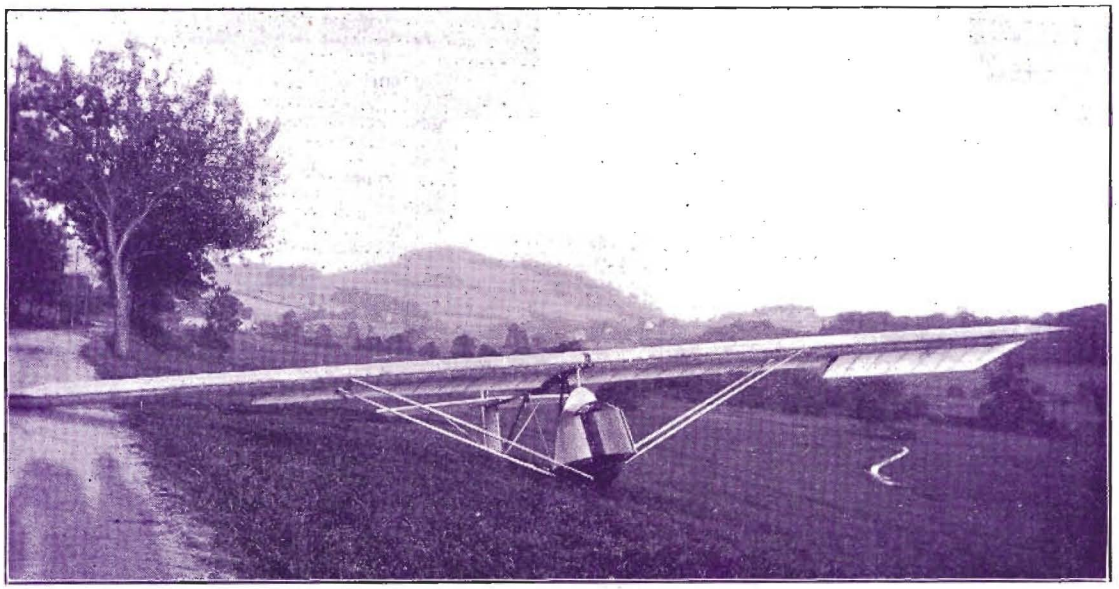
May 8, 1931. Vol. 1. No. 35.

Price 3d.

THE SAILPLANE AND GLIDER

A NEWCOMER.



A "Hols der Teufel" like that recently put together by Mr. Hiscox of The London Gliding Club and marketed in this country by ADJAC. One can be seen at the Exhibition.

BRITISH ACHIEVEMENTS.

To have produced in a brief twelvemonth three individual types of sailplane, each of entirely Britannic conception, and each successful in competition with types produced as the result of ten years' experience, is one which should make the British Gliding Movement feel, in the American sense, good. To preserve that strict impartiality which all good newspapers should endeavour to assume, we will deal with them alphabetically.

The B.A.C. VII, as the latest type to be put in production by B.A.C. Ltd. is called, has already achieved success in a sphere hitherto unassailed elsewhere, so far as we know, in the World. This machine has been designed for auto-towing and to carry a passenger. It has successfully soared solo and with two up, most interestingly in the latter case by being towed off at the foot of the hill; thus demonstrating that one need not have access to a hill, all one wants is a smooth field at the bottom!

The R.F.D. sailplane has demonstrated in a most convincing fashion that it can perform under the most adverse conditions, witness its recent performance at Merthyr. It has demonstrated that Mr. Dagnall and his associates have achieved the ambition of the former which has always been to prove that this country has no need to go abroad for what she wants. She can get it at home.

The *Scud* is probably the smallest and lightest sailplane in the world. It has been designed by Mr. L. E. Baynes, a young British designer, entirely to his own ideas, its lines astonished the classical school. But early flights soon showed that Mr. Baynes knew his job and that the *Scud* could and would soar.

With all this range of equipment upon which to draw we can see no need for any despondency. People write to us and complain that they are not getting what they want from their Clubs and that they are losing, or have lost, interest. What a confession for individuals to make and what sorry Clubs, such must be: to have struggled so far

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and spent so much only in the end to admit defeat. There are soaring sites all over England, and there are men, as well as women, who are enthusiastically anxious to soar. All that prevents them is adequate Club organisation. Elsewhere we refer to devolution or decentralisation.

Are there not a dozen good men in the Country who can organise their local Clubs for achievement. Are there not a dozen men who can form these local groups, which all are agreed must come? A dozen men to see that Clubs within their groups are run on businesslike lines: run to provide what members want at a figure members can afford to pay; run to provide funds for development.

Enough Club balance-sheets are available to show exactly how much every second of gliding costs, the Clubs can, indeed if they are to survive, they must, meet such costs. The old song can be sung again: "we have the ships, we have the men but we want your money too." But there is something to be remembered. Never take money unless you have value to offer in return.

No. Make your Club charges high but in return give your members what they want: soaring facilities and intensive instruction with unnecessary donkeywork cut right out.

THE FIRST GLIDER EXHIBITION.

The first Glider Exhibition has begun. Through the courtesy of Mr. Glass, organiser of the Used Motor Show, a whole gallery of the Agricultural Hall, at Islington, has been placed at the disposal of *The British Gliding Association*, and there, as mooted in THE SAILPLANE on Feb. 13, is to be seen the first public exhibition of gliders, and other things pertaining to Gliding.

At the top of the stairs is the stand and B.A.C.II of the North Kent Gliding Club. Here will always be found someone to answer questions as to the Club's activities. Next comes the stand of THE SAILPLANE. Like the paper, the stand is diminutive.

Next comes the stand of the London Gliding Club, an ambitious venture, festooned in magpie draperies of black and white, with quantities of good photographs as well as parts of the tailless machine now being constructed by the Club to the designs of Captain Needham. Opposite the stand is Mr. Hiscox's "Hols der Teufel," with a decorative colour scheme of scarlet and silver.

Then E. D. Abbott Ltd., of Farnham, have a stand with the neatest thing in trailers, or rather cases, upon it. The £10 case produced by the firm for the *Scud* is an excellently ingenious affair of maximum lightness, in order to keep the weight of the complete trailer within the regulated weight so that no brakes are necessary under the New Road Code.

Opposite to this stand is the *Scud*, which needs no introduction to our readers. One might almost say that it has to be seen to be believed. Various modifications have been incorporated, such as giving more room for the rudder-pedals.

Opposite Captain Latimer Needham's *Albatros*, which was built by the R.F.D. company to the designs of Mr. Needham and was the first British sailplane to be built since the Renaissance, is the stand of G. Ellis and Co., who are showing a small garage, a small pavilion, and a very good model of the London Gliding Club hangar. This hangar is worth the attention of all clubs; its cost is absurdly low and it can be erected with the minimum of time, as shown by the London Club putting their hangar up in two days.

The stand of *The British Gliding Association* is not to our mind worthy of the national standing of that body. On the other hand, as the organisation of the Exhibition is due entirely to the executive of the Association the whole affair must be taken as a measure of their enterprise rather than their stand, which is only a component part.

Opposite the stand of *The British Gliding Association* is the B.A.C. two-seater, which once again is familiar to all our readers and is now in course of intensive production to meet the demands of Clubs throughout the country. On the B.A.C. stand may be seen some very instructive components showing methods of construction. There are, as well, a pair of Goodyear Airwheels, which have been specially developed for auto-towing.

The Dagnall sailplane will not be at the Exhibition until Saturday, as certain repairs have to be made to the machine as the result of an accident at Merthyr. Perhaps it will be possible to hang the R.F.D. in the main hall above the used cars, as a reminder to the crowd that there is a gallery full of gliders.

Then comes the stand of Selfridges' Aviation Department, which naturally does not belie the reputation of this firm, and specifically this department, for attractive display. Portion of the stand has been very ably decorated by Imperial Airways, who are taking this opportunity to spread the gospel of airmindedness.

Talking of Selfridges', Clubs would do well to remember that not only can all types of gliders be obtained there on most satisfactory terms, including hire purchase, but that also complete insurance can be effected through the department.

Rice Caravans Ltd. form the next item of interest, and to Mr. Rice in particular *The Gliding Association* owes a particular debt of gratitude, for he brought along with him a tremendous back-cloth, fit for Drury Lane, and he put this up in such a way as to afford the greatest benefit to the whole Exhibition.

These caravans are wonderful, and I have lively recollections of their comfortable protection from a biting wind at Ditchling last autumn, and not only of their protection. In one I had a very excellent tea produced by Mr. Rice himself over the cooking-stove and with food from the pantry. Talking of pantries, one might mention that each caravan carries a scullery, complete with sink as well.

At the end is a B.A.C.VI, which is the auto-towing single-seat sailplane on which Herr Wolf Hirth soared for two and a-half hours at Balsdean not long ago.

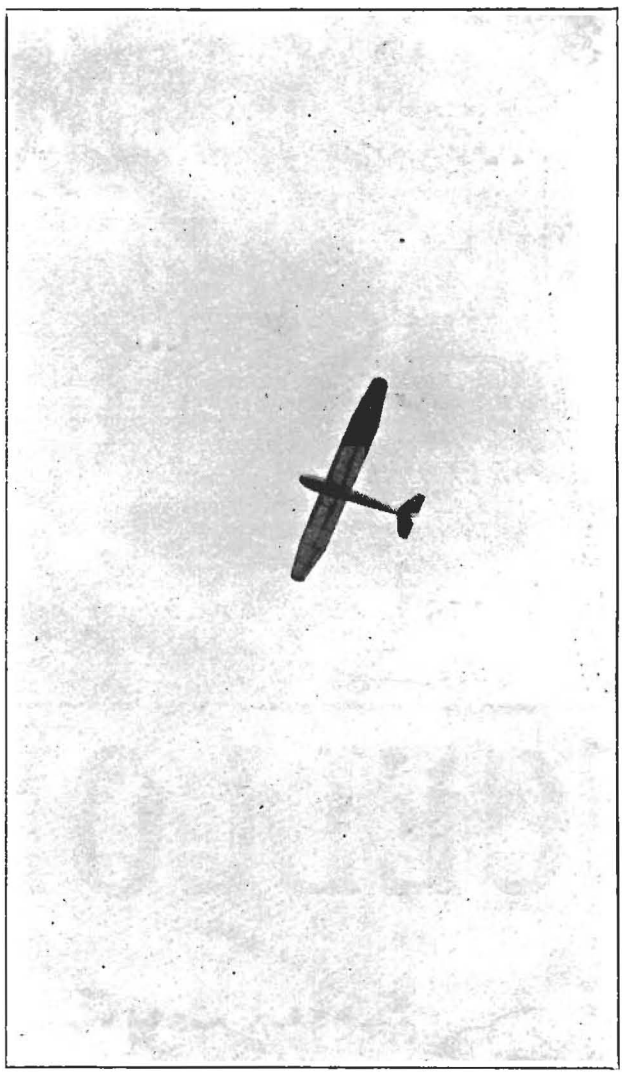
Every gliding enthusiast in and around London certainly must *make* an opportunity, and take his friends and relations as well as HER'S to this exhibition. Not only will he find it interesting in itself, but it affords a unique opportunity to impress upon the ordinary person how much the British Gliding Movement has achieved.

The Agricultural Hall is only a few hundred yards away from the Angel at Islington, whence and whither are combined facilities of 'buses, Underground and trams.

TWO-SEATERS IN DEMAND.

The Lowe-Wylde or rather B.A.C. two-seat machine adapted to auto-towing is in great demand. Two Clubs have now got machines of this type on order and the B.A.C. works hope to deliver them shortly.

Quite apart from the special school plan advertised in this issue B.A.C. Ltd. have prepared a special scheme for training instructors. Clubs can send down nominees for training in the methods of giving auto-towing instruction and B.A.C. Ltd. will put them through a course on advantageous terms.



MAKING HISTORY.—The B.A.C. VII soaring at Totternhoe, when Mr. Lowe-Wylde took-off at the bottom of the hill and landed on top with a passenger.

THE LYONS DEMONSTRATION AT MERTHYR.

The first of the Lyons demonstrations was given at Merthyr on May 2-3. On the Saturday weather conditions made the use of Forest Lodge, the selected site, impossible and so the demonstration had to be staged elsewhere. In spite of the last-minute alteration and the fact that the new site was some seven miles away and that the weather was not good, about 140 cars, together with some six hundred people, had arrived by 4.30.

Two short flights were made by Herr Krause, but the surprise of the afternoon was the Dagnall sailplane, which stayed up for some forty-five minutes. At the end of this time a voluntary landing was made. Unfortunately, when bringing the trailer with the machine on it down the hill some damage was done to the machine.

On Sunday the programme arranged for the day was carried to a successful conclusion. Herr Krause made a flight of some three hours twelve minutes and reached a height about 1,000 ft. above his starting-point, which was about 2,000 ft. high. On this occasion there were about seven hundred cars and four thousand spectators.

The meetings appear to have been very successful, but to date no news from the Merthyr Club has come in.

SOARING IN AUSTRALIA.

Mr. G. R. Rice Oxley, in a recent letter to THE SAILPLANE, encloses a cutting from an Australian newspaper which foreshadows a new attempt by Mr. Oxley on the Australian duration record. The first record was made by Mr. Oxley with a flight of 65 minutes, and afterwards broken by Mr Pratt, of Geelong, with one of ninety.

That both these flights were made in Zoglings, or gliders of that type, casts an interesting sidelight on Australian conditions, the more especially as Mr. Rice Oxley, who weighs 16 stones, reached a height of 1,000 ft. above his start point to which he returned after his flight.

One feels that with such conditions some really surprising flights might be made with a high-efficiency machine.

WANTED.

Approximately a fortnight's intensive gliding training, with a view to obtaining A, B, and, if possible, C, Certificates, ordinary club methods being too slow for one who can only get to weekend meetings when business will permit. Willing to work as well as pay. Reply to G. H., C/o. THE SAILPLANE, 175, Piccadilly, W.1.

ZFM

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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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In Open Competition.

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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.

TUITION BY AUTO-TOWING.—II.

A Report from an American Gliding Club.

(*Continued from page* 272, *Vol. I, No.* 34.)

[*This report has been issued by the Flight Committee of the "Engineers' Glider Club," of Detroit. It is worthy of the closest study, and those intending to take up auto-towing would do well to note the very strict discipline that was found to be necessary. Two aspects of the report will catch the attention of an English reader. The first is the apparent lack of interest in soaring, and the other the belief in the danger of using wooden machines, because of splinters wounding the pilot in a crash. We believe that in spite of our very numerous crashes no injury has resulted to a pilot in this Country from such a cause.*—Ed.]

A 150-ft. tow rope was used for the early training period. This permitted flights up to 100 ft. high from which 90° turns could be made. The members then progressed to a 300-ft. rope giving altitudes of 200 ft. from which 180° turns could be made. On Aug. 3, the more experienced members began using a 600-ft. rope and reaching a 400-ft. altitude. This made it possible to return to the starting point at the other end of the half-mile runway. Experience was rapidly gained. On Sept. 14, a 900-ft. rope was used for the first time and later was increased to over 1,000 ft. This permitted altitudes of over 700 ft. being obtained without undue stress on the glider.

The heights were determined by a measured base line and an inclinometer. From altitudes over 500 ft. "spirals" and "figure eights" could be practised with ample height left to return to the starting point. Considerable practice was obtained in spiralling down and landing on a predetermined spot directly underneath. These flights were planned in advance and demonstrated by the Flight Officer in charge. The others then followed in succession. Thus a man went aloft with a definite idea of what he was to do and where he was to land.

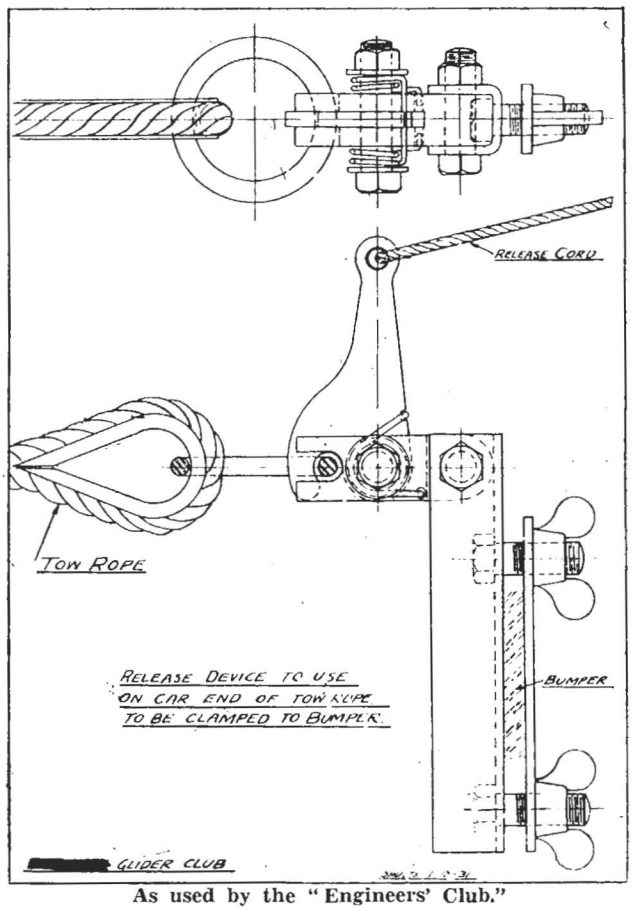
Later the most experienced were left to their own initiative as to the manœuvres, but a definite landing spot was usually set. There are now 15 members qualified for these flights. About the time the more advanced members began using the 300-ft. rope, there ensued considerable discussion as to the stresses involved in climbing and what the safe climbing angle was. Measurements of the pull on the tow rope and the force required on the control stick were taken, during sled rides, low flights, various climbs, and level flight at various altitudes.

The maximum pull on the rope at any time was 200 lbs., which occurred when accelerating on sled rides and during the normal climb at 35 m.p.h. In level flights 200 ft. high the pull on the rope at the car was only 120 lbs. The force required on the control stick in this position was 10 lbs., and at 400-ft. altitude in level flight it was only 15 lbs. As a matter of interest it required 40-lbs. pull on a short rope to maintain level flight 2 ft. off the ground at 35 m.p.h. air speed. Calculations showed a safety factor, during the steepest climb, of 6.5 for the flying wires.

The Club has two gliders, a Waco, received May 10, and an Eaglerock purchased by Major Hallett at the same time and taken over by the Club on July 5. Both of these are of steel frame construction except for the wings. The Club also purchased a nameless wood-frame glider with a cantilever wing, for a very nominal sum. It was thought that this glider could be used for the sled rides and low flights, in this manner taking most of the punishment off the Waco. However, it was found unsatisfactory for this purpose. The relatively heavy wing and small ailerons made it very difficult to keep level on a sled ride at 15 m.p.h. and it proved slow in answering the controls in low flight.

Only two flights were made, one by Major Hallett and the other by Jack Fetters, the Chief Flight Officer of the Club. After about a dozen sled rides the glider was turned over on its back during a sled ride and the wing broken. It was repaired but the officers of the Club decided that it was unsafe to use and no further chances were taken. If it was not safe enough for us to fly, certainly we were not justified in selling it again, however cheaply we might set the price, or even give it away. If someone should be hurt in it, we would be responsible.

There had been some discussion as to what would happen if the wooden fuselage job crashed, so it was decided to stage a crash and take motion pictures of it. The ailerons were blocked in the extreme position and the elevator blocked upward. A dummy was placed in the seat. The glider was launched with a 150-ft. shock cord fully stretched out by an automobile. When released the glider shot upward about 40 ft. did a partial wing-over and struck, first on a wing-tip, and then on the nose. The wing broke again, but not at the repaired spot, and the fuselage broke in six places. One heavy splinter grazed the dummy's head and buried itself over 3 inches in the ground. The leading edge lay across the dummy's head and shoulders. The motion pictures showed the results perfectly.



As used by the "Engineers' Club."

The remains were thrown into a nearby ditch and burned. The Club lost the cost of the glider, one month's hangar rent, materials for repair, and our own time in repairing it, but it was in the interests of safety, and, we believe, justified. It certainly demonstrated to the Club that wood-frame gliders are not to be considered, however cheaply they might be constructed.

The secret of flying can be summed up in two words, "Don't Stall." That we learned the feel of an approaching stall, and to get the nose down, was very evident in watching the men practising their first 90° turns. If in starting the turn the stick is moved straight over to bank the glider the nose has a tendency to come up and the glider to lose speed. It was interesting to notice how quickly the men would detect this and would nose down to regain speed. However, after a few times, one learns the proper position to make a smooth turn at constant speed.

This is different, naturally, from stalling a power airplane. Some of this feeling would be obtained when climbing on the tow rope, if the nose was pulled up too much for the towing speed. At our regular air speed of of 35 m.p.h. the best climbing angle was from 15° to 20° depending on the weight of the pilot. If the nose was pulled up more than this the glider would "mush" along with no increase in altitude and even start to settle. This could be plainly felt in the seat, and it always felt better to get the nose down a little and feel the seat pushing you up in the air again.

Of no small value is the fact that from the beginning of the first sled ride the pilot is going "solo." That this engenders confidence can hardly be denied. By the time he is making high flights the control of the glider is instinctive and he has no sudden change from flying with someone to help him, to flying alone. After landing a glider from 700-ft. altitude to 40 m.p.h., he is hardly going to be frightened if called upon to land an airplane from 1,000 ft. at 60 m.p.h.

"Keep plenty of flying speed even when landing" was

the motto for all of our flights. The slow, stalling landings which can be made with a glider held no attractions for us. In such landings even a moderate puff of wind can lift the glider several feet and then quit, letting it pancake to the ground. We usually landed at about 30 m.p.h. which in addition to giving better feel of the controls prevented stalling, even if the wind velocity should suddenly drop as much as 10 m.p.h. Landings made at this speed required that the glider be flown down and levelled out at the proper distance from the ground. The glider would usually slide 75 to 100 ft. after it first touched the ground. This was due to the lift being retained longer, after touching the ground, than is the case of a stall landing.

In flying the glider at 30 m.p.h. the gliding angle is about 8 to 1. This is quite comparable to the usual training plane. Picking out a spot for landing from 250 ft. altitude and coming in at an 8 to 1 angle at 30 m.p.h. can be considered comparable to landing an airplane from 500 ft. at 60 m.p.h., insofar as the judgment of gliding angle and time is concerned.

Those of us who have been a passenger in an airplane since flying the glider have experienced a fuller appreciation of the movements of the ship and were able to note with a fair degree of accuracy where the landing would be made and when to level off. A few of us have been able to detect in the glider that "settling" or loss of lift which is the signal for a pilot to drop the tail for a three point landing. Of course we don't do that with the glider but the feeling is there. In an airplane we had no difficulty in perceiving the proper time to drop the tail. From these experiences we believe that we have learned the elementary principles of landings.

As to banks and turns in the glider these are all made with the nose down. This is desirable as it becomes instinctive to drop the nose slightly more than the normal flying position when making a turn. The most experienced members obtained considerable practice in turns and spirals as the field was excellent for this purpose. There were two manœuvres in particular which were frequently practised and gave good training in precision landings. One was, to turn 90° after releasing, then rolling into the opposite direction for 180° making a landing in the circle which was in the original line of flight. The other was, to make a complete 360° turn and land directly underneath where the turn was started. Both of these required careful judgment to keep from overshooting or landing short of the circle.

During the later part of the season, after we began using a longer rope and reaching altitudes making it possible, landings were made back at the starting point, about one half mile from where the glider would be released from the tow rope. It is not easy to sit out in front of the wing and judge the gliding angle close enough to place the glider within 100 ft. of a desired point. This ability was obtained only after considerable practice, on just such landings, and noting the shortcomings. It also requires consistent flying of the glider, as far as speed is concerned, to do this repeatedly. While flying the glider was taken as a serious business by every member of the Club; we, nevertheless, got our thrills from trying each new manœuvre. By the time we had practised a certain kind of flight until it became somewhat tame, we would advance to the next step and the thrills would begin all over again.

The Training Curriculum.

The training course has been divided into five sections: Ground Training; Sled Rides; Low Flights; High Flights; and Manœuvres.

Ground Training.

The Ground Training consists of an explanation of the operation of the controls and what each control surface does. Then with the glider sitting on the ground facing the wind, the student practises the use of aileron controls in keeping the glider level. The instructors should swing the tail to one side or the other to see if the student responds with the rudder correctly.

Time: Three 5-minute periods.

Sled Rides.

Tow Rope 150 *ft. Maximum Wind* 5 *m.p.h.*—The Sled Rides consist of towing the glider with a car at an air speed of 15 m.p.h. or just under that at which it will lift off the ground. During the first five rides the elevator is to be kept bridled well below the horizontal position. Later, if the student has shown sufficient steadiness, the bridle is removed and he is instructed to keep the control stick well forward. The car end of the tow rope is equipped with a quick-release fitting and an observer is on watch to release the tow rope if the student gets his controls crossed or hooks a wing tip into the ground.

This training helps to familiarise the student with the starting rush, checks up on his ability to handle the rudder and keep the glider in line, and keep the glider level with the ailerons. It also helps to overcome what little nervousness might remain before the student actually gets into the air. He is kept in this period until he can repeatedly go the entire length of the runway straight behind the car and without the wing skids ever touching the ground.

Time: Ten 1,500-ft. rides or the equivalent.

Low Flights.

Tow Rope 150 *ft. Maximum Wind* 5 *m.p.h. Preferably None.*—Low Flights are the next logical step from the sled rides. The first attempts at low flight should be made only in still air. The glider is towed at an air speed sufficient to just lift off the ground. The student is given a signal when the proper speed is reached. Up to this time he is "sled riding" with the stick well forward. When he receives the signal he slowly pulls the stick back until in neutral or slightly after he begins to feel the glider ride light and beginning to hit the high spots only. He holds it there and clips the grass for the remainder of the ride. After two of these he is usually capable of letting it climb up a foot and holding it there for the entire trip.

He thus obtains a feel of the elevators without getting high enough off the ground to hurt himself, although he may break the glider if he does the wrong thing. Until the first thrills of actually getting into the air are somewhat over, there is danger of the student thinking of only one direction of control at a time and thereby crossing the rudder or hooking a wing-tip into the ground. Very little damage can result from such an act if the glider is only a foot or two off the ground. After demonstrating that he can keep the glider level, straight in line, and not over-control with the elevators, the student is permitted to lift the glider from three to five feet off the ground. From this height, and later, ten feet, he must learn to nose down slightly, release the tow rope, and land, with the glider kept level with the ailerons and in the line of flight with the rudder.

Time: Five flights 1 to 2 feet. Five flights 3 to 5 feet. Five flights 5 to 10 feet.

High Flights.

Tow Rope 300 *ft. Maximum Air Speed* 35 *m.p.h. Maximum Wind* 10 *m.p.h.*—All flights over 10 feet from the ground will be classed as High Flights. By this time the student should be cool and collected while in the air. He should be able to use all three controls smoothly and not have tendencies toward over-controlling. The student will be kept on straight flights, gradually increasing the height until he is able to show satisfactory handling of the glider in a flight straight ahead and from 35 to 40 feet high. The Flight Officers, during this period, will be severely critical in regard to the manner in which the glider is flown. The student must not at any time go higher than the height to which the Flight Officer gives permission. He must nose down before cutting loose the tow rope and must keep plenty forward speed and not try to stretch out the glider. "Keep plenty of flying speed even when landing" should be the motto on all flights.

Time: Ten flights or until passed by the Chief Flight Officer.

Manœuvres.

Tow Rope 300 *ft. First Attempts in Still Air Only.*—The next logical step is for the student to attempt to simple "S" turn from a height of about 75 feet. This would be accomplished by making a 45° turn soon after releasing the tow rope and then another 45° turn back into the wind and landing. After showing proficiency at this, 90° turns may be tried from height of 80 to 100 feet. It has been found that when keeping plenty of air speed the glider will drop about 50 ft. in a 90° turn. Complete reversals or 180° turns can be made if within the length of runway 200 ft. can be obtained without forcing the climb. The climbing angle should not exceed 20° and the air speed 35 m.p.h.

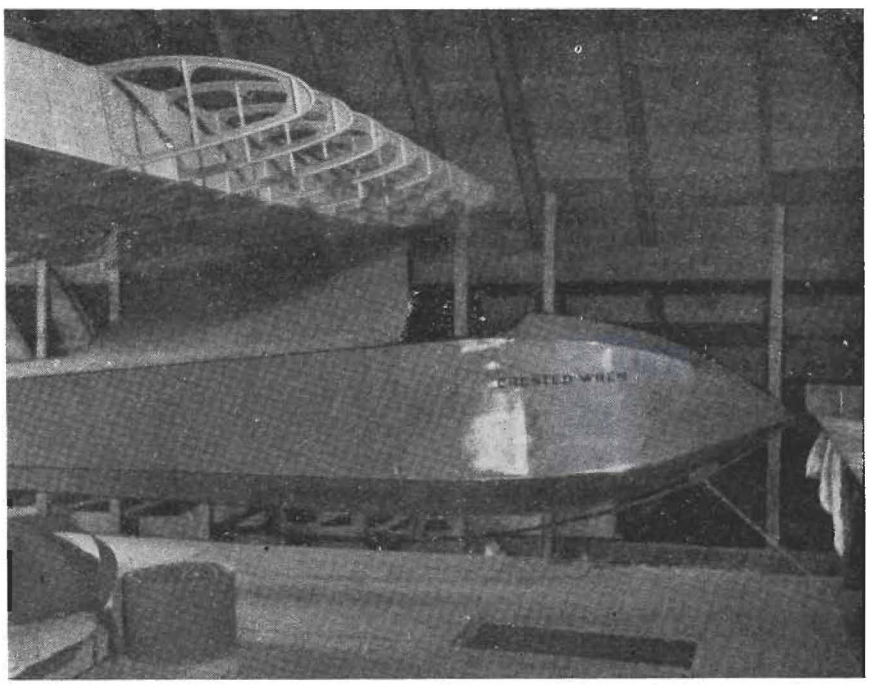
No flying is to be attempted if the wind velocity exceeds 15 m.p.h. This might be said to complete the normal course of instruction. Advanced manœuvres are to be determined by the characteristics of the gliders and the facilities available such as the length of tow rope and runway.

The training time shown under each paragraph is the minimum amount which all students must take. However, the Chief Flight Officer's approval must be obtained before passing to the next period. If, in his opinion, further training is necessary, he will specify the number of additional flights and may even order a student back to the preceding period after he has made several flights if, in his opinion, the student has not shown sufficient ability to safeguard himself and the glider against injury.

A NEW RECORD?

Subject to official confirmation a new distance record for motorless flight has been made. On May 4 Herr Gunter Groenhoff in the *Fafnir* flew from Munich to Kadan, or Kaaden, in Czeckoslovakia, some 160 miles North-east of Munich. The actual route taken must have been much longer, for if one looks at the map a good many detours would appear to be necessary to make the trip. Herr Groenhoff was in the air about 8½ hours, as he left Munich at midday and arrived at Kadan about 8.30 p.m.

This long flight is the outcome of the experiments in towed flight which have been going on for some time, as reported in THE SAILPLANE; they have been made by the R.R.G. to test meteorological conditions and to find out the conditions governing distance flights. In each case the sailplane has been towed off the aerodrome behind an aeroplane, and then released at a suitable altitude.



The sailplane designed by Mr. Manuel and now being built in Mr. Turner's workshop at Folkestone. The Channel Club are rapidly acquiring a big fleet.

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In response to a number of requests we are contemplating starting a School of Instruction in Auto-towed Gliding.

Our fees for a series of twenty flights, with the necessary oral instruction will be three guineas. Additional flights will be charged at the rate of 15s. for five flights.

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NAME.....

ADDRESS.....

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CORRESPONDENCE.

Spring-returned Ailerons.

Sir,—The correspondence between Mr. Bound and Mr. Hincks on the subject of spring-returned ailerons appears most interesting.

With reference to the crash experienced by the Channel Gliding Club, Mr. Hincks states: "Once the wing dipped it continued to drop in spite of full aileron and rudder." I imagine that a fully-depressed aileron at a slowish gliding speed on such a machine is quite sufficient to stall the wing; consequently in spite of the stick being hard over the wing would continue to drop. In addition the aileron drag would probably counteract the effect of the rudder. Lateral control by means of ailerons seems bad in any case; and where the control is secured by depressing one aileron, as in the case of most spring-return designs, it shows its worst features.

Aileron control becomes better as more work is done by killing the lift on the higher wing, rather than attempting to increase the lift on the lower wing; eventually this ought to lead to the adoption of "spoilers" or "interceptors," possibly in the form of a small flap on the upper surface of the wing, and used to depress the wing by "spoiling" the airflow over it. Such a device has, I believe, been tried unsuccessfully.

It should appeal particularly to the designers of large span sailplanes, where aileron drag must become very large, and it also has the advantage that it could be attached directly to the main spar. Naturally quite a lot of work is required before such a device would work well.

But if the Gliding Movement can perfect something less rustic than bending a portion of the wing to secure lateral control, that alone would justify it many times.

(Signed) G. J. C. PAUL.

[*This is constructive criticism and concurs with our own desire to have some useful research work done within the Movement.*—ED.]

A Suggestion.

Sir,—It is perhaps rather looking into the future, but it strikes me that it would be a big help to sailplane owners if the A.A. would extend to them the benefits aeroplane owners can get; but shall I say at an extra cost of 15s. per year to ordinary car membership.

Think what it would mean to a pilot who comes down miles from anywhere to be able to get the help and information that only the A.A. scouts can give.

Should you think there is anything in this idea you might pass it to the right quarter with your comments.

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

The Attitude of A.A.

Sir,—I have now obtained the opinion of our authorities on the subject that you raised in your letter of May 1.

It was decided that in so far as members of the A.A. are concerned the owner of an engineless plane is entitled to the same benefits as the owners of power-driven private aircraft. There is no intention at the moment of instituting a new section of membership for aeroplane or gliding members, but any ordinary car member who has a mishap while gliding and desires to make use of a telephone box can do so if he has the A.A. key in his possession at the time.

Similarly, help and information would be available from a patrol—always assuming that the man is not called upon to leave his beat, except, of course, in the case of personal injury.

In case you have not copies in your possession, I send you some pamphlets on the Aviation Services of the A.A. [*Which we shall be pleased to pass on.*—ED.]

(Signed) IVOR MCCLURE
(*Aviation Dept., A.A.*).

Another Neutral Site.

Sir,—After reading Mr. Dagnall's sporting offer and your editorial comment on page 17 of THE SAILPLANE for Apr. 17, I would suggest as suitable the range of hills in Wiltshire whose height varies from 700 to 900 feet above sea-level with a sharp rise of 350 to 450 feet above the surrounding country and which can be used for soaring with the wind ranging from South through West to Northwest. These hills lie North of the Vale of Pewsey, and within 50 to 60 miles of Guildford. Communications are excellent by Rail, Road and Air. Two unused hangars, 180 ft. x 80 ft., are available nearby at Yatesbury.

I suggest that such a site would be ideal for testing the best British sailplanes in competition with the best the rest of the World can produce.

(Signed) C. T. CUSS
(*Chairman, Wilts Light Aeroplane and Glider Club*).

THE WHITSUN RALLY AT BALSDEAN.

The Contest Committee earnestly and cordially invite all B.G.A. affiliated Clubs, and individual owners, to give this rally their full support, and entries for the events should be sent in forthwith. The Rally is receiving the full support of *The British Gliding Association*, and it is considered that whole-hearted support of this meeting by Clubs will react favourably on the Movement as a whole, and give it just the fillip that is now needed.

THE PROGRAMME.

1. Saturday afternoon.—Test flights. Assemblies and adjustments. "Exploration" flights of the site.

2. Whit-Sunday.—11 a.m.: First of the four rounds of the Spot-landing competition—primary machines. (Open to pilots up to "A" standard only.)

3. 2 p.m.: Distance competition in given direction. For primary or secondary machines only.

4. 3 p.m.: 2nd, 3rd and 4th rounds of Spot-landing.

5. Bank-holiday.—11 a.m.: "North" v. "South" Soaring Contest. First two rounds. (Teams of four.) Maximum aggregate of height attained by team. Time limit of 15 minutes. Machines to dive down on signal of two pistol shots. (Sealed barographs to be used.)

NOTE.—The geographical dividing line is to be taken in this instance as from Bristol to Chatham. Places on, or south of this line are South. All others—North.

6. 1.30 p.m.: Last two rounds of N. v. S. Soaring.

7. 3.30 p.m.: "Figure of Eight" event. Quickest time round two pylons on a ridge. Three laps. Open to Clubs and/or individuals.

8. 5.30 p.m.: Prize distribution and close of Rally.

NOTES.

Storage space will be reserved in strict rotation as entries are received. Entrance fee 10s. per machine per event. If same machine is used by an opposing competitor (or team of competitors) in any one event a further entrance fee is payable by every such individual competitor or team. Proceeds from entrance fees are being devoted to (a) Third Party Insurance, (b) Machine Royalties, and (c) Prize Fund.

Regarding Editor's comments on events in issue of April 24:—For item 3 no machine generally advertised and/or recognised as essentially a sailplane, soarplane or soaring machine may compete. (The adoption of a mathematical definition is admittedly preferable, but only when proved figures are readily available for all competing machines.) [*This appears to achieve even more confusion. In what class is the Scud? Pruflings, admittedly secondary machines, have done a large proportion of the total soaring yet recorded in this country.*—ED.]

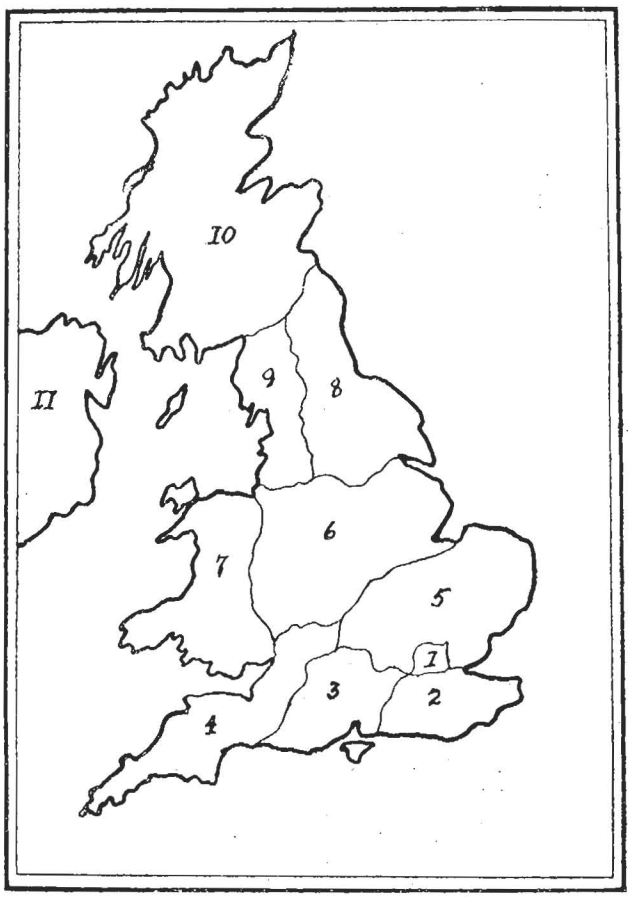
The "snag" of distance to which the Editor referred is more imaginary than real, as machines must travel in approximately a straight line in a predetermined direction, such as will ensure landing within reasonable range of vision and accessibility.

Bell-tents for parties of not less than six must be ordered seven days beforehand, and can be had for the three nights at a cost of 4s. per person. Hotel accommodation in Brighton is rapidly being booked up. (*Verb. sap.*)

It is intended to arrange for such incidentals as a band, a refreshment tent, an ambulance tent, a telephone runner, and a B.G.A. tent, in addition to the necessary officials' tent. It is hoped that a personage of high rank may be prevailed upon to distribute the prizes.

All entries, together with the necessary fees, must be forwarded not later than Saturday, May 16, to The Organising Secretary (Balsdean Whitsun Rally), New Yorke Hotel Ltd., Bedford Square, Brighton.

REGIONAL DEVOLUTION.



1, London. 2, Kent, Surrey, Sussex. 3, Berks, Hants, Dorset, Wilts. 4, Gloucestershire, Somerset, Devon, Cornwall. 5, Norfolk, Suffolk, Essex, Herts, Middlesex, Bucks, Oxford, Northants, Cambridge, Hunts, Bedfordshire. 6, Lincs, Notts, Derby, Cheshire, Shrops, Staffs, Leicester, Worcs. 7, Wales. 8, York, Durham, Northumberland. 9, Lancs, Westmorland, Cumberland. 10, Scotland. 11, Ireland.

This horrific sounding title is merely another way of talking about decentralisation or the shouldering by local groups of the obligations and duties which at present fall upon *The British Gliding Association*. We have for some time past been urging in THE SAILPLANE the need for the formation of local groups, the phrase originally coined by Mr. Goodyear, the Editor of *Gliding*, the Dorset Club's excellent yearbook, was "territorial federations."

Such groupings of local Clubs would enable much valuable work of purely local interest to be looked after by local people and would simplify the work of *The British Gliding Association* as the Council would only have representatives from these local federations instead of representatives (in theory) from every Club. At the moment the latter arrangement means that the Southern Clubs are the most strongly represented as their Council members can the most easily attend meetings.

A meeting was held at Falkirk on April 25 at which representatives from four Scottish Clubs were present and although the meeting was strongly against any action which might weaken the hands of *The British Gliding Association*, the following resolution was passed:—

That this Meeting appoint a committee consisting of two representatives of each Scottish Gliding Club to approach *The British Gliding Association* in the name of the Scottish Clubs with a view to discussing, adjusting and carrying through the suggested scheme of The Association of regional devolution so far as Scotland is concerned.

The meeting further resolved that a sub-committee consisting of Major R. H. Salvesen, R. of O., The Hon. Alan R. Boyle, Messrs. Andrew L. Tomison, C.A., and J. C. Howden-Ferme be appointed to make preliminary arrangements with *The British Gliding Association*.

We heartily concur in the arrangements which have so far been made and we ourselves should like to see similar action taken by other groups throughout the Country. In fact we print with this a map which offers a possible grouping. Although we have also prepared a list of possible secretaries for each group, as we have not consulted the gentlemen concerned as to their participation we do not feel free to disclose their names, but merely put the whole scheme forward for discussion.

The chief opposition to the movement towards decentralisation is that, as the B.G.A. has difficulty in raising funds, so the addition of more groups would only add a further burden on to the Movement. But is this true? If Clubs ceased to send representatives to B.G.A. Meetings the overhead charges would be considerably decreased as there would be fewer minutes and documents to circulate.

The central secretariat would merely have to deal with regional representatives and regional reports. In other works it should be possible to keep the central office dealing solely with matters of national importance towards the cost of which the groups should contribute.

The groups in turn would be supported by contributions from the local Clubs, who would save the cost of being represented on the Council and would no longer pay affiliation fees to the B.G.A. As in practice it is likely that such groups would be formed round the best gliding centre in the district it does not seem likely that cost of running the groups should be high, because they would be grouped round an existing organisation.

It is essential, however, that decentralisation should be built up by the Clubs most interested. This sounds somewhat paradoxical, but if the new grouping is formed by real devolution and the formation of new sub-committees of the existing council of the B.G.A. with the subsequent necessity for the production of vast quantities of typescript in the form of minutes and what not then the cost of the whole thing would be prohibitive.

As soon as a group is formed, the representatives of the Clubs within that group cease automatically to be members of the Council of the B.G.A. They are replaced by one member who shall represent the whole group. Thus in time the Council would slowly be decreased in size and probably automatically increased in efficiency on the well-known formula. We should explain that perhaps each group should be represented by one member for every two hundred associated Club members so that the biggest groups (in actual Club membership) should be the most strongly represented.

Within certain limits such as those applying to Airworthiness, Competition Rules, the Awarding of Certificates and the Standard of Inspection each group would be under its own control entirely. Whether it kept accounts or not, whether it had minutes or not would be entirely its own concern. Its only responsibility to the B.G.A. would be to make certain minimum contributions on a *per capita* basis plus affiliation fees scaled on the number of Clubs forming the group and to send a representative to Council meetings.

The life-blood of the Movement is composed of the individual Club member. His collective opinion is represented by the committee of his Club. The feeling of a group of local Clubs is represented by the committee of that group and in turn each group is represented by one member on the Central Council. That is the ideal.

The Association has to concentrate on national problems and its funds must be devoted to that end. Each group must finance its own projects and be self-supporting or else die. *There must be no subsidising from headquarters.* After all, headquarters has been organised to provide certain services and the final criterion of the efficiency of such an organisation is the amount of service rendered for a given cost. Let that be the fundamental conception on which decentralisation is to be built.

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