club and now of R.A.F., Peshawar, writes:

"There are magnificent hills but they are in tribal territory and therefore forebidden. . . . The thermals are simply terrific. The other day I came down all black and blue after flying for two hours at about noon. Great big WAPITIS are flung about like match boxes."

NEWS FROM THE CLUBS.



The Dunstable soaring ridge, looking towards Whipsnade Zoo: showing the "Professor" and part of "Kassel 20" soaring along it. Photo taken by J. P. Dewsbery while flying "Crested Wren."

LONDON GLIDING CLUB.

Easter.—The Bradford Club contingent arrived with their DICKSON and HOL'S on Thursday evening, and put in some ground hops on Friday. They were making a long week-end of it in the hope that, on one day at least, there might be a soaring wind. But, day after day, the wind obstinately refused to budge from between north and north-east. On Saturday the same procedure was gone through, with London's FALCON and POPPENHAUSEN for company. We were given a thrill when DICKSON slewed round to the left after a take-off, vaulted over the POPPENHAUSEN'S wing, and stopped a few yards short of a high-tension pole. The pilot, in an interview, said he never bothered much about the rudder.

Our aeroplane pilots had a day out. First Wills arrived in his shining new MONOSPAR and broke it (the monospar) at one point by a heavy landing on one wheel. So he asked Briscoe to take him home in his (Briscoe's) MOTH. The MOTH had just got up a few hundred feet over the hill-top when the engine cut out. Down came the MOTH in a steeply-banked S-turn, plumped down hard on the earth, rebounded up a slope and then sat down on its undercarriage. Wills next tried for a lift in someboly's car, but, though several owners appeared willing, their wives were adamant that no such Jonah should be allowed on board. At last one, braver than the rest, made an offer, and fate was kind and did not demand another sacrifice.

Sunday and Monday could only be devoted to ground-hops, and winch work with the two-seaters.

Saturday, April 7th.—Winch work with KASSEL two-seater. Followed by a bad-weather Sunday.

Saturday, April 14th.—Wind rather far round towards south. Collins brought out his new RHÖNADLER and gave it its soaring baptism. Later, MacClement did some soaring, also at the Bowl, in the WILLOW WREN.



Armstrong soaring the "Prüfling" at Dunstable on March 18th. Photo taken at about the time Wills set off across country. Note clouds arranged in shape of an "L," with one arm parallel to the wind direction (left to right) and the other transverse.

Sunday, April 15th.—The KASSEL two seater was taken up repeatedly all day long on the winch by Dewsbery, earning much cash. Later, the wind veered from S.S.E. to S.S.W. and he was able to soar it. Collins soared the RHÖNADLER for some 1½ hours, and the WILLOW WREN with MacClement went up to keep him company. Most of the time the RHÖNADLER was, of course, on top, but there was a time when MacClement picked up something funny and went soaring up along the ridge, well above everything else. After landing, the unfortunate W. WREN was blown over by the wind.

Sunday, April 22nd.—A gentle variable breeze up the hill, with a sky full of cumulus clouds obviously marking the tops of active thermal currents. Only Collins in his delightful RHÖNADLER could take full advantage of the conditions, which he did with such superb effect that he was next heard of in Southend-on-Sea. During the preceding week his fourteen hours of flying had included a five-hour flight, so at long last we have a real certified *pilot*. Better still, another evil old tradition is dead or at least dying: namely, that durational pole-squatting *per se* is in any way a clever affair. We are getting on nicely now. Once it was clever to soar for five minutes and the feat was an excuse for evermore remaining earthbound with three white birds, on an azure ground, adorning one's lapel. Dear, dear! How strenuous has life become these days! Give us back our hansom cabs!

Compared with the RHÖNADLER, the nine other machines, and the one that ground-hopped, had the performance of damp newspapers. The FALKE gave the PROFESSOR a good run, Armstrong in the former putting on a really finished show with circling and a run-round away from the hill at a very decent height. Another pilot said, having flown the same machine with real polish: "*She* did it all. I left her alone. Herr Lippisch's brains are so much better than mine." That battered relic, the CRESTED WREN, was not having her day out but put in about 1¼ hours soaring, reaching the buffalo paddock, the Rifle Volunteer slope and the club-house. The two two-seaters and the TERN, the PRÜFLING and the HOL'S, performed unemotionally, though the last-named for some curious reason shed her skid, complete, on landing. The passenger machines took up some very famous people—you know, the Really Famous kind who are coy about publicity as distinct from . . . (Erased). The TERN landed intact in an amazing place. The ground-hopping R.F.D. scooped up a dog with a wing-tip. Huge crowds again. Lovely sunshine.

Late in the evening a V : F : Person flew the SCUD II. down delightfully, but missed the height of his undercarriage on landing.

We were extremely pleased to have Sir Gilbert Walker all day and part of the night.

On **Sunday, April 29th,** a northerly breeze confined flying to elementary instruction for nineteen members, seventeen of them being brand new or fairly recent, their standard ranging from a Flying Corps flight-commander to a girl who had never flown before. The latter took off inadvertently but high; to her everlasting credit she allowed the machine to bring her down again, which it did to perfection. Nine hours hard work and everyboly tickled to death.

Wednesday afternoon flying starts on May 9th.

We can offer a good home to any number of orphaned, but healthy, primary machines..

SOUTHDOWN GLIDING CLUB.

March 18th.—A fair number of members turned up in spite of the heavy rain. It was obvious that conditions aloft were something special, and we congratulate the London Club pilots who took advantage of them to such good effect; these flights only show what a lot we have to learn, especially those who have managed a "C" think that gliding offers them nothing further.

Training was continued in the afternoon and good progress was made by Evans and Bird.

March 25th.—The R.F.D. was kept busy all day with flights from the hill and Dunning's sailplane was further tried out. Its proud owner gave the scoffers a most convincing, though somewhat hectic, demonstration that the rudder really does work if applied early enough!

Good Friday.—The wind was just too oblique for soaring, but prolonged flights off the top were made in the PRÜFLING and R.F.D.

Easter.—Easter lived up to its reputation and a perfect wind howled straight up the hill from Saturday till Monday. In the absence of their elders and betters, one or two "C" pilots had a regular field day, with flights ranging from nine minutes to half-an-hour or so, and on Sunday had the satisfaction of looking down with scorn upon the neighbouring aerodrome, where operations were suspended owing to the wind.

Meanwhile the R.F.D. was going up like a balloon and coming down otherwise, to the horror of the repair department, and the obvious delight of its pilots. The only snag in this tale of joy appeared on Monday evening, when an old member celebrated his return to the club by reducing the PRÜFLING to a pile of handy-sized bits for the souvenir hunters! He has just completed a B.A.C. VII and evidently intended providing himself with further constructional enjoyment!

April 7th and 8th.—These days were largely devoted to producing a nacelled R.F.D. from our assorted stock of bits and pieces, to replace the deceased PRÜFLING. Training was continued on the R.F.D.

April 15th.—Our hard-worked R.F.D. finally showed its candid opinion of its pilots by collapsing, and during the day was provided with another fuselage. Dunning's effort—still unnamed—was test-flown from the hill by Little, and particularly good flights were made in it by Dunning and Rubick. Its performance is most promising, and it should soar well in the lighter winds, for which purpose it was designed.

The latter part of the afternoon was devoted—some said wasted—to a Committee meeting, when such weighty matters as syndicates and the prevention of undue cruelty to machines were discussed at great length; it was finally closed by darkness and rats, which threatened to attack the Chairman!

Correction to last Report: Telephone No. HORSHAM Rd. 70, not Horsham.

April 22nd.—What little wind there was kept changing direction every few minutes to the horror of our very particular "A" pilot, who must be launched into wind, to within the smallest fraction of a degree! Repeated flights off the top were made by Rubick and Dunning, and we really believe that we have at last persuaded the latter that it is not always the machine's fault! The beginners had a full ration of flights in the valley, and it was a somewhat exhausted party which finally packed up.

April 29th.—Starting with light variable wind the day provided a pleasant surprise in the shape of a good soaring wind late in the afternoon. Reffell took off in Dunning's machine, but appeared somewhat unhappy about the lateral control and gave up any attempt to soar. There is some difference of opinion on the point, but it would seem that the aileron area could be increased with advantage.

Three enthusiasts, having searched every known and unknown gliding site in the South Downs, finally ran us to earth in the afternoon, and were rewarded by seeing two forty-minute flights in the BLUE PERIL by Armstrong and Little.

The open R.F.D. performed quite well, maintaining its height for some distance along the ridge, Palmer making one particularly good flight. The same member later distinguished himself by driving the Trojan into the biggest and deepest rabbit warren he could find, while another member rushed to his assistance and stalled the other Trojan on the steepest part of the hill! Much bad language ensued, but both Trojans were finally persuaded to return home under their own power.

Various jobs were done during the day on the B.A.C. two-seater, and it should be in action next week.

FURNESS GLIDING CLUB.

Sunday, March 18th.—On this day the Furness District was swept by strong westerly to north-westerly winds accompanied by a series of line squalls or cold fronts, bringing with them showers of stinging hail, sleet and rain in that order. Between times the sun shone brilliantly on our Askam site, from where the snow-clad peaks of the lakeland hills were clearly visible, and the view was magnificent.

The B.A.C. IV was rigged and hoisted into position. The air was distinctly turbulent with gusts up to 35 m.p.h. Stevens was eager to try conclusions with the elements, yet whilst we debated the point the first squall arrived. The long dark roll of cloud was first observed far out to sea, with what appeared to be fog or mist reaching down to the water; this proved to be hail of a particularly vicious variety, and we scuttled for the shelter of a wall. The cloud in passing completely enveloped the hill-top; it is fairly certain that no pilot could have faced such an onslaught.

It may be possible to travel in front of the storm where the lift and visibility are good, but we feel that one must have a sturdy and robust mount, coupled with a stout heart, to soar in such conditions.

In 15 minutes (about 1 p.m.) the rain had ceased, columns of mist rolled up from the Duddon estuary, and served to demonstrate the upward trend of the currents on this site. About 3 p.m. the sky was clear, the wind strength about 25 m.p.h. blowing straight from Ireland. Stevens was launched, and rapidly soared to great heights. It was soon apparent that conditions were bumpy; he seemed to be having a rough passage. After 10 to 12 minutes we noticed another squall approaching. Anxiety was plainly visible on the faces of club officials; Stevens must have heard their prayers, for he came in to make a masterly landing at the launching point. Squall No. 2 was upon us before we could reach a safe shelter from the biting hail. Wet, cold and weary, we decided to call it a day. But Squall No. 3 came along to complete our discomforture.

We hazarded opinions as to what KRONFELD might have done in such weather conditions. Yet little did we dream that real live Englishmen were pitting their skill against the elements at Dunstable. Bravo, London!

Some day we expect a visit from our Ulster friends and, who knows, perhaps a Furness man will visit Sutton Bank on his way to the east coast.

It seems to us that the speed of these squalls across country might be fairly accurately checked by comparing club reports, where times of arrival and departure are quoted.

Saturday, April 7th.—Thanks to our Secretary (who rushed all over the town in his car), a working party assembled on the site, only to find the wind backing to S.S.W. A long debate, but nothing else done.

Sunday, April 8th.—11 a.m. Wind west, 10 m.p.h. Stevens made two soaring flights; lift poor. All active members had flights in primary. Gratifying to note that all retain their skill, after long periods of inactivity.



More clouds on March 18th. Stevens soaring over the Furness Club's site at Ireleth, with one of a series of line-squalls approaching: it has already enveloped Black Combe.

(Photo by Vernon Foster).

A BRACE OF "KASSELS."



The brand-new "Kassel 25" and the veteran "Kassel 20" lined up on the beach at Magilligan, Ulster. (See also Front Page.)

ULSTER GLIDING AND AVIATION CLUB.

Easter activities this year were disappointing after a lot of time spent on various machines and trailers. Harris has produced a modified covered wagon for KASSEL 20, and one is forever finding thereon some new gadget at which to marvel.

Saturday, March 31st.—Activities started from the Knockagh in a faint easterly breeze, and SCUD surprised those present by soaring with 100 ft. to spare under the pilotage of both Wynne (who was paying us a visit) and Mrs. Mackie. The latter caused cardiac flutter by stating that it was difficult to soar unless one flew at 23 m.p.h.

Is it impossible to stall a SCUD, or are the Gods infinitely gracious to daring ladies who refuse to listen to an anxious husband's pleadings anent air-speed?

Time alone will show, but we all hope it does so on a nice, smooth, grassy slope and not a vertical precipice with horrid-looking knobs on.

Baster descended from the top in the SCUD and landed, with almost uncanny accuracy, plumb on the centre of a hedge running across the field at the bottom. Result, two elevators shorn off and an aileron fabric torn.

Meanwhile Mackie and Harris had tried soaring KASSEL 20, but the flights consisted of a steady loss of height and ignominious retreat to the bottom. Some people refuse to be convinced that SCUD is a remarkable machine in spite of this day's evidence.

Sunday, April 1st found us at Magilligan with the new KASSEL 25, but without SCUD or KASSEL 20, as the wind had seemed unfavourable. Slight convection currents, however, must have helped any bit of north there was in the breeze, for we found it possible to beat about at 600-800 ft. over the Downhill section.

Six of our "C" pilots flew the KASSEL 25 for about a quarter of an hour each, and are agreed that Magilligan is an ideal spot on which to try out a machine with a gliding angle such as hers. One is apt to become careless about landings when there is an area equal to several square miles at one's disposal, and all of it as smooth as a billiard table. Nobody feels inclined to say much about the machine just yet, except that she requires plenty of bank to get round quickly, and plenty of "hold-off bank" put on early to get out of it. No doubt we shall get used to this after a flight or two, as well as to the terrific flexing of the wings. She has a peculiarly dignified and stately mode of progress and refuses to be hurried in spite of a pilot's prayers and pleadings. One imagines her to be rather "Professorish" as far as a drooping wing goes (she is some 6 ft. wider in the span). Fore-and-aft she is identical with KASSEL 20, which means she is delightful. We are extremely pleased to have her, and Mackie is to be congratulated and thanked for having made her acquisition possible.

Monday, April 2nd.—The wind again insisted upon disappointing us by going even further round to the East, so that five auto-towed launches of K. 25 merely turned into perceptibly delayed return to earth.

The SCUD being out of action (and KASSEL 20 being a bit of a handful for the mountaineering or mobile section), we spent the day mainly in praying for a change of wind, but occasionally for the hardy ones on R.F.D. (rejuvenated by Beck and McFall).

One imagines that the B.G.A. regulations anent towing primary machines at no greater height than 10 ft. may be extremely dangerous to both pilot and machine. It seems possible to put a glider 10 ft. in the air on, say, a 30 ft. tow-rope and strain it much more than by taking it to 150 ft. on a 1,000 ft. cable!

Tuesday, April 3rd was spent profitably by the R.F.D. contingent in a faint easterly breeze. Two new-comers, Miss Sproule and McKeown, were initiated under the persevering supervision of Liddel. A wild and haggard look about the eyes at the end of the day bore mute testimony to his attention to duty. However, his GRUNAU BABY II. is due soon from Germany, so he has the satisfaction of knowing that his turn has been done nobly.

Sunday, April 8th.—Harris was launched in KASSEL 25 at Magilligan with a little trouble owing to a nasty cross-wind from due North. He cast off at about 125 ft. and went up like a rocket on the 30 m.p.h. breeze blowing at that height. Conditions were bumpy, but from below the machine appeared to be as steady as a rock.

He simply sat facing into wind and went up, and up and up, drifting gradually across and out from the cliffs. We got used to watching him appear out of straggly clouds, and expected him to turn down wind and start off across country. He was too considerate of the two pilots below, however, and landed after some 35 minutes. His barogram indicated 2,300 ft., and his altimeter, he says, 2,350 ft., i.e., almost 2,200 ft. above his release, a most excellent show altogether, and the Club record.

Baster and Metcalfe made several abortive attempts at getting into the air, but beach conditions were atrocious, and, although Baster finally succeeded, he must have overrun the cable at some time during the launch, thereby allowing it (the cable) to loop round the bungy-launching hook. He took the 1,000 ft. aloft with him to some 800 ft., but landed far up the beach safe and sound, and quite unconscious of having been released from the car!

Truly, the longer one lives the more one learns, and we have, we hope, benefited accordingly by these little setbacks to apparently "fool-proof" launching methods.

Sunday, 22nd April found us at Magilligan once more. The tide being more or less full, we were obliged to use the bungy from the top. Metcalfe was launched in the SCUD, from an ideal spot between the Umbra and Hell's Hole, a gradual slope some half-mile broad with 600-700 ft. drop from the edge.

The launch took place well back from the face, so that the new elevators might be tried out, and the pilot had difficulty making headway against the 35 m.p.h. breeze. The first 200 ft. gain in height was made hectic by violently turbulent conditions, but at 1,400 ft. above the starting point everything was stable.

A steady air speed of 40 m.p.h. with a ground speed zero and straggly cloudlets passing 500 ft. below, is conducive to a carefree state of mind which in its turn becomes careless. The result was, therefore, that by a few seconds' inattention the pilot found himself too far back to regain the brink. A steady dive at 50 m.p.h. only hastened his downfall without appreciable gain forward, and once the down-draught was encountered the bottom fell out of everything (including the Dent variometer which quietly syphoned the phenol into the vacuum flask).

Thereafter still more wind with rain and a demoralized retreat to Downhill Pub for ham and eggs.

May we take this opportunity of congratulating Collins on his last 60-mile effort. Could we persuade him to come over and spread the "Gospel" by a flight from Magilligan to Cork? Our friends across the border need something of the sort to start them off. (All right, Mr. Editor, you needn't annotate; we'll do our best!)

BRADFORD AND COUNTY GLIDING CLUB.

February—Except for the fact that N. H. Sharpe took his "C" on the HOLS DER TEUFEL on Feb. 18th, the last few weeks have been unproductive of any good gliding or soaring and reconstruction of the PHANTOM has continued, with a few minor repairs and replacements to HOLS to prepare her for our proposed visit to Dunstable at Easter.

March.—On March 18th a very light S.W. wind was blowing over the White Horse at the southern end of the Sutton Bank site, and R. G. Robertson was launched in the PROFESSOR. Conditions, however, coupled with the short beat possible on this slope made a prolonged flight out of the question, and the PROFESSOR landed near Kilburn several minutes later.

We spent the last week-end in March preparing our trailers for the nacelled DICKSON and HOLS in readiness for their journey to Dunstable, and during the night of Thursday, March 29th these two machines wandered down the Great North Road in the hope that the weather conditions for Easter would not be in accordance with the forecasts. Hopes were dashed, for the easterly winds persisted for a week.

Both machines were rigged on Saturday and hopped at the bottom of the hill in company with the POPPENHAUSEN 2-seater and the FALCON. Several members had auto-launches with Hiscox in the POPPENHAUSEN and followed this up on Sunday and Monday with winch launches in the KASSEL 2-seater piloted by Collins.

In spite of the disappointment occasioned by the poor flying conditions, everyone was delighted with the comfort offered at the Clubhouse, and the excellent catering arrangements were fully appreciated.

April.—On April 8th we returned with HOLS to Sutton Bank, having further adventures with burst and lost tyres on the way. On arrival we found J. P. Watson & Co. rigging his PRÜFLING, and later he made two really clever flights in a 5-6 m.p.h. wind with his wing tip skimming the rim of the bowl quite frequently. Occasionally he lifted her very skilfully to a height of 20 feet above the crest and managed his landings down wind on the hill top in a confident manner.

Sunday, April 15th.—A healthy south wind of 30 m.p.h. brought the PRÜFLING out of its lair early in the day, and shortly before lunch it was launched over the White Horse into brilliant sunshine and quite hectic conditions. Smith and A. L. Slater enjoyed an educative and, possibly, happy half hour, and were followed by Slingsby, who was heard, later, to talk of returning from the long grass to build more FALCONS.

Altogether it was a very interesting day, with much useful non-flying work as well, including the fitting of new control cables to HOLS and a great deal of discussion about the Sutton Bank scheme, with particular reference to hangars. One of these days all this talk will get a bit more flying for all of us.

On April 22nd conditions were better than at any time since last October's Competitions. By lunch time a 10-12 m.p.h. wind was blowing from due west, and R. G. Robertson was packed in the PROFESSOR with several layers of overcoats, bolstered with sandwiches. His intention was to do a 5-hour duration flight. He was launched at 2 p.m. and gained height at each beat until he reached 1,600 feet above start point. Eventually, he hung himself up on a sky-hook at about 1,200 feet and remained there until 7.15 p.m.

Meanwhile, J. P. Watson soared the PRÜFLING at frequent intervals and occasionally, when HOLS was launched for "C" tests, three machines were in the air together, attracting several hundred interested spectators to the vicinity.

At the end of a very satisfactory day we had registered 4 new "C's," Holdsworth, Hastwell, Verity and Jowett, all of whom landed easily on top. R. G. Robertson had accomplished his 5 hours, and Watson had enjoyed his leisure in a truly Hiscobolian fashion, ambling up and down the ridge, stopping here and there and peering over the edge to sniff the strongest areas of lift.

ACCRINGTON GLIDING CLUB.

This Club is reported to have recommenced activities on Sunday, March 25th, "after the winter's interval." J. Nolan, J. Stevenson and O. Hughes made successful flights. The site is Hambledon Hill, on the outskirts of the town. It is also stated that on April 22nd Mr. Nolan ("B" pilot) in attempting to soar, stalled at 15 feet and hit the ground with the nose (the glider's, not his) and wing-tip (ditto). The machine will be out of action for a time, and is the only one the Club possesses.

A CLUB AT DURSLEY.

Dursley, a small country town in Gloucestershire, has a gliding club of its own, according to the local paper. The inaugural meeting was held recently.

WILTSHIRE AVIATION AND GLIDER CLUB.

The inauguration of the Wilts. Aviation & Glider Club took place at The Green Dragon Hotel, Market Lavington, on Wednesday, April 25th. The meeting was presided over by Capt. Kimber, who soon proved himself to be perhaps the best person who could have been chosen for the chair.

After a brief address, he called upon Mr. F. C. Smith, the Organiser of the Club, to render his report. The latter soon found that he had enthusiastic support, and explained that he had already available a primary machine, towing cars, storage facilities, flying sites, etc., and that there was nothing to prevent an immediate start being made.

Mr. C. T. Cuss then sketched at great length the growth of the Flying movement in the county, and made several interesting suggestions.

The meeting was then adjourned for the enrolment of members (a proposition having been made and carried that the Club be formed). Except for the newspaper reporter, only one person failed to join in, and it was afterward discovered that his "Better Half" had threatened him with the "Control Stick."

Upon the resumption of the meeting, the following were nominated and elected:—Vice-Presidents, Mrs. M. A. Cairnes and Mr. C. T. Cuss; Chairman, Capt. Kimber; Secretary, Mr. F. C. Smith; Treasurer, Mr. P. G. Bullock. Messrs. L. Butler, F. Gould and A. Blacklaw were also elected to co-operate with the other officers to form a committee.

It was decided that the Club should affiliate with the British Gliding Association, and that the subscription should be £3 per annum for flying members, and £1 per annum for associate members.

Many interesting matters were dealt with such as Insurance, etc., and although the attendance suffered owing to the bad weather and other causes, the meeting closed with 15 useful members to commence the club.

AIR SCOUTS GO GLIDING.

The *North Eastern Gazette* reports that the Tees-side Air Scouts' squadron, having made steady progress since its formation about a year ago, has now bought a glider, with which it is hoped to make trial flights at Easter. The use of a barn at Norton has been obtained as a hangar and workshop. "After qualifying on gliders," it is stated, "pupils will be ready for instruction on power craft."

Those interested can communicate with Mr. W. Davison, 143, Stokesley Crescent, Billingham, or Mr. J. Brewis, 3, Cleveland Avenue, Norton.

TEES-SIDE GLIDING CLUB.

This Club was formed at the end of last year, according to the local press. The present membership is stated to be 22. The Committee has received a tender for a new primary glider, and has obtained permission for the use of three alternative sites within easy reach of Middlesbrough. The Secretary is Mr. J. Gilmour, 7, Vaughan Street, and the Chairman Mr. A. J. D. Black, 8, Jesmond Avenue, Linthorpe.

JERSEY GLIDING CLUB.

This Club has now been formed, and has obtained permission to use the site of the old prisoners-of-war camp at Blanches Banques. The organiser is Mr. A. S. M. Glassford, 3, Caledonia Place, Weighbridge.

GUERNSEY GLIDING CLUB.

The Club is reported to have suffered a set-back on April 1st, when a pilot, flying at 30 ft. up, was "caught by a strong gust." His wing-tip touched the ground, and the machine finished on its back about a yard from a stationary car. The fuselage was badly damaged and the wings smashed, and the Club expects to spend the next two months repairing it. Mr. C. H. Hollis, of Guernsey, has also ordered a SCUD, and is lending it to the Club while their own machine is under repair.

LEICESTERSHIRE AIR SPORTS CLUB.

It is reported that on April 15th the Club's B.A.C. II glider was lifted by the wind and turned over on its back. A member who jumped on to the wing was carried into the air with it. While it was being examined for damage the wind lifted it again, and this time it turned a somersault. Flying then continued with the REYNARD glider. A motor-cycle is stated to have been used for launching.

DORSET GLIDING CLUB.

During the week-end, April 7th-8th, it is reported, the Club's DAGLING performed 20 flights, damaging a wing in the last one. Next week-end the DORSLING was brought from its hangar at Osmington. J. Laver performed a short soaring flight on it, and R. L. Rolfe, who was new to the machine, did two flights down the valley.

OFFICIAL NOTICES

COUNCIL MEETINGS.

The 56th Meeting of the Council of the British Gliding Association was held on Friday, February 23rd, 1934. Present: S. Whidborne, A. E. Slater, P. A. Wills, H. C. Bergel, F. Slingsby, G. H. Lee, G. T. Richards, W. O. Manning, L. Howard-Flanders, D. M. Morland, D. E. Culver, A. N. Stratton, E. G. Sanguinetti, and J. L. R. Waplington (Hon. Sec.).

In the absence of the Chairman, Mr. S. Whidborne took the chair.

Among the business transacted was the following:

"Gorrell" Committee.—The Hon. Sec reported that the Finance and General Purposes Committee had considered a communication from the "Gorrell" Committee, dated Jan. 22nd, on the subject of the control of the Gliding Movement in this country, and a sub-commitee consisting of Mr. Wills, Capt. Latimer-Needham and the Hon. Secretary had been appointed to deal with the matter and appear before the "Gorrell" Committee on Feb. 14th. Memoranda had been sent in prior to the sub-committee's appearance before the Committee.

Mr. Nyborg's Suggestion.—Mr. T. G. Nyborg, having previously written asking permission to appear before the Council at this meeting, did so and put forward the suggestion that there should be a closer co-operation between the B.G.A. and experimenters. After discussion, it was decided to refer the matter to the Technical Committee with instructions to report to Council on the action taken.

Chairmanship of B.G.A.—It was resolved that the Annual General Meeting be recommended to appoint Mr. C. E. Hardwick Chairman for the ensuing year.

(The Annual General Meeting, which followed, was reported in THE SAILPLANE AND GLIDER for March, 1934.)

The 57th Meeting of the Council was held on February 23rd immediately after the Annual General Meeting. Mr. C. E. Hardwick took the chair.

Capt. A. N. Stratton, Mr. L. A. Dessoutter and Mr. A. F. Houlberg were co-opted as members of the new Council. Mr. R. L. Rolfe (Dorset Gliding Club) was elected to membership of the B.G.A. Mr. L. Howard-Flanders was granted leave of absence from the Council from March 25th to October 25th, 1934.

Election of Stewards.—It was decided to leave the election of the Stewards to the Contest Committee.

Election of Committees.—The following were duly elected:

(a) Finance and General Purposes—
Mr. P. A. Wills, Mr. D. E. Culver, Capt. C. H. Latimer-Needham, Mr. H. C. Bergel, Capt. A. N. Stratton, Dr. A. E. Slater, and Mr. S. Whidborne.

(b) Technical—
Capt. C. H. Latimer-Needham, Mr. W. O. Manning, Mr. L. Howard-Flanders, Capt. J. L. Pritchard, Mr. E. C. Gordon England, Mr. F. T. Hill, and Mr. L. A. Dessoutter.

(c) Contest—
Mr. P. A. Wills, Mr. N. H. Sharpe, Dr. A. E. Slater, Capt. A. N. Stratton, and Mr. F. Slingsby.

(d) Rules—
Mr. P. A. Wills, Mr. S. Whidborne and Capt. A. N. Stratton.

COUNCIL MEETING.

The 58th Meeting of the Council was held on April 20th, 1934. Present: Capt. Latimer-Needham, Mr. Whidborne, Capt. Stratton, Dr. Slater, Mr. Dessoutter, Mr. Buxton, Mr. Wills, Mr. Reffell, Mr. Morland, Mr. Manning, Mr. Munro, Mr. Sanguinetti and Mr. Waplington. Capt. Latimer-Needham took the Chair in the absence of the Chairman.

The Hon. Secretary was instructed to convey to the Chairman (Mr. Hardwick) the Council's best wishes for his speedy and complete recovery from his illness.

Among the business transacted were the following matters:

Sutton Bank.—Mr. Wills reported that the Ecclesiastical Commissioners had offered a three years' lease of the Sutton Bank site at a low rental. He had consulted Mr. Logette (hon. solicitor) and Mr. Whidborne in regard to the terms of the lease, and the modifications had been accepted by the Commissioners. It was resolved that the B.G.A. accept the lease, and Mr. Wills was authorised to sign it on behalf of the Association; further that the Control of the Sutton Bank site be vested in the hands of a Committee of management, including financial responsibilities, and that Mr. Wills, Mr. Sharpe and Mr. Slingsby be appointed to the Committee; also that an appeal be made for subscriptions amounting to £750 for equipping the site, the sum to be amortised in not more than 4½ years, and that subscribers receive 5 per cent. interest.

It was resolved, at the suggestion of Mr. Wills, that the Royal Meteorological Society be asked, through its representative on the Council (Sir Gilbert Walker), to approach the Director of Meteorology, Cardington, Beds., with a view to obtaining lapse rates on Sundays.

The question of the sealing of barographs, raised by Mr. Wills, was referred to the Contest Committee.

A scheme submitted by Mr. Sanguinetti for the promotion of THE SAILPLANE sales was referred to Mr. Bergel, Hon. Manager of THE SAILPLANE.

(The minutes, from which the above is extracted, have yet to be passed by the next Council Meeting.)

CORRECTION TO LAST ISSUE.

In the map on page 50, showing routes of cross-country flights, the date was given as May 18th. This is, of course, incorrect, and we gave instructions for its removal. Unfortunately our printers found that the correct date (March 18th) had been given on another part of the diagram, so they carefully removed the correct date and left the incorrect one standing. They also erased the date of the previous record, correctly given as August 23rd, 1933.

To mark the route of G. E. Collins's flight of April 22nd on the same map, start south of the other 3 flights, and join to a point S. of Luton, to Harpenden, to Welwyn, to S. of Hoddesdon, to half-way between Harlow and Chelmsford, and thence to the landing spot, one-third of the way along a line from Southend to Chelmsford.

SPREADING THE GOSPEL.

We learn that some two or three dozen SAILPLANES were sold on Dunstable Downs on April 22nd by the B.G.A. Chairman's son. Copies were also sold at the inaugural meeting of the new Wilts. Club. Fifty copies of the April issue were sent out to Light Aeroplane Clubs throughout the country (Advertisers, please note!), so that power pilots have now no excuse for not knowing what is going on. As a result, enquiries are already rolling in to the B.G.A. Office nearly a score having been received within the first week.

YOUR INTEREST and HELP ARE NEEDED

To secure the fullest possible development of gliding and soaring in this country.

JOIN THE BRITISH GLIDING ASSOCIATION and JOIN A GLIDING CLUB

Particulars of your nearest or most convenient gliding club can be obtained from the Hon. Secretary of the Association (please enclose stamped addressed envelope).

The following is a representative list of Clubs possessing soaring sites:

BRADFORD AND COUNTY GLIDING CLUB. Sec: A. Cox, Overdale, Boston Avenue, Kirkstall, Leeds. Sites: Hawksworth & Sutton Bank.

DORSET GLIDING CLUB. Sec: J. LAVER, 9, Commercial Road, Weymouth. Sites: Maiden Newton, etc.

FURNESS GLIDING CLUB. Sec: H. S. GROSS, 106, Greengate Street, Barrow-in-Furness. Sites: Ireleth, etc.

LONDON GLIDING CLUB. Sec: H. C. DAVIES, 13, Victoria Street, S.W.1. Site: Dunstable Downs, Beds.

SOUTHDOWN GLIDING CLUB. Sec: A. YORK BRAMBLE, 3a, First Avenue, Hove. Sites: Steep Down, Lancing, etc.

ULSTER GLIDING AND AVIATION CLUB. Sec: N. P. METCALFE, The Ulster Spinning Co., Ltd., Belfast. Sites: Magilligan Strand, Co. Londonderry, etc.

THE BRITISH GLIDING ASSOCIATION LTD.

19, BERKELEY STREET, LONDON, W.1