

June 5, 1931.

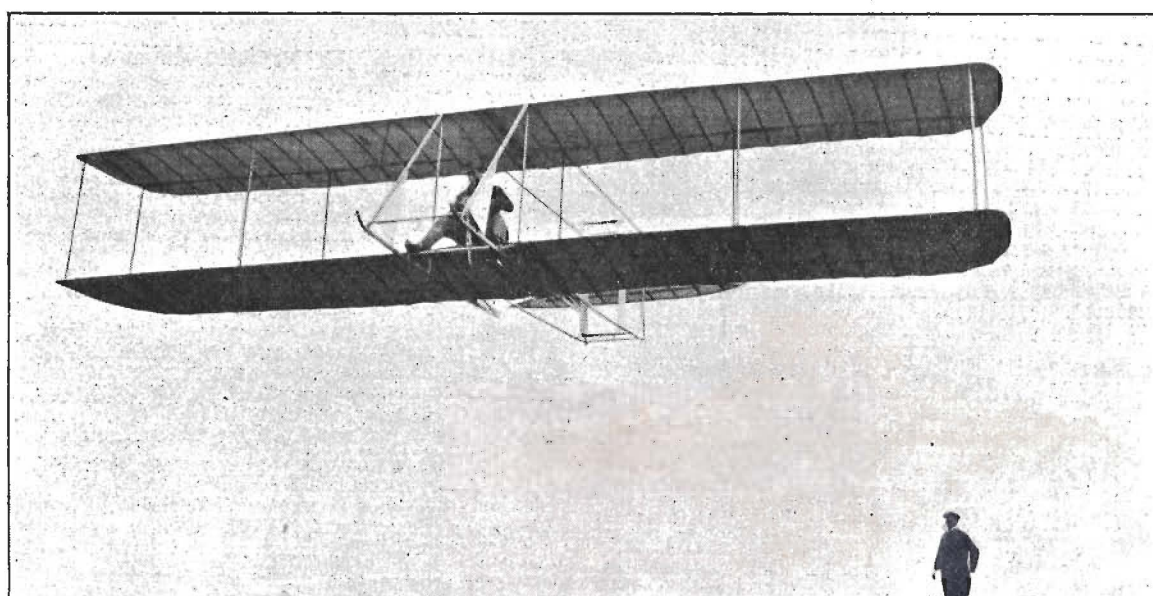
Vol. 1. No. 39

THE SAILPLANE

Price
3d.

AND GLIDER

AT EASTCHURCH.



Mr. Gordon Bell, piloting a Wright glider a year or two before the War. Shortly after the picture was taken the machine was crashed by a power-pilot, as gliders are, even to-day.

CONFERENCE AND COMPETITION.

The First All-England Gliding Conference is to be held at Ilkley on July 11. All the catering will be done by the Wells House Hotel, who will also collect the money. A registration fee of 2s. 6d. is to be paid to Mr. Waplington to cover organising expenses and the like. Some fourteen Clubs have already announced their intention of attending, but with the exception of the North Kent, the Dorset, the Kent, and the Southend Clubs, they are all Northern Clubs.

We have said, and have not changed our opinion, that such a conference is a good thing, but that the time is inopportune, but as the arrangements have gone so far forward, and as fourteen Clubs have decided to attend, let all of us, including those whose views coincided with our own, relegate our own feelings to the background and attend this Conference, which because it must now take place must be representative of the whole Movement.

On the whole the Clubs operating in the Home Counties

CELLON DOPE

**FOR
SAILPLANES and GLIDERS.**

CELLON LTD., UPPER HAM ROAD, KINGSTON-ON-THAMES.

Phone No.: KINGSTON 6061.

Telegrams: AJAWB, Phone, Kingston-on-Thames.

have probably more accumulated experience than other Clubs in that these former Clubs have been operating the longest time; it is therefore essential that such Clubs are represented on the Conference, so that they may hand on to the other Clubs such information as will enable the latter to progress more speedily.

As a result of the keenness shown by so many of the Midland and Northern Clubs for this Conference, we venture to suggest to *The British Gliding Association* that they consider a scheme whereby either the Council, or the Committee of Gliding Club Representatives, hold their meetings at predetermined centres in rotation, in the same way as Judges go on circuit.

This would split up the travelling expenses of the delegates and would keep the Council or the Committee closely in touch with local conditions. It would remove from such meetings the reproach which is apt to attach to them of being too easily swayed by Southern feeling, which is generally the most heavily represented.

We do not suggest that such routine meetings should be held in every Town where there is a Gliding Club, but preferably in centres which are likely to become headquarters of local groups. For instance in this number of *THE SAILPLANE*, Major Currin outlines his scheme for a soaring centre at Ilam Hall and one can imagine that such a place might well form a centre for a Council meeting once every so often.

Anyway Dorset, Ilkley, North Kent, Harrogate, Malton, Hull, Driffeld, Southend, Leeds, Selkirk, Sunderland, Nottingham, Newcastle and Kent have decided to attend the Conference, so what are the other Clubs of the Movement, whose numbers have been estimated at a total from 100 down to 45, going to do about it? There can be no shadow of doubt that as a result of this Conference momentous decisions affecting the whole Movement will be reached, and it will be singularly unfortunate if only a minority of Clubs are represented.

THE AGENDA.

A Provisional Agenda has been drawn up as follows. (Mr. Waplington is anxious to have suggestions and improvements made to him as to the proposed arrangements and speakers.)

Saturday, July 11, 10 a.m. Reception by the Mayor, followed at 10.30 a.m. by an address from Mr. Gordon England. At 11 a.m. Mr. F. L. Gardiner and Mr. Ashwell-Cooke are to give talks on Club Organisation and Finance. At 12 noon Mr. Lowe Wyde will talk on Tuition by Auto-Towing and will be followed by Mr. Humby who will expound the older method of Catapulting. After this till 1.15 a discussion will be allowed. [This should be divided into two parts and follow the groups of speakers, otherwise the first subjects will get all the attention and the others get crowded out.]

The official photograph will be taken at 1.15 followed by Luncheon at 1.30. At 3 p.m. Mr. V. S. Gaunt will discuss the Maintenance of Machines followed by a discussion. At 4 p.m. there is to be a talk about Insurance given by a professional man. Tea will be at 5 p.m., followed at 5.30 by a talk on Devolution of the B.G.A. by Mr. Gordon England. Dinner will be at 8.30.

On Sunday there will be a Gliding Rally and Competitions arranged by the Ilkley Gliding Club.

AN ARTICLE BY PROFESSOR GEORGII.

After somewhat protracted negotiations we are able through the courtesy of Professor Georgii and a special arrangement with R. Oldenbourg, the publishers of the famous German Scientific Monthly, the *Z.F.M.*, to reprint a translation, which has been done for us by Mr. B. S. Shenstone, of Professor Georgii's Survey of the Eleventh Rhoen Competitions. These observations are of the greatest possible importance and we would stress to our readers the necessity for digesting this valuable collection of facts with the greatest care. Not only does Dr. Georgii's article make clear the aims of, and the measure of success achieved by, the German Gliding Movement, it also discloses a wealth of scientific information which will be of use to the scientist and pilot alike.

ANOTHER LONG FLIGHT.

On June 2 Herr Fuchs, of the Darmstadt University Gliding Association, flew, according to the Berlin correspondent of *The Times*, from Berlin to Frankfurt-on-the-Oder, a distance of some 50 to 60 miles in a glider.

At 11.30 on that date he started from the Tempelhof Aerodrome with a tow from an engine machine and landed close to the Vaterland coalmine near Frankfurt-on-the-Oder at 1.45. He made use of air currents created by thunderstorms developing over Berlin, and had to land at Frankfurt because the thunderstorms dispersed and did not re-form.

On June 1, in connection with the first large-scale week-end gliding meeting in Berlin, Herr Fuchs made the first glider flight, lasting for an hour, over the centre of the city.

The interesting thing about these flights is that they were made over absolutely flat and low-lying country so that we now have definite evidence of the possibilities of soaring flight over ground which offers no facilities from its contours. There is little doubt that apart from its scientific implications, aeroplane towing will create new possibilities for the sport of motorless flight.

AEROPLANE-TOWING.

At last the news has reached the Daily Press that Mr. Lissant Beardmore, who is well known as the private owner of a Professor, has been, and is, continuing to make experiments with aeroplane towing. He has already successfully left the ground at Hanworth where he has been making his experiments. Rumour has it that Mr. Beardmore intends to attempt the Channel crossing. For the Cellon prize towing of any kind is specifically ruled out, and a British machine must be used.



AT BROADWAY.—Top, Herr Krause standing in front of the "Falke." Bottom, the "Westpreussen" about to take off. This is the machine which the Lyons' Tea people unfortunately lost at Woofa Bank.

A SOARING CENTRE AND SCHOOL FOR THE MIDLANDS.

First of all, as most people know, the Nottingham Club has arranged with J. Lyons and Co. Ltd. to give a demonstration of Sailplaning, and as a result we shall have the benefit of expert opinion and experience of what we consider to be an ideal site. Dovedale in Derbyshire in my opinion affords the choice of some of the best Soaring grounds in the country, and we think we have been fortunate enough to secure the rights of one site in that district which is not only admirable in every way for Sailplaning, but also lends itself to the formation of Headquarters such as we have in mind.

I really think our Demonstration, without being over optimistic, is going to be a good show, because we have secured promises of assistance from quite a number of Clubs and in addition to Messrs. Lyons' Sailplane, we look like getting three other Sailplanes as well, besides a number of Primary machines.

As an incentive to the other Clubs to attend, I am offering a silver cup to be awarded to the Club making the best flight of the Meeting irrespective of type of machine. This may sound somewhat difficult, but as it will be under the observation of an official of the B.G.A., it should be fairly easy for him to determine and award points according to the merits of the class of machine used. It therefore follows that a Primary machine has the same chance of winning the Cup as any other more advanced type of machine. The details of this Competition are not quite complete yet, because it more or less depends on how many machines will take part, and we shall not know this for at least another fortnight. Naturally Messrs. Lyons' machine will be exempt from this Competition, which will be confined entirely to Affiliated Gliding Clubs.

Now for our other scheme, within 400 yards of the site chosen, and lying in the valley, is Ilam Hall, which is as well known for the felicity of its architectural conception as for the beauty of its grounds. We have made provisional arrangements with the Proprietor to make this our Headquarters, and he is prepared to provide suitable accommodation for members undergoing training at prices to suit all pockets, arranging for separate Bed-Sitting Rooms, or the ordinary Dormitory accommodation. On the two days of the demonstration he is making arrangements to feed at least 1,000 people each day, and you may therefore gather from this what resources there are at Ilam Hall.

The scheme I have formulated is to make this the Head-

quarters of a sort of Regional Club for advanced Sailplaning and Soaring, to which all the neighbouring Clubs would be affiliated. Each Club would be asked to subscribe a nominal sum of money for the purchase of suitable machines, and to pay the fees of Ground Engineers, Instructors and so forth, in addition to which, each member will pay an entrance fee and a subscription. In addition to this a certain percentage of the takings of Ilam Hall, both for accommodation and food, would be allotted to the Club's finances.

The financial side of all these Clubs is always a difficult one, but I think that is mainly due to the lack of interest that inevitably follows with a newly-formed Gliding Club, after the members have attained a certain degree of proficiency and find they cannot go any farther with their Primary machines. In the case of the Nottingham Gliding Club, there was no difficulty about the funds to commence with, when everybody was raw and untrained, but after most of the members had done all they could on a Primary machine, there was a decided lack of interest and enthusiasm. This I contend is not likely to be so prevalent with an advanced type of Club, where the personal attainments are almost unlimited, particularly so, if it can be backed up by a good Club House and organisation.

At our demonstration on the 27th and 28th June I propose getting all the other Clubs together and addressing them on the subject and inviting discussion, and I feel sure that if the demonstration proves satisfactory, it will incite sufficient interest and enthusiasm for visiting Clubs to get the support necessary for the formation of a Club of this sort.

I have not yet put my proposals before the B.G.A., but shall, of course, do so when I have all my facts more or less completed.

S. A. CURRIN.

**"MALLITE" or "APPCO" WATERPROOF
SPECIAL PLYWOOD
GLIDER-**

**MANUFACTURED BY THE
AERONAUTICAL AND PANEL PLYWOOD CO. LTD.
218-226, KINGSLAND ROAD, LONDON, E.2.
Telephone-BISHOPSGATE 5641.**

A COMPLETE RANGE

ALL with INTERCHANGEABLE Components

for
Shock-Cord
Launching

Primary

Secondary

High
Efficiency



for
Auto-Towing

Training

Advanced

Passenger
Carrying

The B.A.C. VII, Two-Seat Auto-Tow Sailplane.

B.A.C. Ltd., Lower Stone Street, MAIDSTONE, Kent.

General Manager: Mr. C. H. LOWE-WYLDE.

Phone: MAIDSTONE 4111

THE ELEVENTH RHOEN SAILPLANE COMPETITIONS.

BY WALTER GEORGII, DARMSTADT.

Translated from "Zeitschrift für Flugtechnik und Motorluftschiffahrt," Mar. 14, 1931, by B. S. Shenstone.

General conditions in the year 1930 made it undoubtedly more difficult than usual to carry through the Contest. The economic depression made it harder for the flying groups to gather the necessary means to enable them to take part in the Contest. It was also not easy to collect sufficient means to carry through the Contest itself in a proper way. In spite of the generally bad conditions and in spite of the fact that the 1930 Rhoeu Contest was accompanied by very bad weather (of 15 contest days, only ten were suitable for soaring, there being fog or rain during the rest of the time), the success of the Contest was uncontestedly greater than before. The advances made were not only improvements on last year's highest performances under considerably worse weather conditions, but showed clearly a higher general standard of performance. Not only were peak performances accomplished by a few selected pilots, but the highest performances were severely contested, and during the competitions continually improved upon.

That specially applies to the endurance flights of the Practice Contest. In the Performance Contest, Kronfeld still stands at the head with distance flights of over 100 km. (60 miles). But the interest in distance flights, that most difficult of soaring exercises, has been awakened in a large number of the younger soaring pilots. It is especially pleasing to note that the method of live-squall soaring, one of the most difficult performances and demanding the greatest attention, has been used this year with the greatest success by the youngest participants in the Performance Contest.

The events of the Eleventh Rhoeu Sailplane Competitions were in approximately the same form as other years. Once again there were School, Practice and Performance Contests.

The School Contest was, however, mainly of a formal character. It fixed school prizes for soaring certificates which were won between May 15 and Aug. 17, 1930, on the home gliding sites of the various boys' clubs, though this could in no way replace the former School Contest. It is pleasing to note that in the Autumn of this year a large number of flying days were held, of which the most notable are: the contest in the Borken Hills in Westfalen, which was organised by the Western Group of the D.L.V. (German Aviation Union), and the second Bavarian sailplane contest on the Hesselberg, south of Ansbach, and the gliding and sailplane contest of the Wuerttemberg Flying Club. On the Hesselberg, we are glad to say, several soaring flights of considerable duration were made. These local contests doubtless help considerably in keeping enthusiasm for the motorless flight movement awake, and form on this account a necessary and valuable addition to the Rhoeu contest.

The former School Contest, on the Wasserkuppe certainly supplied other technical interest outside of the flying instruction of the groups. Due to the fact that the School Contest was combined with the Performance Contest, the gliding clubs were inspired with the desire to soar and to build high-performance aircraft, and also opportunities were given for them to gather experience for building a high-performance sailplane. These aspirations of the boys' flying clubs to advance from *gliding flight* to *soaring flight* must above all things be aided so that the further development of motorless flight be assured. The main purpose of *gliding flight* must be to constitute a school for *soaring flight*. For only then can the younger generation be urged on to excel the present performances in soaring flight and to guarantee further development.

One must not deceive oneself into thinking that the *gliding flight* movement is only carried on by the success of *soaring flight*, as present enthusiasm might lead one to believe, or that a set-back in *soaring flight* performances would have an even stronger effect on *gliding flight* as a result. *Gliding flight* is an excellent means for awakening air-mindedness, and for giving first ideas of aircraft and flight. *Gliding flight* can, however, only supply the requirements for beginners. It loses its attraction for the more advanced if the way from *gliding* to *soaring flight* does not lie open. Just this necessary push from *gliding* to *soaring flight* was supplied by the former school contests in the Rhoeu. It gave the *glider* pilot the spur towards *soaring flight* and awakened in the groups the desire to build high-performance sailplane.

The Rhoeu Contest, as then conceived, was not only a sporting contest for all the groups and pilots in motorless flight, but also a great yearly meeting of the whole flight-enthusiastic German youth, from which the characteristic unity of sporting thought, technical accomplishment and flying ability could develop for the German sailing flight movement, and from which a considerable part of this same movement can be traced.

The events in the Practice and Performance Contests required a higher standard of performance generally. A new event this year was a back-and-forth flight for the Practice Contest in which an aircraft must fly at least 5 km. from the Wasserkuppe and return to the starting point without an intermediate landing.

The most important results of the Practice Contest are shown in Table 1.

TABLE I.

Competitor	Name of Aircraft	Pilot	Longest Duration on one flight	Total duration		Max. height in metres	Aver. height 5 flights in metres
				H. M.	H. M.		
Akaflieg Darmstadt	Darmstadt	Starck	7 50 6 17 5 19 7 39	27 28	790	520	
Flugwiss. Vereinig. Aachen	Rheinland	Pietz	7 49 7 39	16 31	532	—	
Berliner Segelflug-Verein	Luftikus	Bedau	7 34	24 35	1640	734	
E. Dittmar	Schloss Maiberg B.9	Hemmer	7 27	—	620	—	
Akaflieg Dresden		Muschick	6 53	—	—	—	
Akaflieg Stuttgart	Stutt. Stuttgart	Rohm	5 54	—	530	—	
Luftfahrt-Verein Aachen	Aachen	Mayer	8 23	—	725	—	
Akaflieg Göttingen	Jupp Pitter	Van Husen	7 24 8 36	—	—	—	

Results of Practice Contest above rule, and of Performance Contest below rule.

In the Rhoeu little attention was paid to endurance flights up to the year 1928. After one had become accustomed in former years to flying in upwinds on the west slope of the Wasserkuppe, there were no worthwhile results to be expected from endurance flights except the sporting desire to exceed former performances, and as flight practice for young soaring pilots. The year 1928 brought new life to endurance flights on the slopes of the Wasserkuppe. In this year endurance flights became of greater importance because, although after making contact with cloud upwinds, when, of course, hill-upwinds dropped to second place, it was still necessary to do considerable hill-sailing to achieve the height and opportunity for contact with the clouds. So by means of cloud-flying, endurance flight became much more attractive to the pilot, and also demanded specialised training, as the pilot must become accustomed to the difficult conditions of flying in clouds. Apart from this the technical value of endurance flights has been considerably raised with cloud flying, as it gives continuous opportunity for the study of the vertical motions of the air in the neighbourhood of clouds. This year's endurance flights resulted in extraordinarily valuable material in this direction, which I shall mention later.

It is, therefore, especially pleasing that the interest of the pilots in endurance flights during the last three Rhoeu Contests has been greatly increased. When considering the endurance flights which were flown in the eleventh Rhoeu Contest, which are shown above, it should be noted especially what extraordinary physical and mental demands are made on the pilot when he must circle over the Wasserkuppe day after day, unprotected from the cold, restrained in every motion by the fuselage of the craft and necessarily fasting six to eight hours while in the air. In 1929 there were only two endurance flights of more than five hours made. This year there were 12 flights of more than five hours, seven of which were of more than seven hours' duration.

Two pilots in the Performance Contest, Mayer in Aachen and van Husen in Jupp Pitter, did the best endurance flights. Van Husen had the greatest flying time of the contest, i.e., 8 hr. 36 min. Although the Rhoeu endurance record, which was made by Hemmer with 9 hr. 36 min. in the Summer of 1930, was not beaten by van Husen's flight, he succeeded in exceeding the time of the last Rhoeu Contest. But the real advance shown by the results of the Practice Contest as compared to former years was not in the individual peak performances but in the many performances approaching the same value.

Among the fliers in the Practice Contest, Starck, of the Academic Flying Group in Darmstadt, stood foremost in endurance flight. He had held out more than five hours for three times over the western slope of the Wasserkuppe in Nehring's successful craft before he could win the strongly-contested Schwaben Prize for his group. Pietz,

of the Aachen Technical Flight Group, who piloted the *Rheinland*, came a very close second to the *Darmstadt* and his two flights of over 7½ hours' duration were very notable. The flying enthusiasm of the pilots and the devotion of the groups in the care of the aircraft were so extraordinary that one has no cause to worry about the spirit prevailing in the Rhoen. All entrants in the contest still take more pride and joy in flight performances and advances than in material gain.

Although last year the never-before-experienced sight of eleven sailplanes in flight at the same time over the western slope of the Wasserkuppe could be recorded, the squadron flight on the last day of the contest this year was even more impressive. Fourteen sailplanes, nearly half the contesting aircraft, tacking back and forth over the slopes of the Wasserkuppe, undisturbed by the gusty wind, the shreds of fog which sometimes covered the Wasserkuppe peak, and the towering clouds on all sides, showed to what a high level motorless flight has been brought. In spite of this great number, and although many risks were taken, there was only one crash among 14 starts. Here one may look back on former years. On the last day of the 1923 contest with similar weather and wind-speed, five out of six aircraft which started fell victims to the weather. This comparison shows in the best manner the advance which soaring flight has achieved during the past years in flying and technical respects.

The expectation that greater heights could be reached by endurance flights was fulfilled. Cloud flying had shown us in the last two years that it was not unusual to reach heights of several thousand metres in sailplanes. Test flights with power aircraft have often shown that in the neighbourhood of cumulus clouds are upwinds in and above clouds which reach heights of 4 to 5,000 metres (13,000-16,000 ft.). In this year's contest the greatest heights of last year (Kronfeld: 2,015 m. (6,611 ft.) and 2,160 m. (7,087 ft.) above the Wasserkuppe) were not reached again. The weather conditions in this year's Contest made it difficult to reach great heights, as there were few occasions suitable for cloud flying. Real cumulus clouds with favourable upwinds were only present on the last day of the contest. Apart from that, there were strong cloud upwinds for a short time of two hours on Aug. 17.

It can be shown by discussing the flights of the Performance Contest how the weather conditions, which only permitted hill-flying, made the flying in this year's Contest

very difficult. The scanty appearances of cloud upwinds were, however, cleverly made use of by the pilots of the Practice Contest. The greatest heights above the start were reached by Bedau in *Luftikus* with 1,640 m. (5,381 ft.), Starck in *Darmstadt* with 790 m. (2,592 ft.), and Hemmer in *Schloss Mainberg* with 620 m. (2,024 ft.). Bedau, who last year distinguished himself as a quite young "C" pilot with a remarkable altitude flight, was also outstanding this year. The flight during which he reached 1,640 m. is one of the most astonishing and useful performances which have been made, and, apart from flying ability, demanded extraordinarily steady nerves on the part of the pilot.

On the last day of the contest, during an endurance flight, Bedau's machine was seen to suddenly emerge from a cumulus cloud in a spin. Bedau had obviously lost control of his aircraft while in the cloud, and so fell out of the cloud. Once under the cloud he was able to regain control and was not unnerved by this experience, which in the case of an aircraft not so strongly built would have had a different outcome, he completed an endurance flight of 7 hours 34 minutes.

[Next week Professor Georgii will analyse the barogram of Bedau and Chlingensperg's flights.—Ed.]

AN ASSOCIATION FOR N.S. WALES.

An important conference was held in Sydney on Mar. 11, when 42 persons were present, representing The Civil Aviation Department, The Inst. Eng. Aust. (Ae. Eng. Br.), the Aero Club of N.S.W., the R.A.S.I. (Austr. Br.), Aircrafts and Gliders Ltd., D. Milne (Glider Constructor), The Granville Club for the promotion of Aviation, The East Sydney Technical College Glider Club, The Ultimo Technical College Glider Club, The N.S.W. Gliding Club, The North Shore Flying Club, The Pelton Glider School, the Progressive Glider Club, The University Glider Club, and The Metropolitan Gliding Club. After much discussion the motion "that this meeting considers it advisable and desirable to form the N.S.W. Gliding Association" was carried unanimously. A rosy future for gliding in New South Wales is expected as a result of this amalgamation.

BIRTH.

BUXTON.—On May 27, at 25, Bryanston Square, W., to the wife of Geoffrey Mungo Buxton, R.A.F.—a daughter.

JUNE 27th & 28th, 1931

HI! YOU HEAVY-WEIGHTS and
CLUBS WITH 27 sec. SLOPES
BRING YOUR MACHINES TO
BUNSTER HILL, DOVEDALE, DERBYSHIRE

where you will be able to obtain your tickets with ease.

COMPETITIONS SPOT LANDINGS DURATION FLIGHTS
PRESIDENT'S CUP FOR THE BEST PERFORMANCE
GOOD ACCOMMODATION FLANNEL DANCE

AT

ILAM HALL

The Terrain is the proposed Headquarters of the MIDLAND SOARING SCHOOL

Write for further particulars, and book your room, to:—

L. BURBIDGE, Hon. Sec., NOTTINGHAM GLIDING CLUB,

All Clubs within 60 miles radius are invited to attend a Meeting in evening on June 27th at Ilam Hall, to discuss the formation of the Midland Soaring School

**BLACK BOY HOTEL,
NOTTM.**

CORRESPONDENCE.

Trailers and the Law.

Sir,—I have recently been in touch with the Ministry of Transport with regard to the fitting of brakes to trailers of a low weight unladen, and I am given to understand that a fresh order will be issued shortly.

I have also made inquiry into the speed at which trailers may travel. At the present time the restriction is 20 m.p.h. and I am glad to inform you that the Minister has made regulations increasing the speed from 20 m.p.h. to 30 m.p.h. provided it has pneumatic tyres (all glider trailers have). This new regulation has been laid before Parliament and will not come into force until it has received Parliamentary approval. This will probably be one of the first things to be discussed on the re-assembly of Parliament.

(Signed) J. L. R. WAPLINGTON
(Secretary, The British Gliding Association).

Air-speed and Ground-speed.

Sir,—Thank you for printing my theory on the mishap to the R.F.D. Sailplane. In view of your editorial comment however I feel that I was not quite clear. I am in complete agreement with your opinion that the direction of the horizontal wind has no effect on the air-speed of a machine, provided that the motion of that machine in planes approximately horizontal is due only to the gliding angle of the machine combined with gravity forces.

When, however the motion of the machine is due to an impulse (such as catapulting) just prior to a turn, kinetic energy is dissipated not only by the passage of the machine on a course determined by the rudder, but also by its side-slipping in the direction in which it was originally projected. So when the machine attains a straight course its air-speed will depend on the many factors applying to the particular case, these factors including launching-speed, turning-speed and wind-speed.

The problem is thus rather more akin to that of down-wind-launches than of down-wind turns.

I am interested in Mr. E. Brame's theory, and think it highly probable that the condition visualised by him did actually prevail. In fact this fits in with the view expressed to me by Mr. York Bramble, that the sailplane was passing from the sun-heated face of the hill to the side which had all day been in the shade. The downward current resulting from this might easily have deprived Capt. Stratton of the four feet of extra height which would have carried him safely above the fence.

In any case I feel that Captain Stratton is to be complimented on the very skilful way he avoided the people while combating what was probably a whole set of difficult circumstances.

(Signed) J. BEWSHER
(Designer of the R.F.D. Sailplane).

Found.

Dear Juvenia and others,—You will most probably see at some future and not very far distant date that a Club in North Central England is holding a Gliding and Training Camp this summer on a site where one can, if one wishes, camp, or, if one prefers, can live very reasonably at a hotel within three miles of the ground. The cost will be considerably less than a fortnight's "wild life" at a sea-side resort in all probability. If you and others are interested and think you really seriously are prepared to have a fortnight's training perhaps you would write to the Editor of THE SAILPLANE, who knows the author of this letter and unless a number of applications should not come in you may take the camp as practically established.

When you write you might say exactly when you could come and other particulars you think necessary.

Perhaps I ought to mention that the ground has never yet been unusable on account of wrong wind directions. Train-

ing has been done with no wind, N.E., E., S.E., S.W., and N.W. winds.

More later friend Juvenis.

(Signed) F.A.I. No. ?

[This Camp has nothing to do with the proposed School at Ilam Hall.—Ed.]

A Summer Gliding Camp.

Sir,—From your correspondence columns we gather that there are a number of "would-be" glider pilots who favour the idea of a gliding holiday. For such we can offer certain facilities because, apart from our normal week-end flying at Maiden Newton, a few of us intend to camp-out there during August, and thus, when conditions are favourable, we shall carry out evening training. During the period Saturday, Aug. 1, to Sunday, Aug. 9, inclusive, flying will also take place during the day providing sufficient applications are received.

We shall be glad to welcome members at our standard entrance fee of 10s. 6d. plus £1 1s. subscription (to January, 1932), in addition to which there are only flying fees of 1d. for every 5 seconds in the air. The site is ideal for camping—the usual charge of 1s. per night per tent being levied and water is available. Our club house is on the spot and members may share its amenities.

The nearest village is Maiden Newton (1½ miles), Dorchester is 9 miles, Sherborne and Yeovil 11 miles, and Weymouth 17 miles away; so that those who do not wish to do their own cooking, etc., will no doubt find the proximity of these holiday centres an advantage.

The site is suitable for preliminary as well as more advanced work, in fact with the usually prevailing S.E., South or S.W. winds, soaring flights have been made with our primary machine and normal glides of up to 50 seconds have been made with the wind from either the East or the West.

Our Instructors are men with considerable aircraft experience (we have 14 "A" and 3 "B" Licences). Our machines are maintained in an airworthy condition by a fully qualified Ground Engineer.

Applications should be made to:—Hon. Secretary, Dorset Gliding Club, King's Arms Hotel, Montacute, Somerset.

(Signed) NORMAN W. WRIGHT
(Chairman, Dorset Gliding Club.)

Whose Fault?

Sir,—We quite agree that meetings held simultaneously in one locality may not be good for the Movement.

No one can deny, however, that the Committee of our Flying Branch is fully justified in following up the plans for an August Meeting, made, at the request of really active gliding interests, some considerable time before the arrangements for the other local meeting were settled and announced.

Not only are we prepared to prove this publicly by means of our minute book and certain correspondence in our possession; but also we challenge AUDAX—who claims to have no interest in either Club—to prove that he has no interest whatever in the proposed August Ditchling Meeting.

(Signed) F. WHITE.
(Hon. General Secretary, Southern Gliders' Social Club).

[Whatever the intentions of this Club, the other Meeting was announced first and as the Southern Gliders have had one Bank Holiday Meeting surely the sporting thing to do is to co-operate with the Southdown, whose members co-operated so readily at Whitsun.—Ed.]

The Latest Inquirer.

Sir,—Could you please send me addresses of any gliding schools, which teach during the week, in England, preferably near the Coast.

(Signed) D. M. C. RUDD.

THE 'SCUD' CASH	£95 At Works.	TRAILER CASE - £10. TRAILER CHASSIS £10.	E. D. ABBOTT LTD. FARNHAM SURREY.	12 MONTHLY INSTALMENTS £6 7 6
				18 MONTHLY INSTALMENTS £4 10 0
£25 DEPOSIT. COMPREHENSIVE INSURANCE POLICY			£15 0 0	

NEWS FROM THE CLUBS.

THE CHANNEL GLIDING CLUB.

On Saturday afternoon and evening, May 30, there was gliding at Etching Hill, conditions being very favourable. On May 31, the same conditions prevailing, Etching Hill was again visited.

An unfortunate incident rather marred the morning activities. On the first launch the shock cord broke at the ring, fortunately doing very little damage to the crew. In the resulting one-sided pull-off, however, the machine spun round and broke an aileron king-post against our trolley.

This was repaired by the middle of the afternoon and every member present had a flight. The last on the list made the first heavy landing the Club has had in 1931, and effectively put a stop to the day's flying by breaking a couple of landing wires, it being then too late to be worth commencing a repair on the ground.

[Perhaps Mr. E. D. Burley could help us here. We should like to know how frequently elastic ropes should be inspected and the way to get the longest life at joints of this kind.—Ed.]

THE ANNUAL GENERAL MEETING.

The Annual General Meeting of the Club was held in the Town Hall, Folkestone, on Thursday, May 28. The activities of the Club were reviewed both from a flying and a financial standpoint by the Secretary and the Treasurer respectively. The Treasurer, Mr. Cook, in presenting his balance-sheet, stressed the fact that the Club had weathered its first year, during which lack of experience shared by all must inevitably lead to heavy expenses, by showing a credit balance of thirteen pounds in actual cash, and assets in the shape of machines. This in itself was good work, but the Club possessed in addition to this, the invaluable asset of considerable experience gained.

The Secretary, Mr. Worrall, in his report, briefly reviewed the history of the Club's inauguration, referring to the now famous gliding meeting at *The Valiant Sailor*, at which Herren Kronfeld and Maggersuppe proved to the public what a motorless aircraft was capable of. Mention was made of the fact that the Club had continued gliding throughout the year. Various machines had been acquired and kept in service by the stout work of the construction squad, under the able direction of Mr. Samuels. In this connection the work of the juniors was noticed.

Thanks were tendered to the various gentlemen who had helped the Club by acting as instructors, by lending sites and in many other ways. Special thanks were given to Col. Kenny, our able Chairman, for the splendid way in which he had led his committee throughout the year, and to Mr. C. M. C. Turner for his services as chief instructor, and for the gift and use of machines.

The Chairman proposed a vote of thanks to Mr. Worrall for carrying out the arduous duties of Hon. Sec. in so capable a manner.

THE DORSET GLIDING CLUB.

Our Whitsuntide Camp at Maiden Newton was a great success. The "Juggernaut"—our Club car—a Studebaker of uncertain vintage, was called into use on the King's Highway instead of on the bumpy aerodrome, where it has hitherto been used for auto-launching and towing. Alas! she let us down when about 7 miles from Yeovil and we had to abandon her and tow the trailer behind the triumphant Riley. Our "Caravan" comprised two Rileys, one Armstrong Siddeley, one Morris, one A.C., one Austin Seven, and with our tents and baggage and trailer and the old "Juggernaut" we made a gay and lively party.

We duly arrived and pitched tents, returning to Yeovil to sleep and dream of how we would soar in "Freddie," our trustworthiest R.F.D., now we were back at our hill site. After Saturday morning at business, but with our minds elsewhere (for our youngest "A" pilot, a bachelor, had taken out a car full of our wives to form an advance party), we hastened out to our "Primus" lunch. "Come the rain," sheets of it, all Saturday afternoon and evening.

By noon next day the skies had cleared and the wind was howling up the valley, promising a tornado of uplift at the "Dorset Kuppe," so we rigged our machine and wheeled her round the hill top, but found the wind speed at the "Kuppe" was 28 m.p.h. and gusty. So we took off from the lower slopes where the wind was about 14 m.p.h. and made several 15 to 20 secs. glides, of which the only "incident" took place during the last flight by an *ab initio* who found himself dangerously close to and to windward of the pumping station (which stands in our valley and defies it or at any rate forms an interesting hazard), but by just the right amount of correct rudder and aileron at the right moment he lifted a wing over the corner of the fence and steered clear nicely.

On Monday the wind was still S.W. but much more moderate (12 m.p.h.), so we were able to launch from the top and four flights of over 45 secs. were made by four "A's" preparing for "B's." Our Club heavy-weight tried to get a secondary lift from a knoll to the left of the pumping station, but the wheels just touched at 361 secs. and so rendered the remaining period of the flight abortive from the "B" licence view point. Profiting by this error all the following flights were made to the right of the pump-house and the last flight of the day (by our youngest "A") was prolonged by skirting the hillside with a slight rising current to a duration of 1 min. 22 secs.

By Tuesday the wind had changed to S.E., i.e., across the valley, so that we had to change over to a new and hitherto untried portion of the hill top. Two pilots made their second qualifying 45 secs. glides, but the wind then dropped to 5-10 m.p.h. and prevented any greater than 40 secs. flights. Since Sunday afternoon King Sol had reigned and we were all tired, thirsty, and sunburnt, but very happy when we struck camp on Tuesday afternoon and had to dismantle "Freddie" to store in the barn until next week-end.

During May 30-31 a further successful week-end of gliding was held at Maiden Newton. Unfortunately we have not yet been able to afford a hangar and the machine therefore had to be brought out of the barn and erected before operations could commence, with the result that only two glides were possible on Saturday before tea. We were pleased to welcome two representatives from the newly-formed Taunton and West Somerset Club, whom we had invited over to learn what they could from our methods.

We tried out a method of launching which we have not hitherto

used. That is, we anchored the two ends of elastic rope to screw pickets on the brow of the hill and drew back the machine by means of a car, with quick release embodied close to the tail of the machine, so that only three persons were needed to carry out the operation. (a) The pilot, (b) the car driver, and (c) the person on the wing-tip who also operates the quick release.

With the slightly rising ground and the wet grass it was, however, found rather difficult and the scheme was modified by tethering the machine well back from the brow of the hill with the same quick release and on the nose of the glider the usual launching ring and elastic cord terminating in a launching rope passing around the anchor pulley on the brow of the hill so that the car could tow this whilst travelling on almost level ground at right angles to the line of launching.

After camping out on the site Saturday evening three members worked this scheme quite successfully on Sunday morning, and even retrieved the glider from the valley below by using our long tow rope and pulley and the car on the top of the hill. It was thus possible for one member to qualify for his "B" Licence with a spectacular flight in which by virtue of a 20 miles per hour S.W. wind he was able to soar along the ridge of the valley and included several turns in a duration of just under two minutes. The other flight, by our Club heavy-weight, was of 14 mins. duration, and formed his second qualifying flight, preparatory to "B" ticket.

In the afternoon further members turned up and one more pilot (our Hon. Secretary) qualified for his "B" Certificate, whilst two others just failed in their attempt because of the difficulty of getting in the second turn. Certainly their flights were in the form of an "S," but both were rather attenuated and the Official Observers are not prepared to accept any but very definite "S" turns as qualifying for a "B" Licence. Another member after two preliminary hops from the lower slopes took his "A" Certificate with a 32 second flight, whilst further launches were made from the "Nursery" slopes for *ab initios*.

Our next move is to secure (by hook or by crook) an engine-driven winch to still further reduce the labour involved in retrieving the machine at our hilly site.

Incidentally the ladies of our Club were very busy during the week-end cleaning the cottage which is to be our Club House so that shortly we shall be in a much better position to receive visitors who care to call when touring in the West Country. Members who took part were unanimous in proclaiming our indebtedness to the ladies of the party who catered for the inner man under primitive conditions and who also helped in launching when required.

Until further notice we operate at Maiden Newton. Volunteers are needed for cleaning and decorating our prospective Club House, where sleeping accommodation is available from now onwards at a nominal charge.

More active members are needed for our Primary Class as our Secondary machine, the "Dorsling," will be completed in a few weeks and this will leave the R.F.D. available for beginners only, of whom a larger number can now be enrolled.

[There is no doubt that these efforts to substitute mechanical for human sources of energy are very much worth encouraging. The future of the Gliding Movement may well hang on the ability of Clubs to provide gliding deprived of excessive man-handling. Our aim should therefore be to provide the maximum of flips per day per member. Mechanical launching and recovery seem essential. A portable capstan which would allow the free end of the rope to be returned to the bottom of the hill while hauling in a glider on the other end would seem to be a good thing. As it would also be out of the line of flight it could be used for stretching the launching cord in the method as developed by the Dorset Club.—Ed.]

THE FURNESS GLIDING CLUB.

Since the last appearance in these columns of notes from the above Club quite a considerable amount of time has been spent on our machine, during which time the whole thing has been tuncd up and packing inserted under brackets where required.

Our efforts were well rewarded in the recovered controllability of the machine. While this in itself has a direct reflection on the extent of skid damage likely to be occasioned, with bad landings, the opportunity was taken advantage of, nevertheless, to strengthen the centre-section of the fuselage and generally stiffen up the skid. Much of this work, unfortunately, had to be repeated at a later date, on account of an untimely disaster when the machine went diving into the ground. However, this was all successfully overcome and the machine ready and fit at Whitsuntide.

A last minute decision was made to enter for one at least of the competitions at Ilkley, and so it happens that at 5.0 a.m. on Sunday, May 24, the Furness Club machine and trailer were dragged out of bed and the journey commenced. Our Ground Engineer, Mr. Butterfield, took the wheel, while the Ground Captain, Mr. W. A. Stevens, appointed himself traffic superintendent. Conditions were not exactly over encouraging, but that, in consideration of the early hour, was not taken amiss. A light rain came on later, in the morning, but by the time we arrived at Ilkley (9.15 a.m.) well! it was wet.

Woofa Bank! Here indeed was a dismal desolation—even the Furness squad could not brighten things.

After posting up our arrival and announcing our intention of proceeding to Ilkley (we actually set off), good fortune fell to our lot in that we were able to house our machine at an adjoining farm. So engrossed were we in changing tyres (not attire) that the now incorrect notice went unheeded, and resulted in the remainder of our party, the late starters and unencumbered, going on to Ilkley where they resorted to a house to house search for the missing package.

Representatives of J. Lyons and Co. and of the Ilkley Club arrived at the flying (or was it swimming?) field later on in the morning in time to post cancellation notices for the day, and the opportunity was taken of letting our members (1st detachment) make a careful inspection of the "Westpreussen" and the "Falke" while yet intact.

The mislaid detachment, I am informed, made a similar tour of inspection later on in the day, having fallen in with some of the Ilkley Club during their rounds.

We all felt a bit annoyed that we could not extend our visit until the following day (when good conditions prevailed), but would like to record our hearty appreciation of the reception we received from all the gliding fraternity and for the sporting offers from the Ilkley Club by way of assistance, should we feel at any time disposed to paying them another visit.

Now that it is all over—the return journey being accomplished under ideal conditions—we feel quite pleased with the endurance trials of the trailer—200 miles without a hitch sounds somewhat of a perpetual motion, what! By way of proving that the machine, at least, was none the worse for the journey operations on Sunday, May 31, were very successful, some 30 good, clean flights being accomplished. It speaks well for the recent modifications and adjustments carried out that remarkable ease of control was attained, while for the first time for many week-ends the machine was housed after use in a completely serviceable condition.

This state of affairs augurs well for the Club's progress in the next few weeks, and we have every hope of being able to follow up with something achieved by those of our members who are at the qualifying stage for certificates.

THE LONDON CLUB SWEEPSTAKE.

ABBOTS WORTHY, No. 1559, Mrs. Alexander, The Heights, Harpenden. APPERLEY, No. 1835, B. T. Thompson and F. C. Hayden, The Quadrant, Weybridge, Surrey. ARMAGNAC, No. 1044, Miss R. Shutte, Newnham, Weybridge, Surrey. CAMERONIAN, No. 1396, B. Naylor, 97, Woodford Road, E.7. CARMELUS, No. 1503, J. L. R. Waplington, 44a, Dover Street, W. CHEERY LAD, No. 1041, Mrs. M. W. Shutte, Newnham, Weybridge, Surrey. COLDSTREAM, No. 1852, M. Dixon, North Star Hotel, Finchley Road, N.W.3. DOCTOR DOLITTLE, No. 1121, D. Rollinson, A. and A.E.E., Martlesham Heath, Suffolk. ESTATE DUTY, No. 1564, Mrs. McCulloch, Harpenden. GALLINI, No. 1592, Mrs. M. L. Cope, 67, Gillett Road, Edgbaston. GOYSCAS, No. 465, C. Conway, 1, Hyde Passage, N.W.9. GRINDLETON, No. 1171, H. G. Hall, 14, St. Albans Road, Watford. JACOPO, No. 1328, Dr. Reid, 100, Station Road, N.11. KIATERE, No. 389, C. Howitt, Oxford Gliding Club, Cowley, Oxford. KNOLOMA, No. 514, F. H. Connolly, 12, Montefiore, Stræt, S.W.8. LEMONITION, No. 1860, Jules Roeg, 83A, Alexander Road, N.W.8. LIGHTNING STAR, No. 626, Mrs. C. W. Emanuel, 1, Beechwood Rise, Watford. LINK BOY, No. 772, L. Harris, 5, Newhall Avenue, Broughton Park, Manchester. ORPEN, No. 1776, H. H. Schonberg, Bourne House, Dawley Road, Hayes, Middlesex. POKER D'AS, No. 701, Dr. C. W. Shaw, Edgware. POMME D'API, No. 1239, W. A. F. Bowen, 249, Ifley Road, Oxford. PRIMITIF, No. 1910, G. S. Wilson, 49, Belsize Park Gardens, N.W.3. REVEILLON, No. 1849, Mrs. Woodbridge, 10, Victoria Terrace, West Street, Harrow. ROSE EN SOLEIL, No. 707, Mrs. E. Kinder, Bryanston, Panhurst Gardens, Edgware. SANDWICH, No. 841, "Tooth," 88, Newgate Street, E.C.1. SHELL TRANSPORT, No. 551, C. A. Knifton, 449, Kingsland Road, E.8. SIR ANDREW, No. 1351, B. B. Jacobson, 88, Dollis Hill Lane, N.W.2. SPANISH MAIN, No. 1561, H. A. Frost, 501 (B), R.A.F., Filton, Glos. TE HAU, No. 1864, M. Dixon, North Star Hotel, Finchley Road, N.W.3. TE RURU, No. 632, R. H. Windsor, Royal Aero Club, 3, Clifford Street, W.1. ZANOFF, No. 169, A. F. Rogers, 38, Bryanston Square, W.1. THE FIELD, No. 1172, H. G. Hall, 14, St. Albans Road, Watford.

1st Prize, £25; 2nd Prize, £15; 3rd Prize, £10; and Runners divide £15.

THE NORTH KENT GLIDING CLUB.

On Whit-Monday we took our B.A.C. to a new site near Longfield and experienced our first thrills by gliding from a hillside. Considering all our training up to this point has been on flat ground, surrounded by banks and dykes, which cause nasty cross-currents, some remarkably good flights were put up by some of our members, although we were obliged to fly diagonally across the hillside, due to wind direction.

Last Saturday and Sunday we again flew on this site, when even more remarkable flights were put up; this seems to prove that our policy of going slow and making slides before glides has been well worth while following.

All members were very delighted with the new site and are of the opinion that progress should be now more rapid. We should like to take this opportunity of making known the fact that the double sheet bend method of connecting fibre and elastic ropes, as described in THE SAILPLANE, has been thoroughly tested over a considerable period and is very satisfactory indeed, and if Clubs will use this method we are of the opinion that there is very little danger of either slipping or breaking.

We shall be pleased to welcome any of the numerous people who made inquiries at our stand during the recent glider exhibition, at our new ground at Idley Court Farm, Nr. Longfield, any week-end.

THE PRESTON AND DISTRICT GLIDER CLUB.

The training activities of the Club were seriously curtailed by inclement weather during the Whitsun Holiday. Whit Saturday was rainy, boisterous and altogether unfavourable for flying as was Sunday too. Conditions were somewhat better on Whit Monday, and although the rain held off a strong, gusty wind blew from the South-east which proved unsatisfactory for training purposes.

Consequently the coterie of members who were optimistic enough to turn up at the site together with nine others who stayed at the

farm for the holiday were faced with the problem of relieving a tedium for which a wet day in the heart of the country has no equal.

Most of the members had to leave on Monday night, but eight enthusiasts decided to remain until the next day. Tuesday dawned with every promise of suitable conditions prevailing and as the day wore on a 10 mile an hour wind blew from the West and we reaped the reward of our patience. Thirty flights were made, and it says much for the members who have had no previous experience in flying that they handled the R.F.D. machine admirably.

It has been found by our system of instruction that to give a pupil two successive flights is definitely a sound policy and speeds up individual training considerably. The *ab initio* is more able to realise and correct his faults with a few minutes between launches than if he has to wait an hour or more for his turn to come round again. He is also more anxious to better each flight fresh with the memory of the last in his mind. I don't know if other Clubs embrace this system, but it has proved most efficient with us.

On Sunday, May 31, a good muster turned up early, and with a full day before us we set to work with a will. The four most advanced members each made two flights and their control of the machine was ample evidence that confidence was in the ascendant and mastery being obtained. It speaks volumes for progress made and affords a sense of satisfaction to an instructor to observe his pupils really flying the glider as against merely sitting tight, gripping the "stick," and allowing the machine full sway. When it is apparent by nature of the flight that a fault is being corrected,—perhaps drift being overcome,—a dropping wing-tip levelled,—the nose brought either up or down, as occasion demands,—together with a good, smooth landing,—then the fruits of an instructor's work are manifest and previous disastrous mistakes cheerfully forgotten.

Mr. Edwards, Mr. Graham, Mr. Naylor and Mr. Walthew are to be congratulated on their successful flights of the day. Not one of these members has had more than 18 launches, including ground slides, and they are now competent to take their "A" tickets. But our method of instruction will not allow members to fly for the "A" Certificate until they are sufficiently advanced to qualify for the "B" Certificate. We feel that it is not good training to launch a pupil for a certificate with instructions to fly on a straight path unless he is capable of making any turns that may be necessary.

Less proficient members were also launched and in most cases marked progress was discernible. In spite of constant reiteration relative to the sensitiveness of the elevators, some pupils retain still their "ham-fistedness." Two flights were brought to a premature end through harsh use of the "stick" and some damage sustained. An instructor's pulse certainly works overtime when a pupil endeavours to stand the machine on its tail, obtains an uninterrupted view of the wide expanse of the heavens, realises that it *must* be all wrong, and comes back to earth via the quickest and shortest way—"stick" hard down!!

Fortunately the necessary repairs were carried out within an hour, but by this time the wind had freshened considerably and it was deemed unwise to launch beginners. We ceased operations at dusk with a threatening storm impending which broke with great violence before we had completely packed up. But what cared we for a soaking after so successful a day? Half an hour later found us snug in our retreat at the "Green Man," some rather doleful as the result of their efforts (it would be unfair to name names), others high in the clouds consequent upon their praiseworthy performances. And so to bed.—L. E. F.

THE SOUTHDOWN SKYSAILING CLUB.

Members of the Club met at Standean Farm, Ditchling, at 10.30 a.m. on May 31 and found that during the week the barn door had been left open and that cattle had assumed that the machine was a new type of mattress and scratching post. As a result one aileron was broken and considerable fabric damage caused. A quick run to Brighton and repairs on the spot soon resulted in having a spare aileron fitted and the damaged fabric repaired.

We report the largest attendance of the year. It was originally intended to proceed to our advanced training ground to carry out "B" training, but owing to a number of members attending for the first time and to the lack of training during the past few weeks, owing to weather, it was finally decided to concentrate on primary training for the day. A new portion of our ground was tried out and found to be very good. In all some 45 flights were completed. Messrs. Lester, Verrall and Jameson had their first experience of gliding (mostly sliding) and all acquitted themselves very creditably.

We congratulate Stanley Robinson on qualifying for his "A" by a very well-judged and steady flight of 32 seconds, ending up with his port-wing-tip hanging over the barbed wire fence at the bottom of the field. (A study of his features just before stopping would, we feel sure, show considerable emotion depicted thereon.) J. L. Robinson only failed to qualify by 2 seconds by setting the "kite" down rather heavily about 75 yards short of the said fence, possibly a vision of his brother's flight a few minutes previously upset his judgment temporarily. Better luck next time! (Both *ab initio*.)

We would again remind all gliding enthusiasts of our meeting on Aug. 1, 2 and 3, and repeat our invitation for all to attend and bring their machines along and make this a "Banner" meeting. We have received a very gratifying response from "The Trade" and feel that we will be able to muster the most representative gathering of machines that has yet been held. Apart from Messrs. Lyons' contingent this promises to assume an international character.

"THE SAILPLANE" IS PUBLISHED EVERY FRIDAY. ANNUAL SUBSCRIPTION 15/- ORDER FROM 175, PICCADILLY, W.1.

Printed for AERONAUTICS LTD., by BONNER & Co. LTD., The Chancery Lane Press, Rolls Passage, London, E.C.4; and Published by AERONAUTICS LTD., at Cannon House, Pilgrim Street, Ludgate Circus, E.C.4.

EDITORIAL AND ADVERTISEMENT OFFICES OF "THE SAILPLANE," 175, PICCADILLY, LONDON, W.1. ACCOUNTS AND PUBLISHING OFFICES, CANNON HOUSE, PILGRIM STREET, LUDGATE CIRCUS, E.C.4. Telephones: Editorial Regent 1916; Advertising: Regent 5373; Publishing: Central 5822.