Oct. 10, 1930. Vol. 1. No. 6.

THE SAILPLANE AND GLIDER

Price 3d.

IN ENGLAND



A Prufling of the London Gliding Club, flying in the first Inter-Club Competition at Ivinghoe Beacon.

EVENTS OF THE WEEK

The immense tragedy of the loss of the R.101 has had, and will continue to have, repercussions throughout the aeronautical community. Most of us knew someone on board and many of us have suffered a personal loss. Our first feelings are of stunned grief and sympathy for those bereaved, our second a determination to carry on.

To touch on the technical aspects of the question would be impertinent; indeed we are not qualified to do so. In any case a proper Court of Inquiry is being set up, and until this has published its findings the whole matter is *sub judice*.

We shall not even refer to the careers of those who have gone. People who would learn of such things must turn to THE AEROPLANE, which is able to deal adequately with such matters. The tragedy has touched the Movement very closely. *The British Gliding Association* has lost its President, Air Vice-Marshal Sir Sefton Brancker, and one Club appears to have been completely wiped out.

The Movement has gained much from Sir Sefton Brancker's tactful handling of many difficult matters; he has carried its cause to the highest places and seen that the infant Movement had fair play. He has persuaded its patrons that it was worthy of support and was indefatigable in his efforts to further its scope.

In his latest communication to THE SAILPLANE, which was printed in our third issue, Sir Sefton Brancker said he was

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a great believer in the Gliding and Soaring Movement as a means of educating the public and giving the young people a chance of getting into the air. Let us remember this and go forward, remembering the considered opinion of one who had ever the cause of British Aviation at heart and in the end lost his life in its service.

We recently published some lively notes from the Airship Gliding Club, whose membership was drawn from the crew of the ill-fated ship. That Club must now be practically wiped out, but if there are any members left, to them we extend our sympathy and aid, if there is anything we can do to help them. Mr. Key, whose letter about airworthiness helped to bring this important matter to a head, was a member of that Club and perished in the disaster.

We realise, too, that the disaster must have come very close to the Bedford Club, and to them also we extend our sympathy.

Many theories have been put forward to account for the disaster, but, as we have said, we do not propose to deal with them here. We would, however, remind the Movement that the district where the crash took place is said to have a bad reputation for difficult currents. Let us remember that the forces and currents on which our Movement hopes to soar are the same as those which may have played no small part in wrecking the biggest airship in the World. Let us make sure that our equipment is the best in every way possible for dealing with such forces.

More About Training.

We make no apology for publishing another article about the Wasserkuppe. We are sure that every scrap of information about satisfactory methods of training must be gathered together for the benefit of the Movement. Mr. Jackson has written his account as an *ab initio* pupil who tried to get an "A" licence, but was baulked by the weather. Club instructors should read the account carefully as there are many useful practices described which could be well adopted over here.

What We Want.

We are pleased to find Clubs helping us in the best possible way by sending to us for publication details of modifications and devices which they have found useful as a result of practical experience. Perhaps one of the greatest services The Sailplane can offer the Movement is the dissemination of such information. We hope to receive a lot more.

Airworthiness.

We welcome from the Chairman of the Dorset Club a letter in which he explains the extensive precautions taken by his Club to ensure airworthiness of its machines. We are glad to give the fullest possible publicity to this excellent system and hope that other Clubs will follow suit. There is little doubt that people who are faced with a choice of Clubs will join the one that has the best inspection service for *they know that their lives depend on it.*

SIR SEFTON BRANCKER.

The Rhoen Rossitten Gesellschaft, which is the controlling body of German Gliding, has sent a telegram to the *British Gliding Association,* the translation of which is as follows:—

Deeply moved by the tragic disaster which English Flying has suffered. The Rhoen Rossitten Gesellschaft wishes to express its sincere sympathy for the death of your honoured President.

(Signed) Georgii and Ysenburg.

AN IMPORTANT MEETING NEAR YATESBURY.

The Opening of the Wiltshire Light Aeroplane and Glider Club is going to be a properly organised affair as may be gathered by the fact that Phillips and Powis Aircraft (Reading) Ltd. are making all the arrangements. The Meeting will extend over two days—Oct. 11 and Oct. 13.

Yatesbury is on the main Bath Road, half-way between Marlborough and Chippenham. For those who arrive by air, and numbers are expected, there will be hangar accommodation at the old R.A.F. Aerodrome at Yatesbury. This aerodrome lies along the road, and the best landmark from the air is the "White Horse" on the downs, just on the opposite side of the road.

We understand that a good attedance of gliders is guaranteed, and among those who are to give demonstrations are Col. The Master of Sempill, Mr. Latimer Needham and Mr. Lowe Wylde. Herr Robert Kronfeld has been asked to come and is expected.

A VOTE OF CONFIDENCE.

An important conference was held in Scarborough during last week-end. At the invitation of Mr. Howard, who is Chairman of the Scarborough Club, delegates from the *British Gliding Association,* and from the clubs at Barrow, Huddersfield, Connonley, Accrington, Scarborough, Bridlington, Driffield, Bradford, Preston, Halifax, Essex and Ilkley, met together to discuss policy. Much was said and much good feeling was engendered. The Sailplane need only say that the two resolutions which were passed meet with its hearty approval.

The first resolution, which was proposed by Mr. Dornan, was:—

That this Conference of Northern Gliding Clubs expresses entire confidence in the *British Gliding Association* as the Central Ruling Body of the Sport of Gliding and Soaring Flight and urges all clubs to become affiliated and remain loyal to the Constitution of the *British Gliding Association.*

The second resolution, which was proposed by Mr. Domoney, was:—

That this meeting desires the Council of the B.G.A. to look into the question of divisional organisation as soon as they consider that the numbers of the Clubs throughout the Country warrant such a step.

A SOARING CONTEST IN AMERICA.

The National Glider Association of the United States has been holding a Soaring Contest at Elmira, in the State of New York. At this place there is a range of hills some 1,000 ft. high which run above a river and face more or less towards the south-west. They thus form quite a good site. The competitions started on Sept. 21 and closed on Oct. 5. Herr Wolf Hirth, who is well known as an expert sailplane pilot, was one of the entrants, and at the time of going to press had put up the best show with a flight of nearly an hour.

The prizes were not large, but there is interest in noting for what they were offered. The first event was for the longest flight over six miles. The Wright Aeronautical Corporation gave three prizes of $200, $150, and $50. The second event was for the longest duration flight above 30 min. The winner is to get the Edward S. Trophy. The Wright Corporation also offered the same cash prizes as in event one.

The third event was for the greatest number of laps covered round marks about six miles apart along the length of the ridge. One lap must be covered to qualify. The Wright people offered cash prizes of $100, $75, and $25. The fourth event was for altitude with a minimum requirement of 400 ft. above the starting point. The cash prizes of $200, $150, and $50 were presented by the American paper *Aviation.*

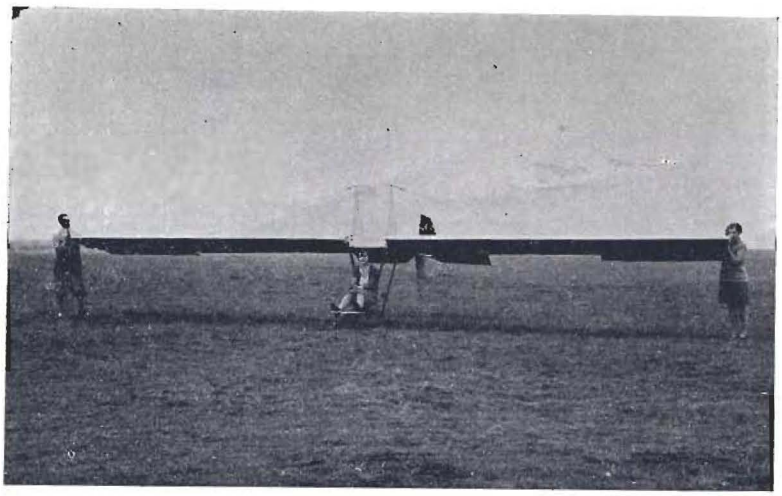
Another event was for spot-landing on the Air Port beneath the heights. The prizes offered by the Air Port were $75, $50, and $25. There were also prizes of $150, $50, and $25 for the pilot or team who should make the most valuable contribution to the Science of Soaring Flight during the period of the Meet, the written report of this to become the property of the N.G.A. and to be published.

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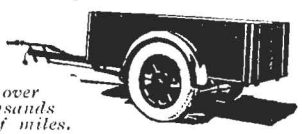
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A PUPIL'S EXPERIENCE AT THE WASSERKUPPE.

By C. H. Jackson.

The two chief Schools of Gliding in Germany are run by the Rhoen-Rossitten Gesellschaft. One of these Schools is at the Wasserkuppe in the Rhoen and the other at Rossitten on the coast of East Prussia. The Schools are open to all Germans and are not confined to young people, or the male sex. Foreigners are also taken at higher fees. The lower age limit is, I believe, 16 years. This limit only applies to these Schools, as children of about 14 years, or even less, learn in village and school flying clubs.

These notes are confined to the Rhoen-Rossitten Gesellschaft and particularly to the School at the Wasserkuppe, which is undoubtedly the headquarters of German Gliding. This school is situated on a hill which overlooks a valley of horse-shoe shape. The valley faces S.E. and when the wind is in the S.E. the site is ideal for getting a "C" licence or making an altitude record.

A good wind is not rare but it is not an everyday occurrence and when it does come, it does not last for long. This is important, for it means that the Wasserkuppe is not particularly suitable for pure duration records. On the other hand, the many hills, and the frequent occurrence of heavy cumulus clouds make the whole region for miles around very suitable for distance flights, always provided that the pilot can first gain enough height to make a good start.

The result of this has been to change the whole trend of Gliding Research in Germany away from soaring or "sitting" on air currents, to the study of how to make flights in a definite direction. This has led to the development of a new type of "clean" machine with a low-sinking speed and a high forward velocity. The Professor was the outcome of early work in this direction and is the father of the present-day high-performance machine.

The Wasserkuppe is directed by Herr Stamer, who particularly supervises flying instruction, the organisation of the workshops, the building of machines and repairs of crashes.

Meteorological research is carried on by, and information is obtained from, Dr. Georgii at Darmstadt.

Herr Lippisch, the designer, lives at the Wasserkuppe. He has the use of a small wind-tunnel and is generally occupied with research work. He also supervises the design and construction of new machines.

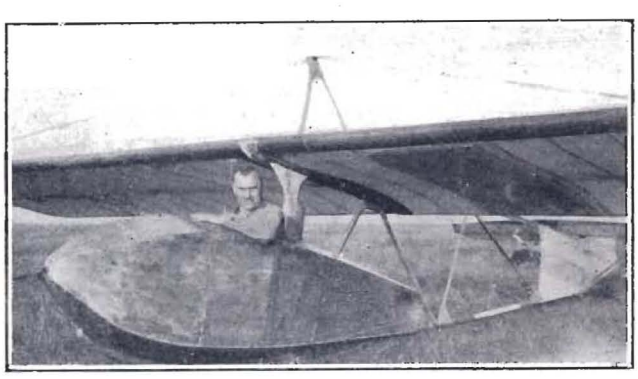
There is ample accommodation for students and competitors. As is natural for such a place, the students are very comfortably housed.

The School at Rossitten has not all the amenities of the Wasserkuppe, but it is more suited for beginers. The sands are very soft and the slopes in parts very gentle. The result is that the students can go right through the run of bad habits, and ultimately cure them, without any personal damage and with very little damage to the machines. Indeed, the classic story is of a beginner who stalled, nose-dived and was buried head first up to his shoulders. The sand was soft, he had a lesson, and did not stall again.

Rossitten is on a sandy peninsula where there is, almost always, a breeze, either off the land or sea, and this with the two sand ridges makes the place ideal for endurance records.

The students at the Wasserkuppe are divided up into three groups: beginners training for the "A"; those with the "A" training for the "B"; and those with the "B" training for the "C." It is, however, more usual to gain the "A" before going to the Wasserkuppe. So that the largest group is that for the "B," and this has the "C" as a possible ultimate aim. This year was exceptional because of the number of absolute beginners.

The "A" certificate is now a nominal affair. It is not considered important enough for a certificate and a badge with one gull is granted instead. One must however do the 30 seconds in a straight line before attempting anything other than a straight flight.



Herr Mayer in a Hangwind.

The possession of a "B" certificate labels one as a glider pilot, and of a "C" certificate as a sailplane pilot, or *Segelflieger*. The former requires five flights each of not less than one minute's duration and of "S" path. The "C" licence requires a flight of five minutes above the starting point.

When the best wind is available, the pilot who is trying for a "C" certificate usually starts from the Kuppe, the right-hand point of the horseshoe, turns left and goes with the wind to a point across the valley and more or less at the head of the horse-shoe. This is ideal for soaring but involves the unofficial recommendation that the pilot return



The Falke, which is to replace the Prufling.

to the starting point,—if possible. Some pilots managed to overshoot the first point and then landed on the road about half a mile away and well across the plain.

Each student has a log book which should have a record of each flight and even each attempt at flight. Its pages are most impressive. The information required is:—strength and direction of wind; the flying ground (three are available and these are used according to students' capabilities and the prevailing wind); pilot's mistakes; damage (to the machine); the height and the duration of the flight; also any remarks. This may seem to savour of red-tape, yet such a detailed record is of great use, both to instructors and pupils.

The procedure with *ab initio* pupils is sketched in the following notes. It is usually reckoned that a beginner who is going to spend a month at camp should leave with at least the "A," possibly with some "B" flights accomplished and certain lucky pupils might get the "B." The "A" should be gained after between 15 and 25 flights, on occasion with even fewer. On the other hand gliding, even at the Wasserkuppe, is at the mercy of the weather, and the time required varies between ten days and four weeks, but the course does not guarantee the gain of even an "A."

The "B" is subject to the same limitations, but the five flights counterbalance the pupil's increased rate of learning, so that even a month might not yield a "B" licence. Yet, a power pilot can gain his "C" after two weeks' tuition, but with the machines used, he must have a fairly good wind; one good enough for the Professor type is not necessarily sufficient for a student on a Leichtwindsegler or on a Hangwind.

The Machines Used.

Both "A" and "B" licences are still taken on the Zögling; this is not the best of primary machines, but it will probably continue to be used for another year. The "C" is taken on the two types above mentioned. The former has the normal type built-up fuselage which is covered with fabric; the latter has a nacelle and the tail unit is carried by a form of grid on the Zögling. There is also the Prüfling, but this is used as little as possible, only when the other machines are out of use. It is most unpopular owing to its heavy build and large forward and sinking velocities. A machine, the Falcon, or Falke, has recently been produced to replace these types, or be intermediate between them and the Professor.

The beginner is given a lecture on the controls. The rudder control is contrasted with that of a bicycle; the use of the control-stick is explained, and the need of thought before each movement is emphasised. The fallacy of pulling back the stick with its loss of speed and consequent danger of stalling is early demonstrated.

It is found that many pupils consider that it is correct to gain as much height as possible and that it is absurd to fly at anything less than an altitude of fifteen feet. This does not show at an early stage and does not matter much at later stages when the slopes allow a reasonable altitude without an unduly large angle of incidence, but it definitely becomes obvious with some pupils after the first half-dozen flights. If it is not done consciously it is often caused by the acceleration at the start. To counteract this pupils are told to manipulate the stick so as to maintain a balance

between the amount of land and the amount of sky in sight. If it is in favour of the latter and one feels the speed, or the noise of the wind in the wires, decreasing, one is told to ease the stick forward, to flatten out before landing and once on the ground to put the stick forward and stay on the ground.

But at all stages of tuition, pulling was considered a serious fault, worse than pushing. Another point emphasised was the danger of applying right rudder and pushing the stick to the left or *vice versa*. This was continually harped upon and the general advice was not to use the rudder unless previously given permission. This meant that the instructor had to choose the direction of flight to avoid obstacles and to be into wind. The pilot had to select a distant point for his direction and keep his eyes on it so that if he flew off the course he should use rudder to regain it. This apparently contradicts other instructions but I soon found that it was advisable to leave the rudder alone, indeed, many found it hard enough to keep it in a neutral position.

With regard to the control stick, further instructions were given to use it to control any tendency to hang to right or left, but when doing this neither to pull or to push. The instructor adjusts the elevator controls while the machine is on the ground. This done, the pupil is informed that a good flight can be obtained if the stick is maintained in that position, relative to the ground, throughout the flight, that is one must consider the machine pivoting about the base of the stick. As progress continues, pupils gradually get the idea of keeping correct flying position, with the nose slightly down, but even then there often remains some tendency to pull at the start.

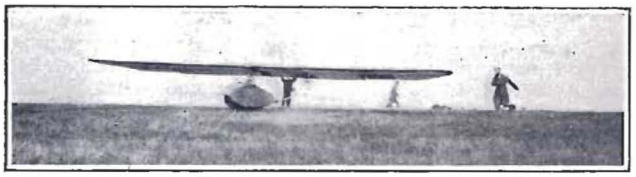
Other points are that one must not put one's foot to the ground before the machine is at rest and not to get out before there is somebody at hand to hold the machine. For non-observance of the latter ruling there is a theoretical fine of 25 pfennig.

Now all these instructions are given before the first flight and most of it is repeated for each succeeding one. Not only that, but the instructor asks the pupil what he would do, if in some unfortunate predicament such as barging into a clump of trees or drifting to the left and hanging to the left? Two men only are put on each side of the rope for the first flights and the pupil is not permitted to give the words of command, he has to repeat them according to the instructor's timing.

On later flights, say for the "A" and those preceding it, an interval of about six seconds between each command is satisfactory, on the earlier ones, three to four.

The instructor has full control over these early flights. He adjusts the elevators so that even if the pilot does pull a trifle the machine will not leave the ground. This precaution is necessary. The procedure is to let each student have three successive "flights." Of these at least the first two are merely "skids" along the ground. They are, of course, quite short and merely to accustom one to the acceleration of the machine, but, apart from that, the instructor can see if the rudder has remained neutral and if either of the wings dropped; also, if the pupil felt this and made any attempt to correct it. It can be seen that such flights are fairly useful tests.

For his third flight the pilot is allowed to rise anything from one to six feet above the ground. This is entirely the work of the instructor, he adjusts the controls and the timing of the words of command to his own satisfaction. The pupil's job is to maintain a straight course. At this stage and the next few flights the instructor can see if



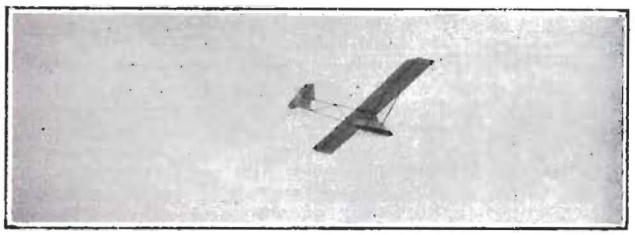
The Hangwind is wire-braced.

pupils are capable of keeping the machine straight, in the pre-determined direction and without banking to right or left. The real test of these flights is the landing. The usual early effort is either to push the machine down to the ground with an awful thump, or to over-do the flattening-out, and proceed with a series of hops and bumps till the machine stops.

After the first three or four flights the number of men on each side of the rope is increased, first to three, then soon after to four. The maximum number of men on the ropes up to the "A" stage is ten on the ropes and two on the tail. Later, when "B" flights are approached, the former number was increased to 12 men. This was found to be enough, even for the heavier Hangwind and Leichtwind machines. Such a number are rarely used on a Zögling.

The procedure described is carried on until the "A" stage is approached. Up to this stage and after the very beginning the number of successive flights was reduced to two and often to only one. The correct placing of the landing team is important, not only to the flight, but to the men. On one occasion when the "V" was narrow the start was bad because the machine was not placed so as to fly down the centre-line. The result was that the left wing dropped, and since the machine was not at any height a somewhat lazy starter was damaged in the ribs. Fortunately the damage was not serious, merely two cracked ribs and no flying for five days, but we took more care in the future.

Around the 10th flight pupils give their own words of command and are started-off from a reasonable height. The gradient of the slope is about the same as the gliding



The Hols der Teufel is a good soaring machine.

angle of the machine and it is an important point that absolute beginners must only be trained on slopes of this kind. Even on this slope three Zöglings were badly damaged. On one occasion a pilot pulled badly at the start, he did not stall, but went right off his course. He tried to correct this and to hang to the right at the same time, side-slipped and the machine was completely written-off. Another machine was almost as badly damaged through a stall, pure and simple. The third crash was of this type, but it only smashed one wing, the flying and landing wires and also the nose of the skid. The danger to the machine of a sideslip was continually emphasised and on several occasions demonstrated. Even a hop on comparatively "early" ground produced two cartwheels. This was not a serious matter at the Wasserkuppe, but it would be for a small club with one machine.

When trying for the "A," students are allowed three flights in succession and indeed the majority only succeed on the third. The usual successful flights were between 33 and 48 seconds in duration.

Practice in long straight flights is continued before anyone is allowed to attempt curved flight. Students for the "A" are not allowed to go off the top of the Kuppe because there is a considerable drop before the slope approaches the gliding angle of the Zögling. Spot-landings are not attempted before the "A" certificate has been gained. When the pupil has got this and made some left- and right-hand turns as well as an "S" path, spot-landings are introduced for turning practice. This spot is a white flag which is placed at the foot of the Kuppe so that a pilot who takes-off from there has to turn through 180 to 270 degrees if he is to land anywhere near the flag.

When I was at the Wasserkuppe the first good soaring wind was the signal for the advanced pupils to attempt their "C" tests. The power-pilots, if they managed to get to the correct place, came out quite well on this. Three of them obtained their licences after nearly three weeks' training. They fared far better than those who had only flown gliders and had obtained their "A" and "B" certificates. But it must be noted that these had to serve an apprenticeship on the Zögling before passing on to the Leichtwind. This latter and the Hangwind were used for the "C" licences, the Prüfling not at all.

The particular type of Zögling used for "A" and "B" flights had a rough fairing built on behind the pilot, this was said to improve the general performance by about 20%.

Two things worth noting are that the safety belt was fixed to the fuselage by pieces of elastic cord. This saved many a wrench when a bad landing was made. All three machines mentioned had as "foundation" a triangular structure, familiar to those using the Zögling, with the upper part acting as a cabane. It is easy enough to pass the belt round the upright of this structure. The other point is that the Zögling is flown with knotted cord hanging from the wing root on the front spar. This enables the pilot usefully to dispose of his spare hand so that he will not overdo movements by putting two hands to the stick.

As I have mentioned before the weather at the Wasserkuppe is not reliable. There is therefore plenty of time for lectures and work in the shops. The lectures are mostly on flying and theory of flight. Most of the work in the shops is repairing damaged and crashed machines.

CORRESPONDENCE.

The Official Point of View.

Sir,—I read with interest your remarks in The Sailplane for Oct. 3 dealing with "Airworthiness Regulations" and there are just a few points on which some information might be useful.

It should first be pointed out that the Technical Committee of the B.G.A. is an honorary body and all work has to be done in spare time, and secondly that a real effort is being made to keep regulations, restrictions, and expenses to the absolute minimum compatible with safety. It is important that the Air Ministry should be satisfied with the way in which the technical side of gliding is progressing and that manufacturers and users of gliders should remain unhampered. This course is somewhat difficult, but is the only one by which progress may be rapid, safe, and really successful.

Coming now to the queries in your leader and answering them in order, the first question asks how the past history of a machine will be taken into account for the renewal of a C. of A. A specially drawn up log book is being prepared for issue and the club engineer will be expected to enter the particulars of crashes and repairs in the book. Failure to do so will make extensions of the C. of A. difficult to obtain without the expense and delay of expert inspection.

As regards inspection, all clubs were advised some months ago that they should appoint a ground engineer who could be responsible for the airworthiness of machines, and quite recently the clubs were circularised again to this effect with the request that the names of these officials should be submitted to the B.G.A. This is usual practice in Germany and must be over here or the Air Ministry is bound to take action.

The B.G.A. already issues drawings of a suitable and approved training-type glider and has obtained quotations for the design of intermediate and high efficiency machines. These, however, will only be produced subject to the demand by clubs and individuals being sufficient to warrant the expense.

The proof-loading test is quite a sound scheme, but many constructors object to their machines being treated in this way, apart from which it is doubtful whether the test could be carried out any more cheaply than the strength check-calculations, and anyway a machine might quite easily pass the necessary strength requirements and be unsafe to fly through instability or insufficient control-surface or other causes that would most likely show up in the check calculations. However, the idea is quite sound and might be utilised at a later date if considered desirable.

The last point concerns test flights, and here also the B.G.A. has taken action by advising all glider manufacturers that test flights should be carried out where possible. The first machine of a type has to be test flown before a member of the B.G.A. technical committee and it is most probable that every sailplane will have to pass such flying tests as are considered necessary.

While the Movement is so new a certain amount of elasticity is essential, but many difficulties will solve themselves. For instance, a firm that carries out test flights on every machine before delivery, and after delivery, will wrest the orders from other concerns which do not, and which will eventually be forced to adopt this procedure.

Finally a few words about the methods and factors as laid down for new designs. These were originally decided upon in March of this year when very little experience of motorless flight had been gained and were based largely on aeroplane practice. This was considered expedient for the time being and was approved by the Air Ministry.

A different method has been evolved in Germany as a result of ten years' experience of gliding and sailplaning, and it appears very probable that some slight modification will be made in the near future to bring our methods into line with those of Germany.

Any advice or suggestion will be welcome by the B.G.A. at all times, but on the other hand clubs and individuals are asked to abide by the regulations as laid down in order that the Air Ministry can safely leave the complete control of gliding to those who are most interested in its welfare. This is the only road to success.

(Signed) C. H. Latimer Needham
(Chairman), Technical Committee, B.G.A.

Sound Practice.

Sir,—I have read with interest your remarks on Airworthiness of Gliders in use, also note you are not aware of any club that has a system of inspection and thought you might be interested to learn that the Dorset Gliding Club, since its inception, has had a very rigid system of inspection.

Our system is that a log is kept of the machine, each flight or launch is entered, with duration, wind, speed, direction, and site which must have been previously been selected by our technical Sub-Committee. Likewise each repair, adjustment and removal of machine is entered and signed for by a responsible person. Before each day's gliding the machine is inspected by a qualified man and a test flight made—if O.K. both the Ground Engineer and the Test Pilot sign the log; likewise any heavy landing is entered and the machine tested again.

A qualified person is described in our flying regulations as a "fully qualified rigger, or a Ground Engineer holding current Air Ministry Certificates, or a person nominated by the technical Sub-Committee." We are fortunate in having Mr. V. S. Gaunt, who is well-known in the aircraft world, as our Honorary Ground Engineer.

At all times when the machine is in use a team-captain is in charge—he must be a licensed Air Ministry Pilot or a "B" Glider Pilot. With these precautions the machine has never failed in the air and has been flown "hands off." Of course, we have had minor crashes, but before the machine is again flown by *ab initios* they are assured of safety.

Norman W. Wright
(Chairman), Dorset Gliding Club.

An Important Matter.

Sir,—I was most interested to read Mr. H. A. Searby's letter published in your issue of Oct. 3, and I congratulate him on the very skilful manner in which he handled the R.F.D. A.T.1 when his elevator control-wire slipped off its pulley and became fixed in the pulley-bracket.

I myself nearly had a similar experience on a machine of the same make when an aileron control-wire slipped off its pulley, but luckily the defect was noticed just in time for the launch to be prevented.

While I heartily endorse all Mr. Searby says re the excellent flying qualities of the R.F.D. A.T.1, it is evident that the design of the control system leaves room for great improvement. After all, this point is one to which the most careful attention is given in modern aircraft design, and it is no less important in the design of gliders. There is no doubt whatever that had a novice been in charge of the machine at the time of the occurrence instead of a pilot of Mr. Searby's experience and resource, someone would have been injured, possibly seriously.

I should have thought that this point of design would have been one to which the B.G.A. would have given the most careful consideration before granting a C. of A., for how can a machine, which is liable to such failure of the controls, be considered Airworthy and suitable for novices to learn upon?

(Signed) A. K. Bindloss.

Should Clubs Form Model Sections?

Sir,—My attention has been drawn to a most interesting article in your last issue, in which it is suggested that Gliding Clubs would be well advised to form Model Sections.

Your readers may be interested to hear that we recently formed such a section, and that the enthusiasm is remarkable. Incidentally, we consider this a splendid method of obtaining a steady stream of really enthusiastic young members for the Gliding Club proper, each possessing a good all-round knowledge of gliding.

Yours faithfully,
(Signed) E. W. Higgs
(Hon. Sec.), North Kent Gliding Club, Model Aero Section.

WHY NOT SELL YOUR EARLY COPIES?

We have but recently announced that the first number of The Sailplane was sold out. A similar fate has befallen Nos. 2, 3, and 4. Will people please note that we are unable to supply any more of these numbers from this office. As one or two people are very anxious to obtain copies of the first and second issues we shall be glad to hear from anybody who is willing to hand over, or to sell, their early numbers.

SHALL WE HAVE A SCORING-BOARD?

In the third number of The Sailplane Mr. Dagnall, or rather his company, the R.F.D. Co., announced that they would give a prize of £10 to the Club which gained the most certificates on Dagnall Training Gliders between the dates of Aug. 15 and Dec. 31, 1930. This excellent scheme was warmly received and we know that many clubs are working hard to win the prize.

But they are all working in the dark and no club knows how the others are faring. If Club Secretaries care to let us have news of how the struggle is going, we will publish in The Sailplane from time to time a score-board. This will make those who have the lead redouble their efforts in order to keep it, and the runners-up will try even harder when they see how few certificates they have to get in order to win.

NEWS FROM THE CLUBS.

WHERE GLIDING CAN BE SEEN.

Beds.—The Bedford Gliding and Flying Club. Week-ends at Wilstead Hill, 5 miles from Bedford on Bedford—Luton road.

Bucks.—The London Gliding Club. Meeting place, the Inn, at Tottenhoe, at 2.30 p.m. on Saturdays and at noon on Sundays, except Oct. 11 and 12.

Herts.—Herts. and Essex Gliding Club. Sunday afternoons, Eastern Roadways Garage, one mile north of Stortford.

I.O.W.—The Isle of Wight Gliding Club. Saturdays and Sundays from 3 p.m. at Whiteley Bank.

Kent.—Channel Gliding Club. Week-ends above Folkestone, close to Dover road, at the Valiant Sailor.

Kent.—Kent Gliding Club. Week-ends above Lenham, on the Maidstone—Ashford road.

Oxon.—Oxford and County Gliding Club. Week-ends at Ibstone, near Stokenchurch.

Somerset.—Dorset Gliding Club. Week-ends at Westland Aircraft Works, Yeovil.

Staffs.—The North Staffs Gliding Club. Week-ends at The Cloud, Congleton.

Surrey.—Surrey Gliding Club. Every week-end, if weather permits, at Lockner Farm, Chilworth, near Guildford. Saturday 3 p.m. to sunset, Sunday 10 a.m. to sunset.

Sussex.—Sailplane Club of T.M.A.C. Horton Farm, Smalldole, near Steyning.

Warwick.—Rugby District Gliding Club. Cote Hill Aerodrome, Husbands Bosworth, Rugby.

Worcs.—North Cotswold Gliding Club. Every week-end at Fish Hill, above Broadway Village, from 2.30 p.m. to sunset.

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 best.

THE LONDON CLUB.

The visit of the London Gliding Club to Itford on Oct. 4 and 5 must be regarded as a mixed blessing. The Club gained a "C" licence and one hopes a certain increase in funds; on the other hand the selection of a faulty site for their hangar cost the Club a very serious amount in damages to practically their entire fleet. During the night of Saturday and Sunday morning a gale demolished the canvas shed. The heavy wooden beams in their fall did much damage to the gliders.

One hopes that the organisers of the Itford Inter-Club Meeting will learn from this and remember that at the Itford show of 1922 the tents were not placed at the top of the hill and were erected where the wind was not likely to damage them. However great the publicity value of a large tent on top of the highest hill for miles around, one feels that such value is offset by the damage which is more than likely to result.

The visit to Itford was made to enable the Gaumont film people to take some "shots" of gliding for a new comedy they are making with Lupino Lane in the chief part. After the necessary "shots" had been made various people made attempts to gain their "C" certificate. The only successful candidate was Mr. Edward L. Mole, who stayed up for something like 11 min. That it is possible to soar in a S.W. wind at Itford and in a Prufling is good news to those who thought that the site would not be possible for all winds.

Sunday was to have been devoted to the gaining of many "A" and "B" certificates, but after the shed had fallen there was nothing on which to glide so disconsolate members had to start repair work and carry the bits down the hill. Let them take heart, however; a visitor who has travelled far and seen much was amazed at the uncomplaining way in which members set to work to repair the damage. He found their energy particularly heartening after listening much to the verbosity of politicians.—T. J.

THE RUGBY DISTRICT GLIDING CLUB.

On Oct. 6 a most successful demonstration was given by Mr. Lowe Wylde at Husbands Bosworth with the training machine purchased by the Club. Mr. Lowe Wylde arrived at about 1.0 o'clock, having left Maidstone at midnight on Oct. 5. Mr. Lowe Wylde made two test flights and the crowd which had come to watch this demonstration showed their appreciation by loudly cheering.

After the glider had been brought back to the brow of the hill, over a hedge and a ditch, Mr. Lowe Wylde gave another flight, this time just clearing the top of a small tree in the hedge, giving everybody a thrill. Once more the glider was brought back over the hedge and over the ditch and up the hill, and Mr. Lowe Wylde was again shot off into the blue, and gave us quite a good demonstration of a glider zoom. He brought the machine almost to a standstill in the air before he turned the nose down.

He attempted to land in the aerodrome field, but unfortunately had too much way on and drove straight into the hedge; this was a decided thrill for the public. However, on arriving at the place in the hedge where Mr. Lowe Wylde's body should have been dragged out, we found him at the other side of the hedge doing his best to extricate the glider from the twigs. On the arrival of the team the glider was soon taken out of the hedge, carried back to the top of the hill, and immediately shot off into the air again. In this glide, the wind having changed slightly, he landed up quite close to the crowd with a very graceful landing.

After this, the writer then took the machine into the air, and owing to the fact that the controls were far more sensitive than he expected, the flight was somewhat undulating and the landing far from graceful, the last dip driving the nose into the ground, with the result of two broken struts. However, the British Aircraft Co. are giving us four new struts, and we think the foregoing description will give a good idea of the strength of the gliders of this construction.

Mr. Lowe Wylde, after tea, gave us the benefit of his experience in a short talk to the members, which was much appreciated. He also answered any questions that we liked to put to him.

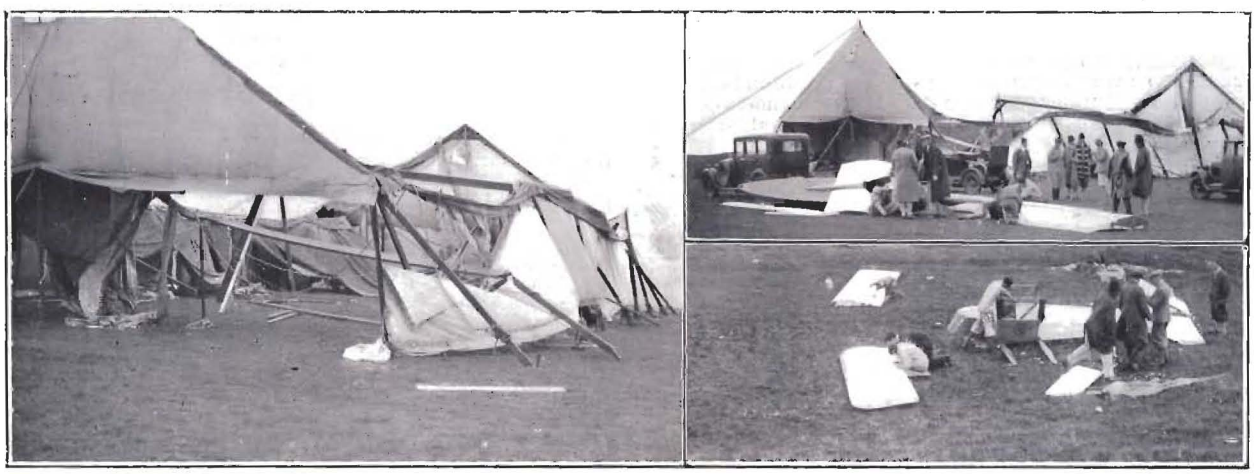
Although the aerodrome is about ten miles out of Rugby, about seven miles from Market Harborough, and about the same distance from Lutterworth, there was a crowd of something like 1,200 people who were sufficiently interested to come out to watch this demonstration, which is very encouraging. The members of the Club are very indebted to Mr. Lowe Wylde for his excellent demonstration.

BEDFORD GLIDING AND FLYING CLUB.

After a very strenuous but interesting week's work the Club's training machine was once more ready for the air during the week-end, when quite a number of members took the stick. The long grass, however, was rather troublesome and greatly retarded the take-off, so in view of this our "engineers" are this week designing and making a light "slip-undercarriage," which will be tested next week-end and fully reported on.

Another alteration our "engineers" have made is to take the control wires around the main king-post instead of through it, as it was considered that the hole weakened the king-post. Also, instead of the king-post being continuous from crown to base of skid, it is now cut where it enters the skid, leaving room for a 1 in. packing-piece, the whole being held together by two mild-steel plates. It has been found in practice that, when a pupil makes a cross-wind landing which is not too severe, the plates take the strain, and when these have been straightened and refitted the machine is soon ready for use again.

It may interest other clubs to mention briefly our procedure in



AFTER THE STORM.—A horrible example of what can happen if you put a canvas tent on the top of a hill. The London Club can be seen hard at work repairing the damage.

training. Firstly, newcomers are given a short series of lectures on theory, with the aid of a blackboard and a small model glider. Then pupils must pass a short oral test and finally a practical test on dummy controls. Each member carries a log-book and before leaving the ground must have passed the oral and practical tests.

All flights are recorded in log-books and initialled, and each flight is carefully observed by an instructor, who carries a megaphone for immediate use to correct any faults observed in the air. The megaphone has been found a valuable asset, as it can easily be understood how a timely order from the ground will save a crash.

THE SAILPLANE is greatly appreciated among our members and we shall be glad if other clubs will include in their notes any useful improvements, etc., which they have found, as we are only too willing to learn.

With deep regret we have to mention the sad loss of our ship, the R.101, which, having been made in Bedford, and manned mostly by Bedford men, was naturally regarded as "our" ship. We also extend our sympathies to all those who suffered in the loss of friends or relations.

SOUTH ESSEX AERO CLUB.

What can be truthfully described as a successful meeting was held on Oct. 6 by the South Essex Aero Club at their new ground near Abridge. Thanks to the spirited support of Mr J. Chambers, on whose ground the Club now operates, the members were able to exercise in full their flying abilities without restriction. Starting early on Sunday morning gliding was carried on almost without a break until dusk.

Those able to stay the day were able to take the machine up on several occasions, and although some members attained a fair height they all concentrated on beating one another in the length of their flights. The majority of members have now become accustomed to being catapulted into the air and with a little more practice the Club will have a number of capable glider pilots. It is intended to carry on gliding as far as possible throughout the Winter, with mid-week meetings for those who find a week-day more convenient.

In order to ensure an all-the-week interest arrangements are well in hand for the establishment of a workshop where members will be able to demonstrate their ground-skill and indulge in glider construction to their hearts' content. The Club intends to justify the inclusion of such notable names as Sir A. V. Roe and Sir Alan Cobham, K.B.E., A.F.C., who are Vice-Presidents to the Club, by arranging lectures and meetings with the object of fostering the cause of Aviation in Essex. Those who have not yet participated in what is the finest of all sports, a sport without parallel and which contains a thrill without danger, should not hesitate to write to the Secretary, South Essex Aero Club, 19, The Pavement, Chadwell Heath, for further particulars as to membership, etc.

CHANNEL GLIDING CLUB.

The Club's R.F.D. and Cpl. Manuel's Manuel VI were taken to the Isle of Thanet Club's inaugural demonstration at Wingham on Oct. 4. Cpl. Manuel made several successful glides on his machine, the design and construction of which aroused considerable interest and approval.

On Oct. 5 Club instruction was continued on the R.F.D. and in this connection it is of considerable assistance that with the co-operation of the interested parties arrangements have been made whereby the Club's gliders are now stored, fully rigged when not in use, in the Aerodrome at Hawkinge. To gain the fullest possible advantage from this arrangement a new training ground for ground hops has been secured adjoining the Aerodrome and this ground will be in use this week-end and in future; it is situated at Hawkinge, 2 miles from Folkestone, on the main road to Canterbury. Much valuable time hitherto spent in rigging and dismantling will now be available for training.

Mr. F. H. Worrad, 42, Rendezvous Street, Folkestone, 'phone 1574, has been elected Hon. Sec. and all communications should in future be sent to him. The subscription to the Club is £2 for flying members and £1 for non-flying members; particulars of the Club will gladly be sent on application.

NORTH STAFFS. GLIDING CLUB.

A most successful meeting was held at Wetley Common, near Cheadle, on Oct. 5, despite some rain and variable wind. Mr. Coles made some highly successful and instructive flights. The Club is fortunate in possessing an instructor who is an experienced aeroplane pilot and whose knowledge has proved already so invaluable.

Mr. Northall made several good glides and then followed maiden flights by Messrs. Jones, Teeton, Steele and Maynard. Mr. Teeton, on his second glide, unfortunately had to land on quite difficult ground abounding in obstacles, but manœuvred the glider with fine judgment. The wing was slightly damaged, but this did not prevent further gliding. The B.A.C. Primary type glider only was used.

Gliding meetings will be held in future each Sunday at Wetley Common. It has been decided that membership subscription shall be two guineas and one guinea for gliding and non-gliding members respectively. The entrance fee is one guinea for gliding members. The Hon. Sec. is Mr. C. Teeton, at 26, Barracks Road, Newcastle-under-Lyme, Staffs.

THE ILKLEY AND DISTRICT GLIDING CLUB.

On Oct. 5 an enjoyable day was spent by Club members, hopping on flat ground. Three or four members who had not previously been launched were sent off and did well. The weather conditions were poor, owing to fairly strong gusts of wind and rain showers.

Everything went well and the Club is looking forward to repeating the programme next week-end. The Club proposes to glide each Sunday during the Winter, whenever weather conditions are favourable.

Two sites are available. The first is a field belonging to the Ilkley Council, next to the Cricket Ground. The second is a field with a slope facing the prevailing wind, by the side of the road leading from Ilkley to Nesfield.

The Constructional Section is planning to build a secondary type of machine these Winter nights, and are meeting every Tuesday and Thursday night for that purpose. One enthusiastic member has nearly completed a Dixon type machine himself and has intimated that he is prepared to offer it for the Club's use. We are expecting a very interesting and instructive Winter session.

The Asst. Sec. is Mr. J. H. Allen, 45, East Parade, Ilkley, Yorks.

THE DORSET CLUB.

Dorset Gliding Club intends to go all out to win the R.F.D. prize for the club which obtains the largest number of "A" licences. Six members are confidently expected to pass the necessary tests before the end of October, and many more are optimistic of doing likewise shortly.

It has been decided to spend the Winter in building a Zogling type glider by Club labour, members having several theories which they hope to put into practice.

The Dorset Gliding Club are offering a specially reduced subscription until Dec. 31 of this year. The subscription is now only 5s. and the entrance fee of 10s. 6d. remains unchanged.

THE WORTHING AND DISTRICT GLIDING CLUB.

The Worthing and District Gliding Club was formed about two months ago, and is affiliated to the *British Gliding Association*, and has just completed its founder membership. A glider is on order—one of Mr. Lowe Wylde's B.A.C.2 Trainers, and the Club has every confidence in this machine proving a "Worthy Bird." The Chairman, Mr. V. C. Abell, is a very active member of the Committee and intends, with the help of other members, to build a secondary machine during the Winter evenings.

The Club also has a very keen and valued member in Mr. Stanley Steer, who has just left the R.A.F. and has an expert knowledge of rigging, etc., and will have complete charge of the machines. Mr. Selfe, another valued member of the Committee, has kindly offered a cup to the member who puts up the best all-round performance before next Spring.

The Club has secured a very good site for training practice, but unfortunately only suitable for a S.W. wind; nevertheless it is making an untiring effort to secure a good "all round" site, several of which it has in mind.

The Hon. Sec. is Mr. N. T. Whiteman, 101, Rowlands Road, Worthing.

THE ISLE OF WIGHT GLIDING CLUB.

Pending the arrival of the Club's new glider activities have been restricted to constructional work on Capt. F. W. Merriam's dual-control machine, which by courtesy of the Directors has been moved to the shops of Messrs. Saunders-Roe Ltd. in order that the work may be facilitated.

On Sept. 24 the new glider, a B.A.C.II training type, was delivered by Mr. C. H. Lowe Wylde, accompanied by the Hon. Sec. of the Kent Gliding Club. Mr. Wylde, after demonstrating the method of assembly, made a very good test flight, and then formally handed the machine over.

The dual-control machine will, it is hoped, be ready shortly, and with these two machines in commission the Club hopes to accomplish some strenuous work during the coming Winter. A third machine will also be shortly laid down.

New members are welcomed, and anyone interested is asked to communicate with the Hon. Sec., Mr. John B. Smith, 61, Swanmore Road, Ryde, I.W.

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

From the performance at Smalldole, Sussex, on Oct. 5, it looks as if there will shortly be a crop of "A" licences in the Sailplane Club, for several members made timed flights very close to the required duration, and one member, Mr. Wills, made an actual flight of 37 seconds. Nine members were present and many visitors were observed on the grounds.

Visitors should motor to Horton Farm, Smalldole, Sussex, and inquire for directions. Smalldole is on the road between Henfield and Shoreham. Applications for particulars of membership to the Hon. Sec., Mr. E. C. Smetten, 2, Wine Office Court, Fleet Street, London, E.C.4.

FORTHCOMING DATES.

A MEETING AT YATESBURY.

The Wiltshire Light Aeroplane and Glider Club are holding a Gliding Display and Light Aeroplane Meeting at "The White Horse," Yatesbury, near Calne, on Oct. 11 and 13.

THE INTER-CLUB MEET AT ITFORD.

The Inter-Club Meeting organised by the *British Gliding Association* will be held at Itford on Oct. 18 and Oct. 19. The nearest town is Lewes.

AN IMPORTANT MEETING IN THE NORTH.

On Oct. 25, at 3 p.m., the Association of Northern Gliding Clubs are holding a meeting at the Hotel Metropole at Leeds. A representative of the *British Gliding Association* has accepted an invitation to be present.

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