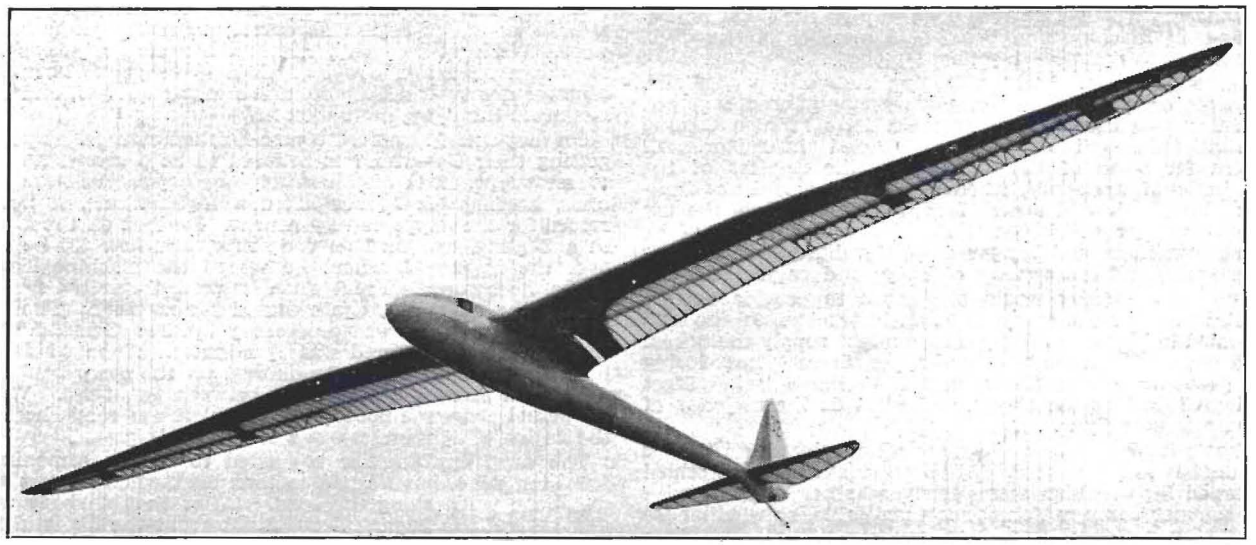
May 15, 1931. Vol. 1. No. 36.

THE SAILPLANE AND GLIDER

Price 3d.

THE RECORD BREAKER.



Herr Groenhoff piloting the "Fafnir" (designed by Herr Lippisch) in which he recently flew 160 miles after a towed start. The pilot is almost totally enclosed except for a gap in the fairing each side.

IDEAS START TO CRYSTALLISE.

In THE SAILPLANE for May 1 we explained and dilated upon the idea of a national school. Since then the idea has developed and letters show that a good deal of interest has been focussed upon our imperative need. There is quite constructive talk of a school being organised jointly by the Scottish Clubs, there is definite interest at Nottingham, as obvious from our advertisements last week and again this week the ever energetic B.A.C. people have got a school of towed flight going.

One of the earliest instructors in this country and a recognised figure in the Movement is very interested in the idea of a National Summer Camp. He is prepared, or preparing, to take charge of such a camp, which he rather considers should be on the South Downs, ideal as they are for Gliding and a summer holiday. We rather suspect him of thinking that Balsdean would suit his purpose.

As his idea is merely to collect fees big enough to cover expenses, say £10, for a fortnight's course, he cannot supply machines, but we rather think that subject to the necessary insurance such equipment might be well hired out by manufacturers who have everything to gain by such an arrangement. You cannot sell motorless aircraft to people who cannot glide and therefore one of the most obvious ways of increasing the glider market is to train more pilots. The Club method has proved practicable, but slow, and there are any number of enthusiastic would-be private owners

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who cannot afford the time and money to go to the Wasserkuppe, who would delight to spend their summer holiday at a properly organised camp.

In this connection we are surprised that nobody has thought it worth while to co-operate with one of the bigger Clubs. These Clubs have equipment, some of them have hangars and one has a professional ground engineer. But they all lack a salaried instructor because they cannot afford to pay the wages of a man for whom they only have work at week-ends.

On the other hand, if manufacturers as a whole or one particular concern more far-sighted than the others, came in on a profit-sharing basis, a practical form of school could be organised right away. Club equipment could be made available during the week for the purposes of schooling, and the instructor could be jointly paid for by the Club and Manufacturer.

Actually the school would be organised as a limited company with the Club and Manufacturer holding shares, so that they should share profits. To us the idea appears more and more attractive, because once trained the pupil buys a home-built machine and becomes a member of the Club. In fact all things work together for good.

Let us elaborate. Marden Gliding Club with a good site, adequate equipment, hangar, and perhaps ground engineer, together with the X.Y.Z. Glider Co. form Marden Gliding School Ltd., and engages a salaried instructor. In return for some of the shares and the services of the instructor at week-ends, when the School would not function, the Club would allow Marden Gliding School the use of its site (for which the Club pays rent), the use of its flying equipment and hangar (capital value some hundreds of pounds), and the services of its ground engineer.

The manufacturer would only have to provide enough capital to cover the expenses of an instructor. If the idea appealed to him as a sales point he might supply the School with one of his more advanced types, thereby introducing his goods to a potential customer at the outset. Most Flying Clubs train on Moths, and what do the majority of private owners fly . . . .?

That schools are needed we are all convinced, all that is required is to get started. Whether we start with a school of towed flight, which seems likely, whether we start with the summer camp, which seems practicable, or whether we start with a School cum Club, matters not at all. The School's the thing.

A NEW BRITISH DESIGN.

One of the many who were designing a sailplane for the ill-fated *Daily Mail* Competition has written to us lately and suggested that a group of enthusiasts, or a Club, might be interested to acquire his drawings. His terms are extremely reasonable, in fact they are merely a fair exchange of advantages. He does not require payment for his drawings, but he wishes to have his design constructed and the builders would have the benefit of his advice.

The designer in question is not only well-known as a pilot, but has shown his ability to design soaring aircraft, and he has the further advantage of having studied closely the latest German designs, so one may assume that this latest design of his should be well-worth acquiring.

Anyone who is interested should write to THE SAILPLANE, 175, Piccadilly, London, W.1, and mark his letter D.M.

THE TWO-SEATER WORKS HARD.

The B.A.C. VII has now done about eleven flying hours and in that time has carried 153 passengers. Last week-end and in the early part of this week it was at Bedford and at Oxford. An accident to the trailer delayed the arrival of the machine at Bedford till late on Sunday.

One of the latest passengers and certainly one of the most distinguished was Her Grace the Duchess of Bedford. Mr. Charles Barnard, famous as the pilot of the *Spider*, and his wife have also been initiated into the mysteries of motorless flight in this two-seater.

On Saturday and Sunday next the B.A.C. VII will be at Southampton at Red Lodge Farm, Bassett. (At least we understand that the regular site of the Southampton Club is to be used.)

AN IMPORTANT LECTURE.

An illustrated lecture will be given by Mr. E. C. Gordon England, A.F.R.Ae.S., on "Gliding and Motorless Flight" at the Junior Institution of Engineers, 39, Victoria Street (near Army and Navy Stores) on Thursday, May 21, 1931, at 7 o'clock p.m. The Hon. Mrs. Victor Bruce will be in the Chair.

Members of the B.G.A. will be admitted free and of Affiliated Clubs at half-price. Tickets, price 1s., from J. L. R. Waplington, Sec., 44A, Dover Street, W.1 (Tel.: Regent 3793).

WANTED A MAN WITH ENTHUSIASM.

There is an immediate opportunity for a "B" licensed power pilot or ex-Service pilot of initiative to become Instructor at a school of Motorless Flight. The School is organised in that equipment, site and the necessary organisation is available, but suitable personnel has not yet disclosed itself.

A certain amount of money would have to be put up by the successful candidate, but it seems to us that such a school would prove a profitable investment; there are any number of people writing to this office every day asking where they can learn to glide. In the end they all have to go to Germany simply because no organisation yet exists in this Country to give intensive training.

Further information can be obtained by writing to THE SAILPLANE at 175, Piccadilly, London, W.1, and marking one's letter M.T.

A WEEK AT THE WASSERKUPPE.

At long last the weather has improved enough to permit the *Anfanger*, or beginner's course, to really get down to work. We have only had one and a half flying-day's fog and hard wind this week, which is quite good. The wind however has been mainly from the wrong quarter, and this has made the flying more difficult.

On May 2 the advanced course finished with all its pupils getting their Cs—which is believed to be a record for the Wasserkuppe. The very next day one boy in the *Anfanger* class, holding his A, completed a flight which, if not a record for the *kuppe*, is very near it. He took off the *kuppe* in a Zogling, two men on each rope, and flew till he was over the *Sugarfeld*, where he soared the machine like a Falke, he turned left and when he passed over the farther end of the *Sugarfeld*, again soared the machine. The last we saw of him he was proceeding towards Gersfeld. His time till he disappeared was 3½ minutes. When we found him he had landed in Obenhausen, on the steep banks of the Fulda stream, finishing up between two trees. What his actual time was nobody knows but it was somewhere in the region of 4½ minutes—in a school Zogling.

The next day another boy tried to do the same in a following wind, but he had to turn back when he met the telephone wires along the road. After that anybody who flew beyond the *Sugarfeld* could not count the flight in his list of B flights.

The whole course, bar two late-comers, have got their As, while 7 have got Bs already, and there are three days to go. Mr. Wilson (of the S. Essex Club) has made four of his five B flights, and should make the last without any difficulty when the weather presumes to give him a little of the right wind. Of the rest of the British colony all have As and one has also made a B flight.

The Canadian lady who is taking the course made a very fine A flight and may even make her B—if only the weather is propitious. We believe that she is the first Canadian woman to make her A—certainly in Germany. Our excitement is intense when one of our two *Kunst-fliegers* takes off, they are sure to do something new and thrilling. One, a Britisher, has rather fallen off and has at last got his A, but the other, an Austrian, improves with every flight. These two have proved that a Zogling will do anything a powered plane can do—and then some.

After seeing how many clubs in England tow their machines back to the start again, the British colony here were a little surprised to find the somewhat lengthy method of man-handling still employed here. With that ingeniousness that is always latent in the Britisher abroad, they suggested a horse to speed things up. The motion was carried with some diffidence, and the opportune offer of a local farmer accepted.

Inspired with the thought that at last we could sit back and watch the machine brought back without all the labour we had previously expended, we sallied forth on the next day's flying and spiritedly pulled the machine back after each flight, buoyed with the hope of the horse's sudden appearance. We finished the day still hopeful—though very tired from our unaccustomed efforts—that the next day would see the animal appear. That horse has not materialised yet, though more than two weeks have passed. We are not quite sure whether we ought to write an obituary notice in THE SAILPLANE or still keep on hoping.

Meanwhile our German companions, having seen what we can do, expect us to continue the good work. It is a hard world, especially when one is landing.—P. S. F.

[*Most of our readers knew that Mrs. Bradbrooke, of the London Club, was not only the first Canadian woman to get an "A" but the first woman to get a British F.A.I. Certificate. There are now a number of women "As" in this country, but who is going to get the first "C" and emulate Mlle. Lippens*?—ED.]

THE QUESTION OF INSURANCE.

We publish herewith the recommendations which Captain Lamplugh of The British Aviation Insurance Group has made to *The British Gliding Association* concerning the necessity for insurance by Clubs of their third party risks. We would draw attention to the warning contained in the latter part of the second paragraph. It is a serious thought that if any one made a claim for some thousands of pounds, say on account of the breadwinner of the family being killed by collision with the glider when landing, that not only the pilot but the members of the Club personally might be held responsible.

There is no doubt that Gliding Clubs should insure against third party risks; although the point has never been raised there is no reason for supposing that their liability varies from that of a private aircraft owner, which would make them liable for all third party damage, irrespective of negligence, caused by the glider. Furthermore, I understand that *the majority of the Clubs are not limited liability companies so that the responsibility would fall upon the pilot and/or the members of the Committee and/or the members of the Club personally.*

The wording suggested for third party cover is as follows:—

"It is hereby declared and agreed that this policy covers the Insured against legal liability to third parties in respect of accidental damage to persons or property arising directly from the launching, flying or landing of the gliders mentioned herein. Warranted that the gliders shall be flown only by members of the insured Club and/or pilots approved by their Instructor.

Warranted that all launches shall be carried out, in a normal manner upon the insured's gliding site at ..... and under the personal supervision and direction of the approved Instructor.

The term Third Party in this policy does not include members or employees of the insured Club or others assisting in the operation of launching the glider, nor does it include members of the public attending as paying spectators any public meeting or exhibition of flying organised by the insured."

Liability in respect of meetings and so on should of course be insured, but this is covered separately in each case and the rate varies in accordance with the nature of the meeting and the risks involved.

The average rate for third party insurance up to a maximum of £1,000 in respect of any one accident and £2,000 in all under the policy is from £4 to £5 per aircraft per annum. It will, however, be appreciated that no definite undertaking can be given to quote this or any rate to any particular Club. The figure can only be taken as an indication of what the rate may be expected to be if the risk is accepted. Whether any particular Club is or is not an insurable proposition depends upon its organisation, site, facilities, etc.

INSURANCE AS APPLIED TO GLIDING.

In this short article one cannot delve too deeply into the principles of insurance, but merely discuss for a few moments the process of effecting "cover" combined with a brief survey of the position of the parties concerned.

It should be realised at once that insurance is a necessity and an important part of gliding, whether gliding be regarded as a sport and pastime or as a business. In every sphere of business and commercial life Insurance plays a leading rôle. In fact it is safe to say that without insurance the trade of the world would not be carried on. Now, therefore, that a new form of industrial life has been born, so must a new form of insurance be designed to provide the young industry with adequate protection against disaster both in its youth and later developments.

Before examining the glider policy as at present framed, let us for a moment consider the principles underlying any insurance policy. An insurance policy is a contract arranged between two parties whereby one party agrees for a consideration, commonly known as a premium, to shoulder certain responsibilities which the other party should rightly bear. These responsibilities may not affect the insured person only, but also other person or persons or their property. Thus we have two principals and a Third Party. The insured, the company or group of underwriters, and the Third Party.

A policy, therefore, issued by a company or underwriting group, in order to provide adequate cover for the insured person, must be so framed that it provides indemnity against loss of the insured's own property and also indemnity for any sum which the insured may become legally liable to pay to another person in respect of damage caused to the person or property of the Third Party. What is really wanted, therefore, is a comprehensive policy covering the owner of a glider against all eventualities at present known.

The policy as at present drafted is comprehensive in that it covers all possible eventualities, but for the sake of clearness it is divided into sections.

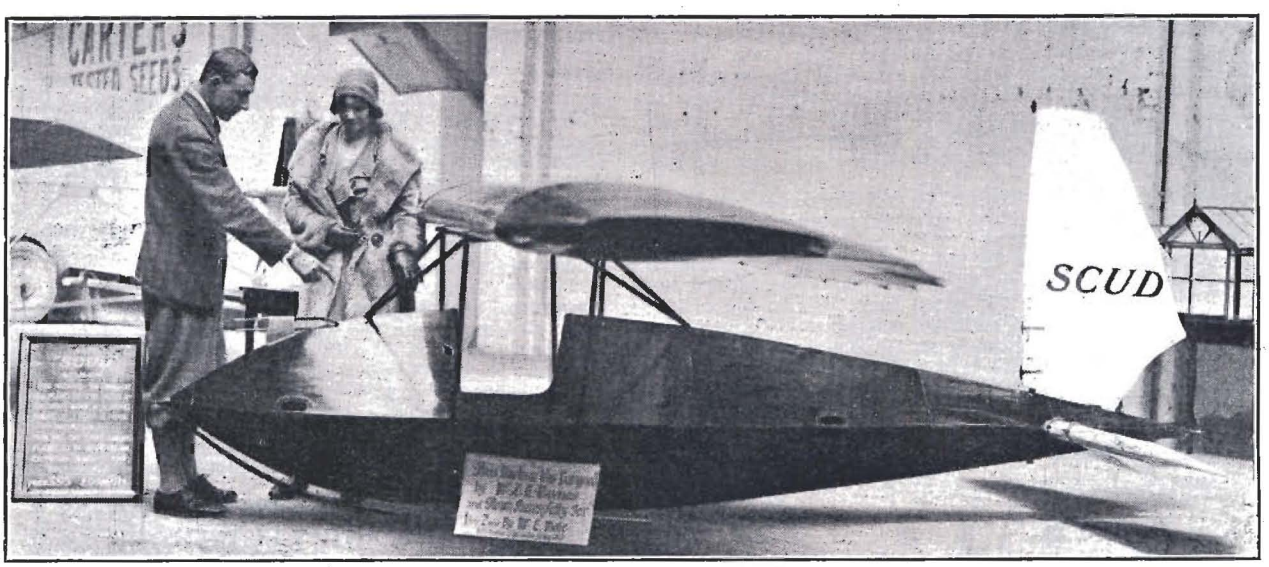
The first section covers damage to gliders while in the air, landing or launching. The second section covers the machine whilst on the ground or in a hangar. The third section covers all risks while the machine is in transit. The fourth section indemnifies the insured person against all sums which he may become legally liable to pay in respect of injury to persons or damage to property as a result of gliding. The only remaining eventuality is injury to the pilot of a glider and this is provided for in the Personal Accident Policy, which is issued in connection with the Comprehensive Policy. Naturally a separate policy is required in this last case as it is presumed that there will be many more pilots than owners, at any rate to begin with.

The policy is issued, as we have seen above, in consideration of the payment of a premium, the acceptance of which binds the company or underwriter to certain obligations. The company or underwriters also make in their turn certain conditions which the assured is bound to observe and it is only by both sides observing the conditions of the contract that the policy remains in force.

As regards the financial aspect of this matter it should be clear that it pays to effect insurance, otherwise business men would not cover themselves against disaster by insurance. In the case of an individual owner or a Club it is short-sighted policy to fly uninsured as an accident might cause financial loss sufficient to put an end to that particular individual's or Club's activities in this new and attractive sport.

Finally note that it is possible to purchase a glider by means of deferred terms of payment. The insurance policy is essential because no firm will offer deferred terms on an article which cannot be insured.

Any further information may be obtained from Selfridges Aviation Department, who specialise in aircraft and glider insurance, and full details of their "Glider" policy may be obtained from them direct.



GOOD BUSINESS.—Mr. Baynes illustrating special features of the "Scud," four of which have now been sold at the Glider Exhibition by E. D. Abbott Ltd.

A PROPOSED EXPERIMENTAL PROGRAMME.

BY CO-ORDINATOR.

[*We are very pleased to be able to publish the following article, which has been specially written for* THE SAILPLANE, *by one who is continuously engaged in co-ordinating scientific research throughout this Country. That a member of the higher grades at one of our principal research institutes should be able to find time to write for us is flattering, but that he should outline a means whereby we can profitably engage in scientific research is encouraging. When modesty as well as questions of policy allow his pseudonym to be dropped we hope that our anonymous contributor will receive due recognition as having added to his other claims to fame by being the first person in England to explain quite clearly how the Gliding Movement can add its quota of scientific research to the ever growing national programme of intensive aeronautical research.*—ED.]

There is no doubt that gliding when it has once got a firm hold on the Country's sporting element will provide a first-class amusement available to all those, who can say, afford at least a motor-cycle to take them to the meetings and back. When we have a much greater number of persons flying then the art of flying a sailplane will develop rapidly and many things in the way of scientific experiment will be possible.

Many have suggested that until the art is better developed it is not worth our while to consider making any experimental measurements, however rough. I do not agree to this, and, provided there is sufficient keenness, I do not see why progress in both the art and science should not proceed hand in hand.

Readers of THE SAILPLANE are already acquainted with the valuable work being done in Germany under the able direction of Herr Lippisch, whose inspiration to those around him has done much to forward the scientific movement. To attempt to start from the point at which he has already arrived is asking too much, but if we look around there are one or two things which we in this country might attempt right away.

To obtain any results of permanent value instruments are needed, and here we might take advantage of the experience gained by the Germans. Doubtless specimens of German instruments could be purchased, or others like them found to be already in use in this Country. But before even this, we might get some useful information by experiments utilising the common spring balance.

As a result of our topographical conditions and the difficulty of obtaining adequate sites, towed flight has been used to get off the ground with some success and a motor-car has been used as the auxiliary.

I do not know for certain, but it seems credible that steady towed flight behind a car is possible. Here then we have an example where a single measurement of the tension in the tow rope might form the basis for experiments. The first thing to see is whether this tension is constant, and it is suggested that the spring balance should be at the glider end of the cord with arrangements for casting off, as with any other tow rope.

A little ingenuity should make possible a system of not more than three mirrors (perhaps only one would prove to be necessary) to enable the pilot to read the dial. Some ingenious person might devise a direct attachment, so that the pilot could read the tension without putting his head out of the cockpit.

Such an experiment is not quite so easy as it sounds. Glider pilots will also probably say that the proposal is foolish, but without careful analysis of existing types the designer will not be able to improve his designs. In any case the experiment is one for a calm day when the air is still and when other kinds of soaring would not be practicable.

After the glider has started it will take some short distance to attain steady flight. We will assume that this has been achieved and that the car then has a clear straight run. The car speed can be fixed beforehand and the glider has to be flown as nearly as possible in a horizontal position. Then for a given car speed there will be one attitude of the glider at which it will take a horizontal flight path.

At this attitude we want to know the steady reading on the spring balance. This will give us the tension in the wire which will be the resultant force on the glider. At another car speed the attitude of the glider required for horizontal flight will be different and the dial reading changed. Thus we shall be able to obtain a series of readings for varying car speeds which will give us the resultant forces compounded of lift and drag over the before-mentioned range of speeds.

Let us now consider the next step. Can the angle of the towing rope be measured either at the car or at the glider, preferably the latter? But even if it is only possible to measure it at the car, the angle at the glider end can be calculated, and the mathematics of this calculation have been published in the Reports of the Aeronautical Research Committee.

Given the weight of the glider, the angle of the resultant force, its value, and the speed of horizontal flight lift and drag curves for the glider are readily calculable (assuming that the no lift angle relative to some fixed line on the glider is known, otherwise only the normal and longitudinal forces can be calculated).

In this case we shall have done for the whole glider what the R.A.E. Parasol monoplane has been designed and built by Parnalls to do for wings. In this machine an elaborate mechanism permits the free movement of the wing and supporting struts relative to the body. We, however, in the simple method outlined above have obtained lift and drag forces independent of such uncertainties as engine horsepower and airscrew efficiency.

Perhaps the reader will say that all this sounds very dull, doing your flying on the end of a wire on calm days, but he must remember that the whole object of a scientific experiment is to find out what efficiency is being obtained with the craft he flies, so that the designer, as I have already pointed out, may design something even better. Moreover, should the idea here outlined prove feasible, then it is capable of extension.

If the air is not reasonably still then some measurement of wind speed must be made, and the pilot must carry an instrument to ensure that his sinking or rising speed vary about a mean zero value. These are, with good sailplanes, quite small, and there was some discussion on this point and the Speed Diagram in THE SAILPLANE for Feb. 27, 1931. As to an estimate of wind speed at the height of flight there is little to beat the German method of observing the speed of the travel of smoke. The pilot might let off a puff of dense smoke when he has finished his run, and an observer on the ground could measure its speed between two points.

All of the above assumes that there are no up and down current which might reasonably be the case on a still day and over flat country. [*Provided there were no thermal currents, which are proving to be very prevalent.*—ED.] Up and down currents can be measured and estimated, as Herr Lippisch and Captain Entwistle have explained to us, but since the sinking speed for normal gliding is small, especially with the most efficient form of sailplane, the importance of the correction for vertical velocities is considerable. Hence the intention in the first instance is to use calm days for the first trials of such methods as those suggested above.

Another difficulty that arises on a really windy day is the change of wind speed with height. There are formulæ which are available for calculating the rate of change of wind speed with height, but their use will need the knowledge of the exact height of the glider above the ground during the experiment, and this height can be measured. As we must be careful not to have an instrument board full of dials, all of which have to be read at once, this height might be calculated by observation from the ground by measuring the inclination from a measured base line.

Obviously there are many other experiments which can be made with gliders, but I am of the opinion that the most important, as well as the most interesting thing to study first is the efficiency of our aircraft. Perhaps someone can suggest a better means of doing this than the method which I have endeavoured to outline above, and if these notes stimulate such discussion, then they will have served one of the objects for which they were written.

Towing is a practical proposition, whether by car or by aeroplane, and while writing these notes my attention has been drawn to the use by Herr Groenhoff of an engined-aeroplane to give him a towed start from Munich aerodrome to make in the *Fafnir* what is claimed to be a record flight of some 160 miles in a straight line. Such experiments as those which I have suggested are equally possible when a glider is towed behind a powered machine.

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A FILM TO BE SEEN.

Mr. Waplington, of *The British Gliding Association*, informs us that he has seen an American "Sportlight" talkie film on Gliding. He recommends those who are interested in Gliding to take the opportunity of seeing it. He will be pleased to forward on request a list of cinemas at which it may be seen.

Scenes include pictures of Primary Training Gliders with an instructor explaining to *ab initios* the methods used in taking-off and manipulating the controls while in flight; a chat by the American pilot, Ruth Elder, who also makes a glider flight; an exhibition of glider flying in a glider seaplane launched by speedboat, and an actual flight made by the cameraman.

Why Not Buy British?

At Merthyr on May 2 after a foreign pilot in a foreign sailplane had made two flights totalling 2 min. 30 sec. the

R.F.D. SAILPLANE

flew for

45 MINUTES

and then made a voluntary landing, in spite of the fact that an announcement had been made to the effect that no British pilot or British machine could do more than the foreigner owing to the weather conditions (6 m.p.h.)

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CORRESPONDENCE.

A Northerner Explains his View-point.

Sir,—Who are these individuals you mention in your editorial notes this week who are not getting what they want or have lost interest, and which are the Clubs that are admitting defeat? I hope these weak-hearted men are not of the North! Shame enough on them to write and publicly proclaim they have lost enthusiasm.

Is not this cooling off of enthusiasm just a sorting out of the sound from the unsound, though? In the Ilkley Club, which has now been going over nine months, we have practically lost all those members who came along with the sole aim and object of showing others what supermen they were, those that came along with the object of impressing upon their girl-friends how fearless they were, those who found yet another excuse for consuming more liquid refreshment than is good for them, and those that came in with a "Hail-fellow-well-met" attitude that meant nothing. Fortunately we still have a foundation which is left and upon which, having weathered the storm and proved itself to be made up of sounder materials, it is possible to build.

Other clubs have been divided by petty quarrels, lack of business acumen and lack of common-sense, though the majority in this part of the world are now definitely a united force which it will take a lot to split or disturb. We have however instances of both around here. There are two clubs, both within a hundred miles of here which have dwindled, or are dwindling, to nothing. Their members, if they are truly interested in the sport of Gliding and Sailplaning, are simply joining other clubs.

I think the point the public fail to realise, and it is a thing people in general fail to realise in other things than Gliding, is that the more work one puts into a thing the more one gets out.

In the case of this Club a man is judged far more by the amount of work he puts into a job than if he is an "A," "B" or "C" pilot. If one is prepared to put a certain amount of work into this Gliding and Sailplaning business it saves ridiculous expense, and brings far greater satisfaction. One of our members, with the help of others, has just finished a Dixon and very soon we hope to have an Intermediate machine, already christened *The Bat,* finished; so that by August, when we are definitely holding an extensive competition on our comparatively new and very excellent club ground of 1,500 acres at Malham, we hope, with an up-to-date expense of under £200, to be able to boast three machines, an incomparable club ground, and several members with tickets of one sort and another. In the £200 expenditure must also be counted a club car.

Most of the clubs in this part of the world suffer from lack of conveniently placed grounds and it is more good fortune than anything else that those clubs with really good grounds have them. Another great difficulty of clubs in this part of the world is the depression that is being experienced in the textile trades with the spontaneous depression of other trades in the district. To raise the subscription in the case of most clubs in this neighbourhood would be suicidal, possibly the entrance fee could be raised but I doubt whether even that is possible. As it is those who are more fortunately placed, economically, than others, usually stand odd expenses of a very minor nature themselves and so perhaps contribute another 10s. or so more per annum.

The great advantage that we have over many other clubs, and which we are beginning to realise very strongly now, is that our honorary instructor, Mr. Crabtree, has, since his return from the Wasserkuppe, been our leading light. He has told us the mistakes the German clubs have made, the best and safest way to learn to fly, how to set about repairs, and he it was, I think, who said that one of the first necessities of a good club was a good ground. The result was that we spent six weeks, when we might have been flying, finding one. At Easter we realised in three days the truth of his statement.

With regard to the competition which we are arranging for some time in August, and which I mentioned earlier in my letter, nothing is definitely fixed. We are, however, hoping to have at least one expert German pilot here at the time, and we have been assured that many of our surrounding clubs will come along. If any of the more advanced pilots of the South feel like coming to have a look at the North I believe it is going to be well worth their while to come.

To finish this rather lengthy epistle I feel there is still one more thing to be mentioned. Gliding and Sailplaning is still very much in its infancy, and to try and make the infant run before it has really learnt to walk, is going to have a bad effect on its health in its later years.

(Signed) N. C. H.

THE LYONS DEMONSTRATION AT BROADWAY.

The fact that a very large number of people can be got together to watch demonstrations of motorless flight was once again demonstrated at Broadway, in Worcestershire, on May 9-10, when a total of between 8,000 and 10,000 people gathered together to see what motorless flight is, and how achieved, on the occasion of the Lyons Tea demonstration

The wind, that fickle jade on whose whims hangs the success or failure of a demonstration, played false once more, and the soaring site, at the Tower, could not be used. The show was therefore disappointing to those gliding enthusiasts who had come to see soaring flight, as it had perforce to be held on a training site. On the other hand, one gathers that the lay portion of the crowd was very interested to see Herr Krause and his machine. One of our correspondents and a visitor to the North Cotswold Club after saying that the best time on Saturday was just over a minute, has some interesting comments.

On Sunday the wind changed again, but still did not come from the West, and again only glides were possible. The organisation was excellent, but much time seemed to be lost in getting the machines back to the top of the hill, in spite of Lyons' 6-wheeler, which easily climbed the long slopes.

It was estimated that there were nearly one thousand cars in the car park and on the roads, and possibly six or seven thousand people watching on the Sunday, in spite of the cold, dull day, and practically no wind, whereas on Saturday there were between 1,500 and 2,000.

Members of many surrounding Clubs were in attendance, and all agreed that Mr. H. Wright (the North Cotswold Gliding Club's instructor) and his pupils put up a good show in their R.F.D. Primary machine.

THE SAILPLANE is to be congratulated on the very fine programme which was on sale on the ground The matter contained therein would no doubt interest many of the public who were non-gliders and would perhaps help them to become air-minded and thus members of gliding clubs.

These events are a convincing exposition of the argument which has been put forward editorially in THE SAILPLANE that Clubs which are organising demonstrations of this kind must not rely entirely upon one soaring pilot and machine. They must have other events ready, so that if the wind proves fickle there is plenty of equipment ready to amuse and interest the crowd. Nothing is more harmful to the Movement than allowing a big gathering of people to disperse with the feeling that there is nothing to interest them in gliding.

Another point is causing us anxiety. For the first time since the inception of the paper there was last week no "News from the Clubs." This was partly due to the unfavourable weather at consecutive week-ends but we suspect, after going through our correspondence, that there is a tendency for Clubs to be so busy organising for their great day that they neglect the foundation on which they are building their future existence, namely the training of members. There is grave potential danger in neglecting routine work merely to organise a meeting in order to attract new members, you must look after the members who already form the Club.

HIGHER STILL.

In our account of the Lyons Tea Demonstration at Merthyr, we reported that Herr Krause reached a height of 1,000 ft. above his start point. This information was sifted out from the reports then available.

Mr. Geoffrey Woolf informs us that Herr Krause actually gained a height some 3,000 ft. above his start point.

THE LYONS DEMONSTRATIONS.

The third of the series of demonstrations of soaring flight, which have been organised by the Lyons Tea people in conjunction with the British Gliding Clubs, is to take place THIS WEEK-END at Preston.

The others are as follows:—

May 16—17.—Preston. Butler's Farm, Beacon Fell, Preston.
May 23—25.—Ilkley. Woofa Bank, Ilkley.
May 30—31.—Scarborough. ——.
June 13—14.—Glasgow. Campsie Fell.
June 20—21.—Stirling. Sherrifmuir, Stirling.
June 27—28.—Nottingham. Ilam House, Dovedale.
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, Portsdown Hill.
Sept. 5—6.—London. Dunstable.

NEWS FROM THE CLUBS.

THE CHANNEL GLIDING CLUB.

On May 2 the C.G.G. was operating on its only available slope for an Easterly breeze. Despite the fact that under ordinary circumstances the field is only suitable for 20 sec. flights, interest was derived by the more advanced members in endeavouring to prolong their glides by making a start turn and introducing an element of soaring into their flights, several attaining 25 secs.

On this afternoon a new policy was introduced. The C.G.G. since its inception has enlisted junior members, feeling that the development of air-mindedness in the youth of the nation was greatly to be desired. These juniors have proved themselves tremendously keen. They have turned up to the flying meetings regularly, and have held wing-tips and hauled away on the ropes when required. They have also done much good work on construction nights, and for all this their only reward has been to watch their elders occupying the coveted seat.

It was thought, therefore, by the Club that the juniors were scarcely getting a square deal, and it was decided that as a reward for their keenness, with their parents consent, they should be given a few slides, so that in time they should be able to take their turn with the rest, and meanwhile their interest would be maintained. Suitable weights were obtained and attached to the nose of the machine, and the strength of the launch was adjusted to the weight and the supposed skill of the pilot. The results were astonishing. Every launch was entirely successful, the pilots showing complete knowledge of the controls and quickness in their application.

Owing to the foulness of the weather, there was no gliding on May 3, but the above programme was carried out again on Wednesday, 6th, and Saturday, 8th. The juniors showed definite progress.

On May 10 weather conditions appeared to be good for Etchinghill, and it was hoped that one member at least would net an "A." On arrival at the site, however, it was found that the wind was several points South of the ideal, and after several unsuccessful attempts at an "A" had been made, flights being in the region of 27 secs., it was decided to wait for a better day, and intensive instruction was given to the less advanced members, not forgetting the juniors, who received four or five flights each. This time they all really flew, and made a very good job of it too.

We seem to remember Mr. Horace Wright, of The North Cotswold Club, offering to pit his team of lady pilots against all comers. Before very long we shall be able to issue the same challenge on behalf of our "under 14's."—E. C.

[*This training of junior members under properly organised safeguards is a progressive step and on the initiation of which we are pleased to congratulate the Channel Club as well as on their determined efforts to find adequate sites.*—ED.]

THE ESSEX GLIDING CLUB.

On May 9-10 the Essex Gliding Club resumed activities at Havering Park Farm (near Hog Hill Golf Course), Lodge Lane, and will there continue throughout the season every week-end, weather permitting. The primary machine has undergone certain alterations which have resulted in a better performance, but as this was the first meet matters were by orders taken quietly.

[*Where is Havering Park Farm and how does one get there; none of the places given above can be found in our A.B.C.?*—ED.]

THE GLASGOW GLIDING CLUB LTD.

The Glasgow Gliding Club was inaugurated in June, 1930, when a meeting of those interested in motorless aviation was called by Mr. A. Y. Payton (the present Secretary).

The first steps towards founding the Club were taken at this meeting when it was decided to seek for suitable ground and to obtain as much public interest for the movement as possible.

Owing to various difficulties, chiefly caused by the fact that Glasgow as a town is so widespread, suitable ground was not immediately available and this retarded our initial progress. In the matter of publicity the Gliding Movement here received press support when *The Daily Record and Mail* agreed to feature a weekly column of Gliding Notes and provide space for Club movements and news.

In October a second meeting was called to put the Club on a proper working footing and commence gliding at the earliest possible date.

Mr. Gregor Cameron agreed to become President, *pro tem.*, in order to expedite matters and the Club's first glider, an R.F.D., was ordered shortly afterwards. The Club commenced gliding on Nov. 23, 1930, and practice has been continued throughout last winter and the spring of this year in the face of many difficulties.

Apart from the vagaries of the weather, the inevitable damage to the glider consequent on hard landings by *ab initios*, created delays, and ate into our funds. In spite of all this the Club has continued to progress and this year invested in an advanced type of machine, the B.A.C.III, which should also greatly interest aeroplane pilots and those more advanced in the science and practice of flying.

The Glasgow Club claim the honour of being the first of the Scottish Clubs with members who have obtained the "A" Certificate of *The British Gliding Association*.

The Hon. Alan Boyle became the President of the Club on the retiral of Mr. Cameron this year. Mr. Boyle, who is a pioneer in British Aviation and the holder of No. 13 Air Pilot Certificate for Great Britain, has done much to stimulate this new movement.

THE LEEDS GLIDING CLUB.

We are informed that Mr. G. Jefferson has resigned from the post of Hon. Secretary to the Leeds Gliding Club as he has become too busy to give the time that is necessary for the work. His successor is Mr. N. B. Liversedge, 33, Alexander Avenue, Templenewsam, Leeds.

THE NORTH KENT GLIDING CLUB.

In common with most Clubs, our activities during the last few week-ends have been confined to making interesting and very much to the point remarks about week-end weather. The Exhibition of Gliders at the Agricultural Hall came as a welcome diversion. Assisted by much encouragement from Mr. Waplington of the B.G.A., we managed to get our B.A.C. II into the Show at about 9 o'clock on the evening before the opening day. Our thanks are due to all the energetic members who have been able to devote time to "staffing" our stand.

By some strange chance last Wednesday evening was quite fine and a number of members turned up hopefully anticipating that at last something could be done. Unfortunately a dead calm prevailed, and lack of numbers on the rope prevented anything really useful being done. On Saturday afternoon it was both fine and breezy, but our activities were brought to an end after a stall on the third flight.

We got going again on Sunday, but once more the third flight proved disastrous. One member managed to drop a wing, commenced to turn out of the wind, and a gust under the starboard wing turned the machine right over. Thanks to the robust construction of the Dickson the nett damage consisted of stretched wires and one rib broken in the rudder, plus one upset pilot—upset because he had caused a delay in flying activities! Our ground engineer soon had things in order again, and the remainder of the day was quite successful.

We should like to thank all those who have gone to a deal of trouble in advising us through the medium of THE SAILPLANE, regarding the joining of Hemp and Rubber ropes. We have adopted the Double Sheet Bend method, which appears to be absolutely satisfactory.

THE SOUTHAMPTON GLIDING CLUB.

The Club resumed flying on May 10 after several weeks' inactivity through adverse weather conditions. Excellent flights were made in spite of lack of practice, a steady wind being very beneficial to the more weighty members.

Full advantage was taken during the non-flying period to thoroughly inspect and overhaul the machine. A new seat was found to be necessary; this was made by the members themselves and has proved to be highly satisfactory.

THE SOUTHDOWN SKYSAILING CLUB.

The Southdown Skysailing Club had a full day's gliding on May 10, but owing to light winds only short flights were possible. Some thirty-five launches were made and most of our active flying members made up for lack of practice due to the bad weather during the last six weeks or so.

Again the kingpost broke under slight strain—this is the third in a short time—but it was quickly and efficiently repaired by Mr. Ely. The useful but uneventful series of flights were continued up till 8.50 p.m.

We are glad to inform those interested that we have now settled down at Ditchling Beacon and shall be gliding there regularly every Sunday.

When you come to **SCARBOROUGH** *this 1931*
arrange to stay at
THE ROYAL HOTEL
Headquarters of the Scarborough Gliding Club. On the sea front.
The Gliding World of Europe will be there this year. Book now for June.
Accommodation 300. Hot and cold water. Terms from 15/- incs. Magnificent Ballroom.

THE SURREY GLIDING CLUB.

The weather, which has been bad during week-ends for some time past, made a change for the better on Saturday, which enabled Club training to proceed very well during the whole week-end. The average of flights was very good and times varied between 30 and 45 seconds on the Dagling. This, of course, was for members who had previously handled the machine, and did not include one new member who commenced his training in the usual way.

The wind was in a very favourable direction, and it was disappointing that the Prufling could not be brought out. It is still in dock, however, suffering from a damaged nose. This was caused by a heavy landing last week-end. The damage is not very extensive, and we hope to enter both machines for the Whitsun Meeting at Balsdean.

THE WILTSHIRE LIGHT AEROPLANE AND GLIDER CLUB.

The Wilts Club held a very enjoyable meeting at Easton Hill on May 9, when a number of visitors from Somerset, Berkshire, Gloucestershire, London and India attended. The most perfect glide of the day was made by Mr. Simper, and the longest by the Hon. Instructor, Mr. L. S. Scarlett.

The glides now total nearly 300, and the members are eagerly looking forward to the summer meeting, July 24 and 25, when, by arrangements kindly made by the Lyons Tea people, Herr Krause is to demonstrate real soaring flight, three miles north of Devizes, at Oliver's Castle.

In consequence of Mr. Dagnell's challenge, it is hoped to arrange the "glider Schneider" at this site, which has been proclaimed to be one of the best three in Great Britain by Herr Krause, and is strictly neutral.

On May 9 the wind was nearly absent, but 35 members and guests assembled in otherwise perfect weather. "The Car," which was kindly presented to our Club by Messrs. H. C. Praeter Ltd., was delivered to our Easton Hill site, and members much enjoyed making use of 23 h.p. for towed return uphill.

Nineteen glides were accomplished, the longest being 15 seconds. The back-axle and chassis for our trailer was very kindly presented to our Club by Mr. Smith, of Bath, and trailed to our Easton Hill site behind his private car on May 2.

NEWS FROM THE EXHIBITION.



Unfortunately both the B.A.C. VII and the R.F.D. sailplane were away on duty when these pictures were taken.
("Sailplane" photos.)

Those who have not yet taken their friends to the Exhibition are urged to do so before it is too late as it will be after 10 p.m. on Saturday next. Quite apart from the well-known Underground or Tube connections to the Angel at Islington, 'Buses No. 73 and 38 will be found to take one from the civilisation of the West-end to the ruralities of the Agricultural Hall with comparative speed.

Some distinguished visitors have been up to Islington, including the Director of Civil Aviation, Colonel Shelmerdine, Mr. Lindsay Everard, Chairman of the Leicester Aero Club and Member of Parliament, was extremely interested in what he saw there, and Captain H. H. Balfour, M.C., also M.P., who is President of the Isle of Thanet Club, and who has repeatedly drawn the attention of the House to the Gliding Movement, also spent some time in the gallery of the Hall.

E. D. Abbott Ltd. are to be congratulated on selling three "Scuds" from their stand. This, coupled with the orders which are likely to result from the inquiries which are pouring in from all over the World as a result of advertising in THE SAILPLANE, should keep the firm hard at work.

A SPECIAL PLYWOOD FOR GLIDERS.

The Aeronautical and Panel Plywood Co. Ltd., of 218-225, Kingsland Road, London, E.2, are well known as the suppliers of "Mallite plywood," which is very rightly regarded as being the best thing of its kind. This firm have been closely in touch with the Gliding Movement, not only since its renaissance, but ever since people began to build gliders after the War 1914-18. They realise that people in the Movement are all extremely hard up and that they find the prices of materials, which have been specially inspected for Air Ministry approval, are practically beyond their pockets.

Therefore anxious to do all they can to help the growing movement, the Aeronautical Panel Plywood Co. Ltd. have put APPCO on the market; this material is backed by the reputation of the Company and may therefore safely be regarded as being of a very high standard. On the other hand, the increased charges which result from the repeated inspections necessary under A.I.D. regulations are saved, and the result is a plywood, backed, as we have said, by the reputation of the firm, at a price which is much less than that required for Mallite.

There is thus no need for Clubs, individuals or manufacturers to buy imported plywood of inferior quality when British material of guaranteed quality is available at such reasonable prices. Inquiries should be made to the firm at the above address and mention made of THE SAILPLANE.

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