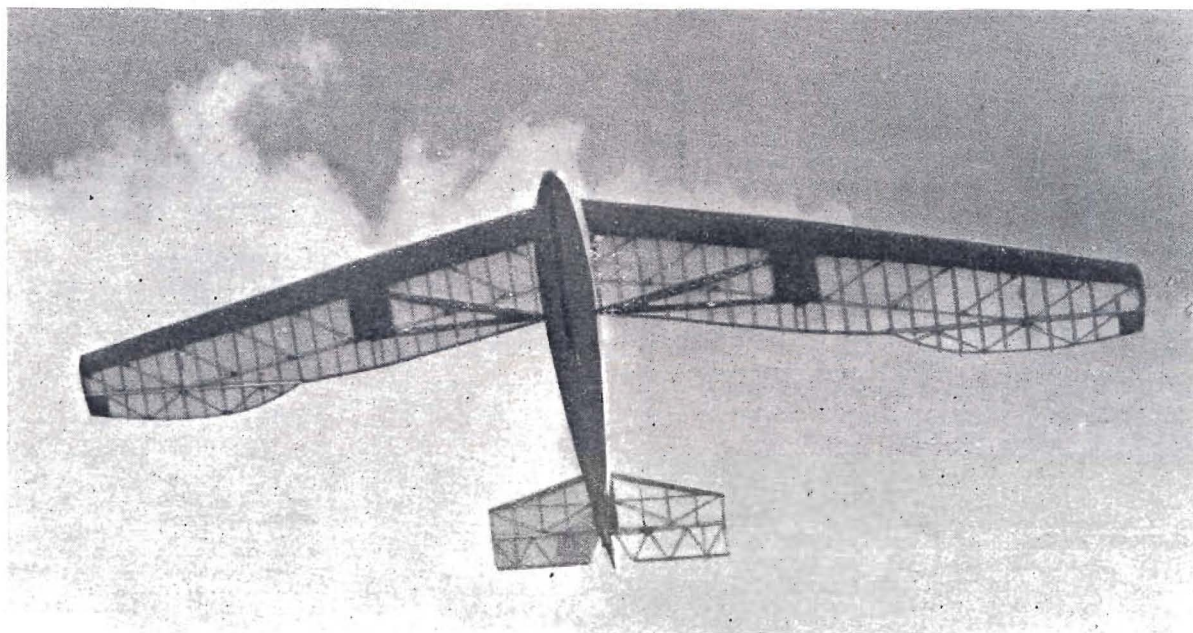


THE SAILPLANE

AND GLIDER

LATEST AND BEST.



The "Falke" which experience is showing to be the best machine on which to gain "C" Certificates.

WOULD A GENERAL CONFERENCE BE A GOOD THING?

A suggestion has been put forward by the Chairman of the North Kent Gliding Club, the energetic Mr. Kekwick, that a general conference of all the Gliding Clubs in the Country should be held during the summer somewhere in the middle of England to ventilate grievances and discuss matters of national import. July 4 has been suggested as the date, and Harrogate the place.

Would this be a good thing? The idea is good, but the time inopportune.

Our first reactions are, on the whole, unfriendly. There is too much talk and too much staff work, as one indignant Council member of *The British Gliding Association* ex-

pressed it to us, in proportion to the amount of gliding achieved. There is only one good reason for a gliding movement, and that is to glide. At present a good deal of energy is wasted upon the production of typescript and talk.

The whole simple beauty of gliding consists in the fact that through motorless flight the healthy open-air side and the sporting aspects of aviation can be made available to the majority of persons who are not positive paupers. The fact that gliding may be a means of getting people interested in power flying and so increasing the light aeroplane market is only of secondary importance. The fact that gliding may increase the national sum of air-mindedness and

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so increase the national willingness to spend taxpayers' money in subsidising (at present) uneconomic air transport is again of only secondary importance to us, as is the fact that motorless flight offers a very convenient and cheap way of making certain scientific experiments, but for none of these things are the real enthusiasts really aiming.

The enthusiasts, and we hope that we may be allowed to number among them, are continuing to strive after the achievement of man's oldest dream: to fly with the easy grace of the soaring bird. We believe, and we have shown, that man can emulate such flight. We have shown that people can be initiated into this sport and taught to soar at a cost of time and money that is not unreasonable.

Is it necessary to confer, and is it necessary to organise demonstration after demonstration, which consume Club energies, with very little result? In spite of these displays, which have the avowed intention of interesting new members, hardly a Club in the country is properly organised to cope with the members that they have.

No Club executive should rest until every founder member capable of being taught can soar, and when he has reached that stage, making available for him, soaring facilities. These founder members are the people who had the vision and made sacrifices to get the Clubs going, and until they have been adequately catered for Clubs have no right to dissipate time and energy talking.

Further, what good is the Council of *The British Gliding Association*, which is boasted to represent the affiliated Clubs throughout the country, if a special conference of such Clubs has to be called?

We think that a conference of instructors to discuss standard methods of training and to improve their own standard would be of much greater value. Conference or no conference, the slowly growing Clubs will continue to concentrate on training their own members and not voyaging miles to a conference which can only result in good resolutions.

The argument can be advanced that a conference would promote better feeling, so would a National Meeting, which would do something to increase inter-Club rivalry in actual accomplishment. There are fifty-two week-ends in a year, of these probably 10 per cent. are spoilt by rain and 10 by adverse or inadequate winds, which leaves about 41 week-ends for gliding. Say five hours' gliding a day (average), and that means 410 hours for gliding. Now that is taking no account of crashes, so what hope has the small Club of doing anything at all for its odd thirty members if it wastes time talking and conferring. That can be done over a drink any evening, or even by writing to *THE SAILPLANE* about it.

No increase of talk will improve things, only an increase of gliding can do that. The Clubs which are concentrating on providing for their members are the ones which will go ahead. Already they are stealing members from other Clubs, as N. C. H. pointed out in his letter the other week. Slowly, and whether the Association likes it or not, decentralisation will arrive by the strong Clubs growing and absorbing their more talkative neighbours.

So will the ultimate good to be obtained from decentralisation come. A few strong Clubs on really good sites, with proper ground organisation and adequate fleets of aircraft. Such a trend is likely to be accelerated by the formation of the various schools now being organised. These will train the more wealthy would-be pilots, who will buy machines of their own. Where will they take them? To Clubs with good sites, proper hangars, and someone to look after their machines.

No, we cannot afford to give our gliding up for conferences, and we think such a scheme had better wait until

thick fog and no wind is guaranteed by the Meteorological Office, making Gliding quite impossible for every Club in the Country.

THE FIRST ENGLISHMAN GOES TO GRUNAU.

On June 1 Mr. Jack Wilson, who is only just back from a month at the Wasserkuppe, departs for a month at Grunau, where he hopes to get his "C" Certificate, as he has already got his "B" at the Wasserkuppe. Grunau, as readers will remember, is the gliding school in the Riesengebirge, whither Herr Wolf Hirth has gone to take charge and where a special course of auto-towed tuition will be given.

If anybody is going to Grunau for the beginner's course, or the advanced course, both of which start on June 3, Mr. Wilson would be glad to join forces. His company is not to be avoided in that he speaks German, not only as a result of his stay at the Wasserkuppe, but as a result of his stay in the country with our Army of Occupation.

He would be pleased to hear from anybody disposed to make the trip. His address is Mr. Jack Wilson, 5, Audrey Road, Ilford, Essex.

AMERICAN GLIDING LICENCES.

In the United States a glider licence is really a licence, in that a pilot cannot fly a glider until he has received official sanction. The Certificates issued in this Country are merely official recognition of the status of the certificated person, they are not legal permits to fly, in that one can fly a glider quite legally without one.

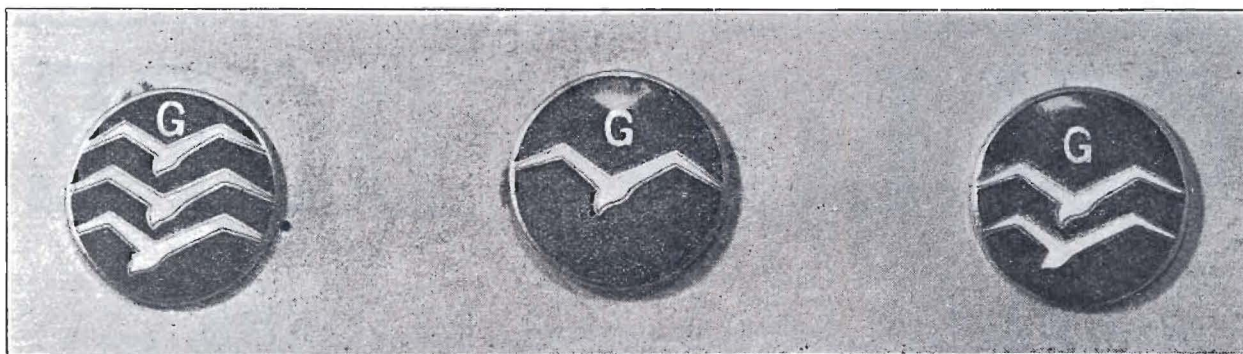
In the United States there are 199 glider pilot licences and 818 student glider pilot permits active. These figures rather suggest that more gliding is done in this Country than in the United States.

GLIDING CERTIFICATES.—IV.

Previous lists of Gliding Certificates have appeared in *THE SAILPLANE* for Jan. 23, 1931, Mar. 6, and May 1. The names below the line are those of pilots who have added "B" or "C" Certificates to their "A's."

No.	Name.	"A."	"B."	"C."
135.	James Keith Watson (<i>Ilkley</i>)	6.4.31		
136.	Norman Craven Hodgson (<i>Ilkley</i>)	7.4.31		
137.	Arthur Senior (<i>Yorks Aero Club</i>)	21.3.31		
138.	Gerald Vyvian Williamson (<i>Yorks Aero Club</i>)	21.2.31		
139.	John Duckworth Irving (<i>Newcastle Aero Club</i>)	8.3.31		
140.	Rowland Henry Bound (<i>Hampshire Aero Club</i>)	18.3.31		
141.	Felix Graves Whitnall (<i>Channel</i>)	21.3.31		
142.	Richard Francis Turney Granger (<i>Nottingham</i>)	23.3.31		
143.	John Henry Payne (<i>Imperial College</i>)	23.3.31		
144.	George Konried (<i>Imperial College</i>)	23.3.31		
145.	Clifford H. Jackson (<i>Imperial College</i>)	23.3.31		
146.	Paul Adorjan (<i>Imperial College</i>)	23.3.31		
147.	John Bernard Everett Keeble (<i>Imperial College</i>)	23.3.31		
148.	James Eric Welbeck Cheney (<i>Channel</i>)	7.4.31		
149.	Bernard Hartley (<i>Ilkley</i>)	5.4.31		
150.	John Howard Allen (<i>Ilkley</i>)	7.4.31		
151.	Stephen Edwin Brown (<i>Ilkley</i>)	7.4.31		
152.	William Henry Jacques (<i>North Cotswold</i>)	11.1.31		
153.	Stewart Scott-Hall (<i>London</i>)	6.4.31		
154.	Herbert Glynn Hall (<i>London</i>)	15.2.31		
155.	Eugene Brame (<i>Surrey</i>)	12.4.31		
1.	C. H. Lowe-Wylde (<i>Kent</i>)		1.4.31	
29.	Alan Herbert Reffell (<i>Surrey</i>)		12.4.31	
38.	Montgomery Hunt Thomson (<i>Surrey</i>)		19.10.30	
66.	Horace Charles Wright (<i>North Cotswold</i>)		29.3.31	
67.	Douglas Edward Culver (<i>London</i>)		12.4.31	
123.	M. H. Findlay (<i>Hanworth</i>)		15.2.31	
127.	S. M. Thompson (<i>Leeds</i>)		7.4.31	

Unless otherwise stated the italic names in brackets are those of the Gliding Club of which the pilot is a member.



FOR MERIT.—These badges, which have white gulls on a blue ground, are the outward visible signs of gliding proficiency. The one on the extreme left is the "C," the middle the "A," and on the right the "B." These badges are internationalised, but whereas British badges have a "G," German badges have no letter, and other foreign countries have a letter according to an international convention. The "C" Certificate is given for a soaring flight of five minutes above the taking-off place.

SCUD



THE PRIVATE OWNER'S SAILPLANE

The Scud is the craft for the man who wants to soar: for the private owner or club member who values portability: for the practical man who asks for simplicity of repair, and the pilot who demands really effective control.

MR. E. MOLE writes: "I am writing to congratulate you on your successful design, the Scud, which seems just right at the first attempt."

"I soared the Scud for over an hour, and it proved a revelation after other types of gliders: the controls answer quickly and smoothly, and enable the pilot to fly with much greater accuracy and confidence than with the usual sluggish control."

"You have obtained a really effective control without making the machine over-sensitive for the novice, and this quality, combined with the machine's light weight and ease of handling, makes the Scud 1, in my opinion an extremely sound proposition for both novices and more experienced pilots."

CAPT. R. BENTLEY writes:—"My two flights on the Scud were the third and fourth I had ever done on a glider, and I found it easy to handle and responsive to the controls, which amply convinced me that it is a very controllable and therefore safe craft of its type."

"I am therefore sure that it is an excellent machine for improving the ab initio glider pilot and introducing the power pilot to the art of engineless flight."

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TRAILER chassis for
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The first primary training machines to go into production were R.F.D.'s. The first production machines to be used were R.F.D., and that was in March, 1930. The R.F.D. soar- and sailplanes were the first to soar.

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R.F.D. Service is known all over the country, and nearly every Club has taken advantage of it. See what PRESTON has to say in this week's "SAILPLANE."

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FOUR WAYS OF WINNING £1,000.

Ever since the offer of the Cillon £1,000 prize for gliding across the Channel was first announced, I have been much interested in the possibilities of a successful flight being made, and in the method by which it can be achieved.

It seems to me that there are four distinct ways of tackling this problem, two of them being legitimate soaring, while the other two are more in the nature of tricks.

The most straightforward method should also be the easiest, as it depends on a weather condition that occurs fairly frequently; high cumulus clouds forming over the coast line with clear skies over the sea. This is generally associated with a gentle sea breeze of, probably, no more than 10 m.p.h. If a sailplane having a gliding angle of 1 in 25 at a speed of 45 m.p.h. can be used, the initial height required can be obtained in the following manner.

The height lost in one hour is 1×45 miles; the forward

25

distance travelled is 45 miles, less 10 due to head-wind, giving an effective gliding angle of 45 in 35 or 1 in 19½.

25

If the distance to be covered is taken as 22 miles, the initial height required is 22×5280 , or 6,000 feet: this should

19½

not prove impossible.

The alternative is to find a day giving suitable conditions for a sailplane, once sufficient height has been gained, to climb in the rising currents associated with a cloud and glide to the next where further height can be gained.

This condition is not quite so likely to occur as that of the first suggestion, unless the flight is made under rather stormy conditions: a pilot could glide backwards and forwards across the front of a line-squall which was moving in the required direction: there would be ample lift available.

Both these methods require at least some experience of soaring among clouds which very few British Glider Pilots have yet had the chance of acquiring; so, in order to give the less expert a chance, the following schemes are put forward.

It is well-known that gulls and other birds follow ships for long distances across the sea without using any appreciable energy: they do this by gliding in the current of warm air rising off the ship. The question that arises is whether this current has a sufficiently high speed and is of sufficiently wide extent to maintain a sailplane in the air.

If we assume a temperature difference of 5 deg. Centigrade (9 deg. Fahrenheit) between the air on the deck and the surrounding atmosphere, and that it remains the same for the first 50 feet up, the rising current will reach a speed of about 5 m.p.h. Actually it is probable that a larger temperature difference than this will occur, but that it will reduce rapidly with height; even so it would seem to be worth while to explore these currents and make some measurements.

A speed of 2 m.p.h. would be high enough if there were sufficient width, and it would only be necessary to choose a day when the sum of ship speed plus wind speed was equal

to the optimum gliding speed of the sailplane in order to achieve success.

A very light glider would be most suitable, so as to restrict the span to the width of rising current available, possibly a tailless monoplane or a biplane: however, if the wind direction is across that of the ship, and its speed is high enough, the glider can take up a position at an angle to the ship's direction and so make use of a larger span without overlapping the up-current. It might be advisable to follow an Atlantic liner from Southampton to Cherbourg instead of a smaller cross-Channel steamer from Dover to Calais.

In connection with this idea it is of interest to note that similar currents should exist above our main roads on a hot summer's day, suggesting a method of making cross-country journeys independently of wind or hills. Even a power-driven aircraft can feel the bump when crossing a road at a height of 100 feet or more, as I can remember from my own flying in 1918.

The final suggestion is much more like a trick. In a strong wind it is possible to keep a sailplane in the air by tying it down with a cable after the manner of a kite. The condition during catapulting is similar, but the point of attachment is too far forward for correct balance as a kite: a suitable attachment point can be found, however.

Now choose a day when there is a steady wind blowing across the Channel at a speed considerably above the stalling speed of the glider: attach a light cable to the point of balance, and let its other end carry a drogue. Launch the glider from the windward side of the Channel with the drogue in the fuselage. The pilot then turns down wind and glides out over the sea, turns into wind again and throws the drogue overboard into the sea: the glider will now drift slowly backwards across the Channel, dragging the drogue through the water.

The drogue must offer sufficient resistance to the sea to prevent the difference between the speed of the wind and the speed of drift from falling below the stalling speed of the glider, which should, therefore, be as low as possible. As an example, if the drag (or resistance) of the drogue to the water at 5 m.p.h. is equal to that of the glider (plus cable) to the air at 15 m.p.h., a wind speed of at least 20 m.p.h. is necessary and the crossing will be made at a speed of 5 m.p.h.

It would appear from these considerations that there is ample scope for enterprise in various directions.—C. M. BARTER.

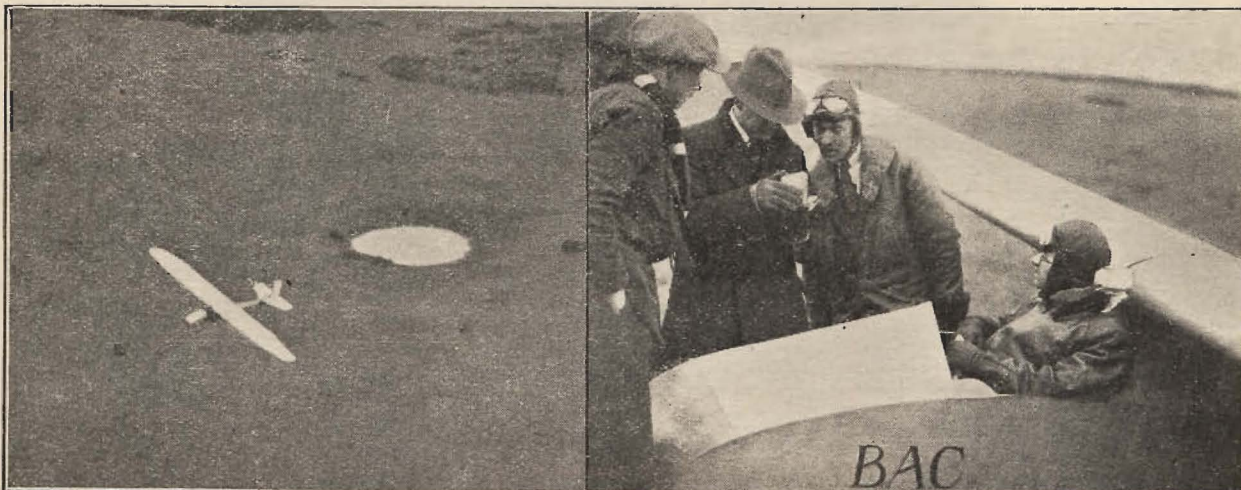
[We publish below the rules issued by The British Gliding Association governing the entries for this Prize. The paragraph about "Towed Gliding" would seem to rule out the very ingenious drogue method, though there appears to be no ruling about using the curl of uprising air behind steamships.—Ed.]

The Prize of One Thousand Pounds which has been offered by Messrs. Cillon Limited will be awarded to the first British Pilot accomplishing a Motorless Flight in a glider of all British construction from England to France (or vice versa) in accordance with the following conditions:—

DATE.—The Competition will be open for a period of two years from June 1, 1930, to May 31, 1932, inclusive, unless previously won.

ORGANISATION.—The Competition will be conducted by The British Gliding Association.

COMPETITORS.—The pilot of the glider must be a British subject.



A recent event at Balsdean. Herr Wolf Hirth, the famous German sailplane pilot, flying the B.A.C. VI, which he kept in the air for 2½ hours. On the right, Mr. Lowe-Wylde looks at the altimeter held by Mr. Waplington, of the B.G.A. Herr Hirth is in the machine. The B.A.C. VI is an intermediate type.

and hold a current "C" Glider Pilot's License issued by The Royal Aero Club.

GLIDERS.—The Competition is open to any heavier than air machine, entirely constructed in the British Isles, not provided with any motive power, and which is not supported either wholly or in part by any gas which is lighter than air, and which has a current Certificate of Airworthiness issued by The British Gliding Association in accordance with its regulations at the time of the attempt.

OFFICIAL OBSERVERS.—The British Gliding Association will appoint Official Observers to control all starts.

ENTRIES.—The entry fee is £5. This fee, together with entry form, must be received by The British Gliding Association, 44a, Dover Street, W.1, at least 14 clear days before any attempt is made.

STARTING PLACE.—The Competitor may select his own starting place subject to the right of veto by The British Gliding Association if such point is considered dangerous or otherwise unsuitable. The Competitor must obtain necessary permission from the owner of the land as a starting place. All starts must be made during the hours of daylight. The Competitor is responsible for the Observer being notified beforehand of any attempts, and for his being present at the start.

LAUNCHING.—The launching shall be a normal hand launching by the usual methods, only hand traction being used, and not more than twelve persons pulling upon the tow rope or elastic.

TOWED GLIDING.—The glider shall not be towed in the attempt to cross the Channel. Any Competitor who is towed otherwise than when launching, in the manner laid down in the above regulation, is automatically disqualified.

THE FLIGHT.—The British Gliding Association will issue log sheets, which must be carried by the pilot in all flights in the Competition. The Observer will fill up the Starting Certificate on the log sheet and hand the same to the pilot prior to the start of any flight in the Competition. The pilot on landing must fill up the Landing Certificate on the log sheet. This certificate must contain such particulars as will enable the Association to locate the place of landing. The Landing Certificate must be signed as correct by the pilot and two responsible persons present at the time of landing, or, if none present, resident in the district where the landing was made. The landing must be made clear of the water.

SAFETY.—No attempt shall be commenced until The British Gliding Association shall have been satisfied that the pilot has taken all reasonable steps to ensure the safety of himself in the event of a descent on to the water during crossing.

The arrangements in connection with any attempt shall be made to the satisfaction of The British Gliding Association.

QUARTER OF A CENTURY AGO.

[The following extracts appeared in The Automotor Journal for Jan. 27, 1906, and Feb. 10 of the same year. The editorial comments on Auto-towing should prove instructive as well as amusing.—Ed.]

EXPERIMENTS BY TOWING WITH A MOTOR-CAR.

To experiment with an aeroplane by having it towed by a cord from a motor-car going at high speed is a form of tackling the problem which naturally appeals to a good many people, and we have ourselves, on one occasion, at least, suggested it as worth trying. We are not now at all convinced that it is a good method to adopt, because the towing cord, which represents the string of a kite, not only gives propulsive force, but also stability, and the problem, of course, is to accomplish stability while provided with propulsive force only.

However, the experiment has been tried on the Ormond-Daytona beach, which is just the place one would select for trying it. Unfortunately, the aeroplane broke either itself or its rope—probably the rope—when raised to a height, by the motor-car towing it, of 200 feet above the beach. It accordingly fell to the ground, but it is remarkable evidence of the excellent nature of the Ormond-Daytona beach, and its suitability for experiments of this kind, that the experimenter did not suffer any more injury than a severe shaking.

RECKLESSNESS NOT NECESSARY.

Of course the experimenter had no business to go up 200 ft. What (if anything) he would have learned about the controllability of an aeroplane under such circumstances, would have been provided by keeping at a much lower altitude. If he was unable to do so, it would have proved that his control was imperfect. He should have been able to keep his machine from going up so high; that is to say, if it was nearly as controllable as it ought to have been. Instead of rising to a dangerous height like this he ought to have been able to maintain himself at from 20 ft. to 40 ft. in the air with a diminished pull on the motor-car.

TWO NEW CLUBS.

Two new gliding Clubs are in the process of formation. One is based on Selkirk and the other on Windermere. The Selkirk Club was formed as a result of a meeting held on May 15. About 150 people were present, and after the Chairman, ex-Provost John Roberts, had spoken briefly and

opened the meeting, Lt.-Com. Steedman, R.N., explained the objects of gliding, and so on.

After that the meeting was thrown open for questions, suggestions and proposals. Someone immediately proposed the formation of a Club, which was seconded and carried. Lt.-Com. Steedman then gave further details of Gliding Club organisation, and after giving a list of those to whom thanks were due, the meeting was closed.

The first general meeting of the Club was then held, and those who intended to become members elected a provisional Committee to carry on till the end of June. Authority was given to the Committee to fix entrance fee and subscriptions, to arrange about the purchase of a machine, and to do anything else that was necessary.

The provisional Committee then held a meeting, when certain details were discussed and a further meeting arranged for May 29. At this first meeting the Committee fully realised the need of doing something at an early date to maintain the interest aroused, but the only thing that could be done, as no funds were available, was to have further meetings in the other towns in the district. The Committee then dispersed with the intention of gaining members.

The next morning, however, a staunch supporter of the movement in the district offered the loan of enough money to the Club to buy a glider and trailer, which were therefore ordered. Two grounds in the district are likely to prove suitable and to be available for use. People who live round and about Selkirk should get into touch with Lt.-Com. Steedman, Ravensheugh, Selkirk.

The Windermere Club is holding its first meeting as we go to press, so no further information is at present available, though anybody interested who lives round about Windermere would do well to get in touch with Mr. Cooper Pattinson, of Pattinsons (Windermere) Ltd., Beresford Road, Windermere, Cumberland.

THE FIRST GLIDER EXHIBITION.

The First Glider Exhibition ended last Saturday after some 2,000 people had paid for admittance. That the Exhibition did not attract more interest is certainly not the stallholders' fault, because when they saw how the land lay they all did their best to obtain publicity for the Exhibition, although they had all been under the impression that the Exhibition would be properly advertised.

That such exhibitions have potentialities is clearly shown by the interest that was aroused among the visitors who did find their way to the wilds of Islington and by the amount of business that was achieved. There is no doubt that the British Gliding Movement can put up a very entertaining range of exhibits, and that, properly advertised, such an exhibition can only do good.

The British Gliding Association and Mr. Waplington are to be congratulated on the way they organised the Exhibition at such short notice and the way in which they brought their activities before the public at a financial profit to themselves. That was excellent.

THE LYONS DEMONSTRATIONS.

The third of the Lyons Tea Demonstrations was held at Beacon Fell, Preston, on May 16-17, when over 600 cars were counted in the official park. Once again the advantage of not relying on one machine and one pilot was demonstrated in that the *Tea Cloudyacht* was damaged on landing after the first flight and was subsequently relaunched after an inadequate inspection, with the result that a forced landing eventuated with most wood-smashing results. Herr Krause was quite unhurt and flew the *Falke* instead; demonstrations of primary glider flying were given by members of the Accrington and Preston Clubs. A very full account will be found under "News from the Clubs"—the Preston Club's report.

The fourth demonstration will be a three-day affair and is taking place this week-end at Woofa Bank, Ilkley.

The remaining demonstrations are as follows:—

May 30-31.—Scarborough. —.

June 13-14.—Glasgow. Campsie Fell.

June 20-21.—Stirling. Sherrifmuir, Stirling.

June 27-28.—Nottingham. Ilam Hall, Dovedale, Derbyshire.

July 4-5.—Bradford. Ambler Thorne, off Roper Lane, Queensbury.

July 18-19.—Oxford. —.

July 24-25.—Wilts. Oliver's Castle, nr. Devizes.

Aug. 1-3.—Southdown Skysailing. Ditchling Beacon.

Aug. 15-16.—Channel. *Valiant Sailor*, Dover Hill.

Aug. 22-23.—I.O.W. Afton Down, Freshwater.

Aug. 29-30.—Portsmouth. Race Course, Portsmouth Hill.

Sept. 5-6.—London. Dunstable.

THE STORY OF THE LONGEST MOTORLESS FLIGHT.

[Pictures of the "Fajnr" and accounts of the flight have appeared in the two previous issues of THE SAILPLANE. This flight was made from Munich to Kaaden, in Czechoslovakia, a distance of 160 miles in a straight line. The start was made by towing the sailplane off a flat aerodrome behind an aeroplane. The flight began about noon, so Herr Groenhoff was in the air nearly eight hours.—Ed.]

When the news came through that Herr Groenhoff was expected back at the Wasserkuppe after his record flight of 160 miles, arrangements were made immediately to offer him a right, royal welcome. Small trees were felled, wood collected, and three cans of petrol "won." Out at the cross roads a huge beacon was built, with the petrol amply scattered around. Inside the *Deutscher Flieger* Hotel tables were set in one long line, and all was bustle. At 8 p.m. a telephone message informed us that the hero had left Gersfeld, which is the village at the foot of the high ground. In ten minutes the beacon was well alight, and the blaze on the top of the Wasserkuppe could be seen for miles around.

The ambulance man had brought one of his stretchers on which was placed a chair. The car arrived and "the Boy" (Herr Groenhoff) was pulled out by his hair, placed in the chair, and carried round the Kuppe, then into the Hotel. Still in his chair, which was placed on a table, all students and everyone present passed in front of him and congratulated him.

We were then seated, with Groenhoff at the head of the table, and beer provided for everyone. He had a look round and saw that the workmen who made his machine were not present, asked why, and was told that they were still working on his next machine. They were promptly sent for and he thanked them very much for putting such good work into the machine, thus enabling him to attain the record.

Herr Hirth then proposed that Groenhoff should relate to all his experiences during the flight.

"Well, boys," said Groenhoff, "at 12.10 mid-day I was towed off by a 'Flamingo' to 600 metres (1,968 ft.) over Munich. I then cut loose and for 2 hours I flew over and around Munich. This was cumulus cloud flying. I lost height, and at the last minute I was able to rise into the clouds again. Suddenly the appearance of a thunderstorm in a U shape attracted my attention (I entered it), but found no suitable up-winds outside where expected. Here I flew blind, and encountered hail stones as large as cherries, which made such a terrific noise on the machine that it drowned all sound of the thunder. The lightning flashed around and everything was yellow. It was absolutely splendid. The lumpiness caused by the vertical and horizontal currents was terrible.

"In one case I reached a speed of 120 m.p.h., by which the outer points of the wings bent down to a very great extent, instead of up, the wing having been designed to

have negative lift at tips for stability. I thought the craft would break up and wondered how my parachute would work. The hail was now so bad that I am sure I would not have been able to stand it had my head not been cowed. As it was, the fabric was pierced in so many places that the wings of the machine will have to be completely renewed with fabric on the upper surfaces.

"I came out of the cloud, got in front of the storm which had changed from U shape to a long line. Later, I entered the cloud again, but got into a down wind and almost had to land; finding a small hill enabled me to gain height sufficient to reach the storm again and go forward. I then had great fun in exploring the edge of the storm, going backwards and forwards, investigating all parts. I tried to go off with a 'small bit' of the storm which had broken off, but finding it not strong enough I returned to the main squall. As evening was fast approaching I left the storm once more and went down to land.

"Evidently I misjudged things. It was quite dusk as I approached land, the gliding angle of the *Fajnr* being 1:25. I saw the lights of a town and decided to land as near as possible. The darkness was very deceiving and I saw hills quite near with high tension wires about. Then I saw a river just below me (Eder), which runs at the bottom of a gorge 300 ft. deep. I just managed to reach the opposite bank with only a few feet to spare, and landed safely about 8.20 p.m. with my heart thumping.

"I shouted very loudly, but nobody answered. I got out of the machine and found the road. Here I met a pedlar and asked him what country I was in. He told me it was Czechoslovakia. I walked on for one hour to a town called Kaaden. I reported at the Police Station, the Chief of which immediately communicated with the military authorities. They secured a truck and we marched back to the machine. This truck was found to be too small, so they returned for a larger one; arriving back at the gorge, the authorities demanded that the 'peculiar machine' be dismantled as it might easily fly away again. The machine was now officially taken over by the military authorities. I could not telegraph to the Wasserkuppe or home because the office only opened at nights in case of revolution. I was preparing myself to spend the night in the barracks, but later was told that I might go to the hotel if I wished.

"Gradually the importance of the flight dawned on the minds of the populace, and in the morning I was received by the Burgomaster and presented with pictures of the town. I was later photographed in the barber's chair, whilst having a shave. And that is the end to a most interesting sailplane flight."

At the end of Groenhoff's narrative of the flight I offered congratulations to Herr Groenhoff on behalf of the British "Colony" at the Wasserkuppe, and of the British Gliding Movement.—JACK WILSON.

FOR SALE.

Klemm aeroplane without engine, suitable for conversion to glider, £10. "K," 22, The Park, Mitcham, Surrey. (Phone) Mitcham 2487.

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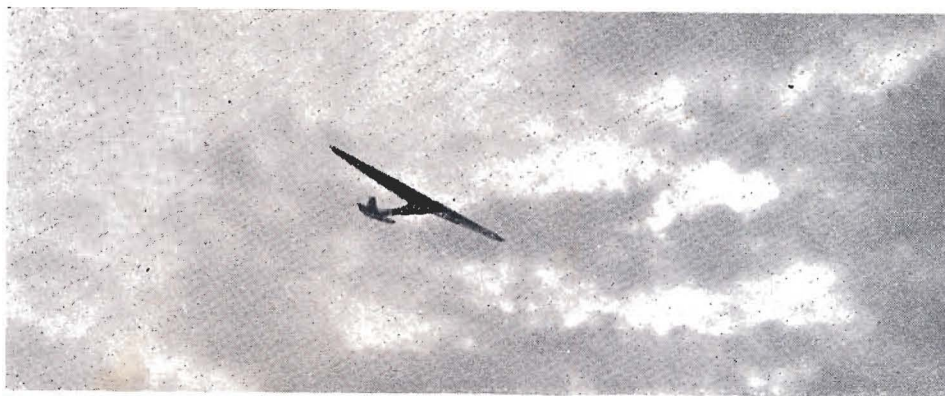
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NEWS FROM THE CLUBS.



The London Club "Professor" or high-efficiency sailplane soaring at Totternhoe, near Dunstable.

WHERE GLIDING CAN BE SEEN.

- Beds.—The Bedford Gliding and Flying Club. Week-ends at Woolley Hill, on the Huntingdon-Thrapston road, between Spaldwick and Ellington.
- The London Gliding Club. Meeting place, Turveys Farm, near Totternhoe, on Saturdays and Sundays.
- Dorset.—See under Somerset.
- Edinburgh.—The Edinburgh Gliding Club. Sundays, at West Craigs Farm, between Corstorphine and Turnhouse Aerodrome.
- Essex.—South Essex Aero Club. Week-ends, Wheaton's Farm, Laindon (L.M.S. Southend branch).
- Glam.—Merthyr and District Gliding Club. Sundays, 10 a.m. to sunset, ¼-mile left Dynevor Arms, Merthyr Tydfil—Swansea Road.
- Hants.—The Southampton Gliding Club. Every week-end at Red Lodge Farm, Bassett.
- Surrey Gliding Club. Saturdays, 2.30 p.m. Sundays, 10 a.m., weather permitting, at Stocks Farm, Meonstoke (Old Winchester Hill).
- Hereford.—The South Shropshire and North Herefordshire Gliding Club at Dinmore, ¼-mile from main Hereford-Ludlow Rd. Every Sunday, and Thursday from 2 p.m.
- Herts.—Herts. and Essex Gliding Club. Sunday afternoons, Eastern Roadways Garage, one mile north of Stortford.
- I.O.W.—The I.O.W. Gliding Club, at Bowcombe Down, 1½ miles W. of Carisbrook, on main Newport/Freshwater road. Every Sunday from 11 a.m.
- Kent.—North Kent Gliding Club. Saturdays 1 p.m., Sundays 10 a.m. Joyce Green Aerodrome, near Dartford.
- Kent Gliding Club. Week-ends above Lenham, on the Maidstone—Ashford road.
- The Isle of Thanet Gliding Club. Saturdays and Sundays from 2 p.m. Manston Aerodrome, Thanet.
- Lanark.—The Glasgow Gliding Club. Barrance Farm, Easter Whitecraigs, near Glasgow. Every Sunday from 11.15 a.m.
- Lancs.—The Furness Gliding Club, at Raikes Moor Farm, Hawcoat, Barrow-in-Furness. Saturday, 2.20 p.m.; Sunday, 10.30 a.m., weather permitting.
- The Stockport Gliding Club. Every Sunday afternoon at Woodford Aerodrome, Manchester.
- The Preston and District Glider Club. Week-ends at Butler's Farm, Beacon Fell, 2 miles from Inglewhite and 7 miles from Preston.
- Notts.—The Nottingham Gliding Club. Mr. Ellis's Farm, Kneeton Road, East Bridgford, Notts. Every Sunday, weather permitting.
- Somerset.—The Dorset Gliding Club, Westland Aerodrome, Yeovil.
- Staffs.—The North Staffs. Gliding Club. Week-ends at The Downs Banks, Barlaston Downs, near Stone, Staffs.
- Sussex.—Southern Soarers Club. Newmarket and Balsdean, between Lewes and Rottingdean, near Brighton. Week-ends by arrangement, for Soaring. (Phone: Hove 5116.)
- Southdown Skysailing Club. Every Sunday, Ditchling Beacon.
- Sailplane Club. Every Sunday, at Smalldole. London office: City 2121.
- Warwick.—Rugby District Gliding Club. Cote Hill Aerodrome. Husbands Bosworth, Rugby.
- Wilts.—The Wiltshire Light Aeroplane and Glider Club at Easton Hill, Alton Priors Range, Bishops Cannings, near Devizes.
- Worcs.—North Cotswold Gliding Club. Every Sunday at Fish Hill, above Broadway Village, from 10 a.m. to sunset. Saturdays and Wednesdays from 2 p.m.
- Yorks.—The Accrington Gliding Club. Wednesdays, Saturdays, Sundays, Hambleton Hill. One mile along Burnley Road.
- The Bradford Gliding Club. Saturdays, 2.30 p.m., Baildon Moor. Sundays, various alternative sites are being tested with a view to permanent use.
- The Huddersfield Gliding Club. All day Sunday near the Flouch Inn, 11 miles from Huddersfield, beyond Newmill, on main Sheffield Road.

[Clubs are invited to send in full details as to where and when they can be seen at work. This feature should help Clubs considerably as readers who are not members can go to look at the nearest local Clubs and see which they like.—Ed.]

THE ACCRINGTON GLIDING CLUB.

The score or so members of the Accrington Club who were present at Beacon Fell on May 17 were much interested in the performances of their own primary glider, a *Hanseat*, which is of German manufacture, and the Preston Club's glider, a R.F.D., made by an English South country firm. Unfortunately the Bolton Club did not get their glider rigged, although they had brought it on the Saturday.

Five flights were made by the two Clubs, three by Accrington and two by Preston, on Sunday, and it was plainly manifest that both Clubs possess gliders capable of putting up some remarkably good performances and have outstanding pilots in their leaders—Accrington in Mr. Maurice Bainbridge, and Preston in Mr. Falla. A point in common is that both pilots have had considerable flying experience with the Air Force, having first flown in 1915.

Mr. Bainbridge made three delightful flights, reaching a point about 70 feet above his initial height and twice or so lifting on uprising currents of air. He sailed across the valley at about 180 feet in height and altogether gave a clever display of control. His times, taken by the President, Mr. Edgar Sharples, were 60 seconds in his first flight and 1 minute 40 seconds on the second flight.

Mr. Falla had rather shorter flights, but they, too, were highly demonstrative of the thrills of gliding. The glider was brought back to Accrington by one of the motorist members, Mr. Croasdale, and a few enthusiasts who had camped on the site on Saturday night within a few yards of their pegged down machine.

THE CHANNEL GLIDING CLUB.

On Wednesday, May 13, several members journeyed to London to view the Glider Exhibition. Considerable interest was derived therefrom, the *Scud* being particularly noticed. We should not be surprised to see one down here before the summer is out. There are very audible hankerings.

On Saturday, May 16, there was no gliding, but several members put in a good day's work on the repairs to the B.A.C. II, which is now rapidly nearing completion.

Sunday, May 17, was a remarkable day in the Club's history in several respects. In the first place weather conditions were ideal for Etchinghill. Secondly, a newcomer, who had never even seen a glider before, was launched off the top and clocked on his first flight, 31 secs., thereby qualifying for his "A." (We will be honest—he is a Royal Air Force pilot.) Thirdly, our most junior junior, aged 10 years (weight 5 st. 10 lbs.), made an initial flight (it was meant to be a slide) of 7 secs. (Father was there to see fair play.)

Mr. Baker, of the Thanet Club, who, having read in *THE SAILPLANE* about our juniors, paid us a visit to see it done, expressed himself amazed at their performance, remarking that he had seen grown men do far worse. We should like here to thank the Editor very much for his kind comment of last week. We rather expected to have the whole of the Gliding Movement up in arms over what we consider a progressive step, and we are glad to have his approval.

In the afternoon, Mr. Francis, who tried very hard for his "A" on the previous Sunday, qualified with a splendid flight of 35 secs. Mr. Mason (a heavyweight) tried twice and clocked 27 secs. both times. The last flight of the day was his third. Previously we had been using the single rope. This time it was doubled. In spite of a 10 m.p.h. drop in the wind he clocked 29 secs. Hard luck! had he been launched by the double rope first time he would undoubtedly have got his "A." We have found by experiment that the double rope leaves the hook between 3 and 5 secs. earlier than the single. Clubs with 27 secs. sites please note.—E. C.

THE PRESTON AND DISTRICT GLIDER CLUB.

Some time has elapsed since notes from the above Club appeared in these columns, but this does not mean that we have been inactive. Far from it. Our small band of hard-working members, together with a staunch body of willing helpers, have been engaged during the past two months on extensive preparations for the Lyons Tea people's demonstration, which took place on May 16 and 17.

We had hoped to have had efficiently trained by this date a few of the more advanced members in time to participate in inter-Club events, and to this end instruction was carried on apace with a selected few. An unfortunate accident on Easter Sunday terminated the operation of this plan.

Telephonic communication with Messrs. R.F.D. Co. established their claim of "service" and they arranged to have all necessary spares ready for us to pick up on the following Sunday.

To recount in detail the adventures of the three hardy stalwarts who made the journey to Guildford would fill this journal and could be described to better advantage by a more able pen than mine. Let it suffice that they started at 1.30 a.m. on Sunday morning complete with trailer, full of spirits (?) and vanished into the night.

Wind,—rain,—hail,—snow. More wind. More rain! They rolled into Guildford at 11.30 a.m., loaded the spares, raided Mr. Dagnall's works for anything useful they could carry away unobserved, snatched a hasty meal at a nearby hostelry, then manfully set the car northwards.

Other than being delayed with carburettor trouble, soaked to the skin and frozen alternately, nothing momentous happened until a

few miles from Rugby, where the two reliefs were awakened from a well-deserved nap by a sickening lurch and a wild plunging of the car. Came a screaming of brakes, hoarse, inarticulate noises from the driver, a rending and tearing—CRASH!! Then silence save the mocking howl of the wind and the gurgling laughter of the driving rain.

Three weary "intrepid birdmen" crawled hopefully into the night with fear in their hearts for the worst. And the worst had happened. The trailer coupling had come adrift, the precious freight had swung around broadside on and crashed over into the ditch! . . .

A veil must be drawn over the return to Preston, the scathing comments and libellous reasons suggested for the mishap by fellow-members. The port wing and aileron were badly damaged and a full week employed in carrying out the necessary repairs.

The 16th dawned with every promise of a fair day, but with little wind. However, our hopes were high, for on no occasion have we visited our site at Beacon Fell when the wind has been less than 10 miles per hour. Usually it blows from 15 to 35 miles per hour from the West or North-west. As the day wore on a light breeze sprang up from the South-west, and at 2.30 p.m., when the meeting opened, it registered only 4 or 5 miles per hour.

THE DEMONSTRATION.

Sir James Openshaw, our President, opened the Meeting and welcomed Messrs. J. Lyons and Co. Ltd. to Beacon Fell. He commended the firm on their enterprise and association with the Gliding Movement.

Herr Krause was then launched in the *Tea Cloudyacht*, and in spite of adverse conditions soared for 5 minutes. The flight terminated with a mishap, for in turning near the ground the port wing-tip touched and swinging the machine round the tail struck the ground somewhat severely. On examination the damage appeared to be but slight and Herr Krause pronounced the machine to be airworthy. He was launched again, but the wind had not increased at all and this time he soared for 4½ minutes. The flight ended abruptly and with more disastrous results, for in essaying a landing in a large meadow on the Fell top the tail unit was broken off.

The *Falke* was then brought into commission and although its performance in such a light wind could not compare with the *Tea Cloudyacht*, several good flights were made. The landing in particular on the last flight was a masterpiece of skilled control, the machine being put down without a scratch in the smallest field in the neighbourhood, said field having a large open ditch across it and being surrounded by trees.

It was hoped to arrange a programme of inter-Club events and the Accrington and Bolton Clubs came at our invitation to participate. However, the machines arrived on Saturday, but no pilots were available to fly them. The Preston Club instructor, Flg. Off. L. E. Falla, made a number of flights from the Fell top, and explained briefly to the crowd the method of training and the essential differences of Primary Gliders, Intermediate Machines and Sailplanes.

Conditions on Sunday, the 17th, were even worse than the previous day for a dead calm prevailed. At 11 a.m. a definite wind got up from the North-east and we hurriedly set to work to move the whole outfit to that side of the Fell. The early promise failed, however, for the wind petered out and the only blades of grass that stirred were those tossed up by the ever-hopefuls who nearly denuded the Fell of growth in their anxiety to prove that there must be some wind!

Fully 7,000 people were present by 3 o'clock, but the smile of Dame Fortune was not for us. The repairs to the *Westpreussen* not being completed, the *Falke* was flown, but only long glides were possible and landings made in the valley below. Our R.F.D. machine was again flown by Flg. Off. L. E. Falla, and Mr. Bainbridge, of the Accrington Club, made several good flights in a *Hanseat* Primary Glider. Later in the afternoon Flg. Off. L. E. Falla essayed a flight for his "B" Certificate, which he obtained with a duration of 1 minute 35 seconds in the air.

It was regrettable that no demonstration of real soaring flight was possible with such a large crowd present, for though some understood and fully appreciated the position, there were spectators who went away feeling that they had been robbed—even though entry to the Meeting and Messrs. J. Lyons' cups of excellent tea were both free. But then—"There's nowt so queer as folk."

Extreme interest was aroused by our recent addition to the Club gear, which was the centre of a large, keenly-appreciative audience on both days. This was a Ford car (date unknown!)—*Cherith* by name, so christened by Mr. A. Whitehead, who acquired this "perfect lady" for 15s. And she runs!! Inquirers from all quarters have not been satisfied as to why *Cherith*, and so we are reluctantly compelled to believe that the name must conjure up for Mr. Whitehead some very fond memory from the mire of his doubtful and murky past.

We have fastened a wooden drum on a rear wheel and by means of blocks and a stake in the ground, together with 1,000 feet of cable, dear *Cherith* does her spot of work admirably and retrieves machines from the valley faster than we can send them down. We know this idea is not new, but for the benefit of any other Club that is without some form of retrieving gear this must be tried out to enable the possibilities of the device and enormous saving in labour to be appreciated.

Apart from actual flying the whole Meeting was crammed with incident and provided a fund of unrehearsed humorous interludes—wonderful copy for the pen of a Tom Webster. The thumb-nail sketch enacted by Messrs. Deaves, Naylor and Walthew in their serious efforts to drive home the release-gear stake with a 14-lb. hammer elicited yells of laughter from the crowd, who were vastly entertained by what to them must have seemed a concerted attempt

to reduce 874 feet of Beacon Fell to sea level. Fortunately for us a volunteer came forward, who did hit the objective four times out of six, and so prevented the premature removal of our site.

No less entertaining was the sight of one gentleman, who, entering a field to obtain a close-up view of the *Falke*, made a sudden and rapid departure via a barbed-wire fence, hawthorn hedge and four foot ditch with an irate cow a very good second in the rear. A strong upward current over this spot was apparent for some considerable time occasioned by the stream of invective from the wet, muddy and bdragged unfortunate. But he could run!!

We should like to obtain the services of the dear old lady who was heard to explain to her friend as Herr Krause was about to take the air "that he was being pulled to the edge by a piece of string, would then drop over the side and loop the loop." The technicalities of launching and gliding were "explained" in full to her admiring and awestruck companion. She must possess a wealth of gliding knowledge and would be an acquisition to any Club!

Some pronounced the Meeting "dud." Others enjoyed every minute of it. It just depends on one's point of view and sense of humour and proportion.

May we take this opportunity to publicly offer our very grateful thanks to Mr. P. Baster and Mr. J. Harris and the members of the Ulster Gliding and Aviation Club who came from Ireland to the Meeting. They did yeoman service for the Club, and apart from offering to do the odd spot if required of them made a point of looking for more work when one job was completed.

It leaves a warm feeling, a sense of deep gratitude and indebtedness that these enthusiasts should come all the way from Belfast primarily for enjoyment and yet be prepared and willing to assist complete strangers in the cause of Gliding. With such *esprit de corps* the Movement cannot fail. Thank you, Ulster.

At Whitsun we get down to work again and Saturday, Sunday and Monday will find us at Beacon Fell carrying on.—L. E. F.

SOUTH ESSEX AERO CLUB (GLIDING SECTION).

Although the weather has not been very encouraging over the week-end, members of the South Essex Aero Club who turned out intending to put in some practice were well rewarded for their enthusiasm by a good number of flights.

Having consulted our friend the wind-gauge, it was decided to try out No. 2 Hill, and some very good flights were the result. Mr. Palmer, the Club's instructor, kept the R.F.D. going for 22 secs., and was followed by Mr. Jaggars and Mr. A. C. Tupper with flights of 15 and 17 secs. respectively.

Adjourning to the hangar for luncheon, the morning's performances were discussed and having noted that a change in wind-direction had taken place it was decided to transfer to another hill, hitherto not used by the Club.

This decision proved a wise one, the afternoon show being better than the morning, and the following flights, amongst others, were logged: Mr. H. A. Sissons 18 secs., Mr. M. Jaggars 20 and 18 secs., Mr. Hammond 19 secs., Mr. A. C. Tupper 20 and 17 secs., and Mr. Palmer 25 and 23 secs.

Mr. Hitchcock, the Club's cine-photographer, was very busy filming members in flight and incidentally recording any little errors that may have been made. Apart from the interest attached to seeing oneself on the screen the films have a great instructional value and their use is a factor well worth developing within the Club.

It is intended to take full advantage of the Whitsun Holidays and anyone interested will be welcome at the Club's ground at Langdon Hills. Further particulars of the Club may be obtained on application to the Hon. Sec., South Essex Aero Club, Chadwell Heath, Essex.

THE SAILPLANE CLUB OF T.M.A.C.

The Sailplane Club of T.M.A.C. will be operating on Monday, May 25, as well as Sunday, May 24, in order to get as much intensive training done as possible during the Whitsun Holiday.

The site is at Horton Farm, Smallsole, near Steyning, and a request to Mr. E. G. Smettem, 2 Wine Office Court, Fleet Street, E.C.4, will bring a road map showing the best ways to get there.

THE SOUTHAMPTON GLIDING CLUB.

Mr. Lowe-Wylde visited Southampton during the week-end and demonstrated his two-seater B.A.C. VII at our Swaythling ground. Unfortunately the weather was far from ideal, which kept would-be spectators away.

Flying was out of the question on Saturday, the rain not ceasing. On Sunday, in spite of the dull weather and cold wind, a number of members made flights and through Mr. Lowe-Wylde's kind permission were allowed to take over control in the air for a short period.

It became quite a miniature Flying Meeting as a number of visitors came by air from the Hampshire Aeroplane Club, and Mr. King was kept busy taking up passengers in his Descoutter. The spectators, especially the power pilots present, were astounded at the amazing controllability and the flat gliding angle of the B.A.C. VII.

THE SOUTHERN SOARERS' CLUB.

This Club, which originated as the flying branch of the Southern Gliders' Social Club, has progressed, we are glad to report, by leaps and bounds. It has access to 2,000 acres of the finest gliding and soaring terrain in the Country, with permanent structures providing accommodation for over twelve machines.

The novel arrangements for membership of this Club permit of intermittent membership at the rate of one guinea per quarter. Full particulars can be obtained from the Flight Secretary, New Yorker Hotel, Bedford Square, Brighton.

ADVANCE NOTICE.—The Club proposes to organise an August Bank Holiday meeting with attractions of national interest.—F. W.

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