Oct. 31, 1930. Vol. 1. No. 9.

# THE SAILPLANE AND GLIDER

Price 3d.

## ABOVE THE WORLD.



Mr. Reffel on the Surrey Club's Dagling at Ditchling.

## TUITION AND TOWED-FLIGHT.

The expression, "auto-towing," has all the advantages of brevity if not those of etymological significance. Presumably it should mean some form of "self-towing," which it does not. The expression has been coined to denote towing a glider by automobile and is certainly a brief way of describing that dangerous pastime. As the aforesaid dangerous pastime seems likely to become popular, we hope that somebody will coin an English name for it, as these combinations of Greek and English words are horrid.

A fortnight ago we published an account from an American source of how flying tuition by towed-flight could be most safely given. This week we publish some further aspects of the subject. One account comes from the United States and has been written by a power-pilot who was so intrigued with what he read in the very article which appeared in THE SAILPLANE that he went off and took a course at the Chicago Gliding School. This is important and should be noted. He did not go and get a friend to tow him off the ground, but went to a proper flying school which operated on a full-sized aerodrome.

The other account comes from the Oxford Club, who, having no flying school to go to, made their own experiments. They towed a Zogling behind an Alvis Sports car on a length of sash-cord. They were extremely pleased with the results and intend to go on with the system. The sash-cord possibly is a safety device in that it would probably break should any severe load be placed upon it.

We have noticed in our researches into the literature of

CELLON DOPE

FOR

SAILPLANES and GLIDERS.

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

'Phone No.: KINGSTON 6061. Telegrams: AJAWB. Phone, Kingston-on-Thames.

the subject that quick-release gadgets are invariably used, one on the glider and one on the car. The best device for the car seems to be a winch with the towing rope wound upon it. This winch is firmly mounted at the back of a chassis and has a bucket-seat alongside in which sits the Instructor who has a brake on the winch. With the brake he can control the height of the glider and also by suddenly slackening off can cause the rope to fall off the glider.

Such a winch would not be difficult or expensive to instal and seems to be much the best way of tackling the problem. If the rope is made fast to the back of the car it will certainly get entangled at some critical moment and cause an accident.

So much for practical considerations. What does this interest in towed flight portend? Does it foreshadow, as the first motor-cycle engined glider foreshadowed in 1923, the end of the Gliding Movement or does it mean that Clubs are going to use the method for surmounting their most vexing problem, that of training *ab initio* pupils?

We believe the latter. We have felt very strongly since the start of the present renaissance in December 1929 that towed-flight should be discouraged and only mentioned in a limited circle. It seemed obvious that it had enormous possibilities for increasing the death-rate and therefore was not to be commended. The slower, and therefore safer, method of catapult-launching seemed to be the best means of advance.

We have had six months' experience now and it has been proved quite conclusively that not only can the Gliding Clubs train *ab initio* pupils by the German method of catapult-launching, but that it is safe. In fact the Clubs have done a very great service to Aviation in this country by demonstrating that people can be trained to fly, in the sense of knowing how to operate aeroplane controls, at a ridiculously low cost. One thing stands out and that is the long time necessary to train a pupil.

The first reason for this is the number of crashes that generally result to the machine from this method of training. These crashes in poor Clubs cause a great deal of delay and much wasting of the precious Saturday and Sunday afternoons. There is further the question of obtaining an adequate site, which must have a gentle slope for training flights of a proper length. These training slopes are not always available because the wind may not be from the right direction.

Now by towing a glider behind a car you can teach a pupil the proper way to handle the controls and can continue that treatment until he is sure of himself. You are towing behind a car, so no sweating crew is necessary to skid the pupil along the ground and pull the glider back again. The height of any flight can be adjusted by the instructor and provided the length of rope is adequate there seems no reason for the glider to alight on the car.

Wind-direction is not of very much importance as may be gauged from Mr. Miller's article from the United States.

This system seems then to offer a way for Clubs to train their *ab initio* members more quickly than heretofore and possibly at sites nearer home, as the essential requirement is a flat field of some acres. This must be quite free from surrounding obstacles such as trees.

Whether a straight flight of 30 secs. from an altitude gained by car-towing would be recognised by the B.G.A. or the Royal Aero Club as qualifying for an "A" certificate remains to be settled; but in any case the method would get a number of people to the stage when they were ready to be launched off the top of a hill.

Car-towing is dangerous, and we say emphatically that it is not recommended to Clubs or private persons who have had no experience of gliders or tuition thereon. The Oxford Club have had their machine since last May and know what they are up against. By car-towing it is quite possible to jerk an inexperienced somebody high enough into the air for them to have a nasty crash. About a dozen people were killed in the United States last year while trying to fly gliders. Most of these fatalities appear to have been due either to stunting or towed flight.

The first person to get killed thereby in England will not be a martyr to the noble cause of gliding but a serious setback to the Movement. In fact he is more likely to martyr his friends than himself and no precaution is too excessive which will prevent such an occurrence.

If the B.G.A. can spare the time from its labours, perhaps that Association would issue a recommendation as to the limiting towing speed of a primary-type glider. This question may even be solved by the manufacturers who will probably issue their own recommendations. It is obviously possible to break a machine by towing and this must be avoided.

To what end is the Movement directed? Towards what goal is the Association striving? Do Clubs look forward to the day when all their members will be "C" pilots and sail along the ridges and hills of the English counties, or do they see in Gliding an approach to powered flight? Do they look forward to the day when they will have an aeroplane of their own? Does any Club or body yet exist which is endeavouring to use the Glider as a way of examining the structure of the air and advancing the science of aeronautics?

To the first two groups at least towed-flight can prove a valued servant but a crushing master. Let us adapt the means to the end. Let us all learn to control Zoglings by the quickest and cheapest means available. Thus shall we avoid these dreadful exhibitions of aerial toboganning to which the unsuspecting crowd is invited with appalling results to the dignity of the Movement. Let us haste with the greatest possible speed, consistent with safety, to the time when Gliding Meetings will at least contain some indications of soaring flight.

### GLIDING IN CANADA.

The Glider Club of Vancouver, in British Columbia, appears to be going strongly. This Club claims to have a number of "firsts" to its credit. It was the first Glider Club to start operations in British Columbia and now has the first Canadian lady glider pilot in the Dominion.

In this connection it is interesting to note that a Canadian, Mrs. F. D. Bradbrooke, was the first woman to get an "A" glider certificate in Great Britain. At the moment we believe she is the only woman to hold a British Gliding Certificate.

### THE AUSTRALIAN GLIDING RECORD.

Reference has already been made in The Sailplane to the activities of the Geelong Gliding Club in Australia. In these activities Mr. Pratt, of the Aircraft Manufacturing Company, played no small part. Indeed he has built a number of machines of the primary training type.

The latest Club to be formed in Australia appears to be The Warrnambool Gliding Club, to which Mr. Pratt has recently delivered a machine. This town is some 300 miles along the coast westward from Melbourne and apparently the high sandy cliffs there make soaring possible. On Sept. 21 Mr. Pratt stayed up for 1 hr. 35 min., which is stated to be the Australian Record.

### THE FIRST AUSTRALIAN INTERMEDIATE TYPE.

A new type of glider is being built at the Melbourne factory of the Larkin Aircraft Supply Co. Ltd. This has been designed by Mr. W. S. Shackleton, who will be remembered by many for the successful light aeroplanes he designed at the early Lympne Meetings. These were the ANEC and Wee Bee types.

Mr. Shackleton was with William Beardmore and Co. Ltd. of Dalmuir as chief designer. He was forced by reasons of health to go somewhere sunnier and has been for some years with the Larkin people in Australia. Mr. Shackleton's early designs, which were so successful at Lympne, were high-wing cantilever monoplanes based on German glider practice of that period so that in designing a glider Mr. Shackleton is returning to his early love.

The machine is to have a span of 38 ft., a chord of 4 ft. 9 in., and an overall length of 24 ft.

### SPOT-LANDING OR DURATION.

The first prize for Event 1 in the competitions at Ditchling was presented by the Cloudcraft Glider Company, of Southampton. We are gratified to learn that this Cup had been presented for a Spot Landing Competition in which the Cloudcraft Glider Company believe in company with The Sailplane, to be the proper sort of competition for training machines. The B.G.A. saw fit to present this Cup for something else.

While on this subject we should be interested to learn when a primary training machine ceases to be one. After all, if you start a duration contest for such machines, various entrants will discover that you get a better duration with a flatter angle of glide and to obtain this they start to clean the machine up. This cleaning up to win duration prizes will go further and further till the machine is suddenly found to perform as an intermediate type. What then?

### JOY-RIDING IN SAILPLANES.

Last week-end at Soutergate, where the Furness and Scarborough Clubs organised a demonstration, about 13 passenger flights were given in the two-seat glider which belongs to the Scarborough Club.

This raises the interesting question as to whether sailplanes carrying passengers for hire and reward (we understand that the Scarborough Club charged 10s. a ride) can be called an aircraft within the meaning of the Air Navigation Act. If it can, and it seems likely, such flights can only be given in a machine with the proper Certificate of Airworthiness piloted by an adequately licensed pilot.

### WHAT IT FEELS LIKE.

Two or three weeks ago a correspondent asked what it felt like to glide. A friend of THE SAILPLANE, who is an *ab initio* glider pilot, has tried to explain what he felt like.

"Your turn to die now, old man! Better leave me your wallet." Those were the words of invitation that I received to take the pilot's seat of a Zogling for the first time. It was the first Flying Meeting of the ——— Club, and half a dozen other hardy souls had tried their best to damage the machine, and none of them had succeeded. None of them had previously handled a Glider, apart from launching Herren Kronfeld and Magersuppe on their recent visit to this country.

I took my place in the seat while somebody measured my neck for the rope—I mean fastened the safety belt round me. The launching crew—four on each end of the rope, looked far too strong for the purpose—were getting a bit impatient. I glanced round at the controls, and saw they were more or less neutral.

"Take the Strain"—It was more of a strain for me than for them. "Walk"—I wish I was walking with you. "Run"—I'd like to. "Release"—I think I really meant "Let me go."

Slowly at first, then quickly off the ground. What do I do now? Pull the stick back a little—That's better—We're doing fine. We seem a deuce of a long way off the ground now. The machine's going too slowly—Push the stick forward—Now we're coming down—Too quickly—Ease it back a little—We're nearly down now—Shall I land with a bump, and break the back rest like the last man did? Pull it back a little further—The d—— thing is turning to the right—Put my rudder over—It's turning still more, and the keel is on the ground. We're stopped and facing the way we came from.

Anyhow I landed gently. Why did I turn further to the right? I used my rudder. I look round at the said control—I've gone and pulled the thing the wrong way round. I've been told a dozen times that to turn, you work the rudder-bar opposite to handlebars.

"Very good flight, old man." He little knows what a large part luck played in the matter. Still I don't mind going again so I'd better get out of the seat to go back for my next "flip." 9½ seconds! Long enough to break your machine, but not nearly enough to give you time to think what to do next.

Still, I've not got the wind up now, though possibly I'm rather excited to think clearly. I pull my gaspers out and put one between my lips. Well I'm d——d. I've still got one going. The one I lit before I went up.

Anyhow I've Glided (or is it Glid? Glode? or Glud?), for the first time—and I hope it's the first of many.

### THE INEVITABLE.

[*Henley's A.B.C. of Gliding and Sailflying.* Edited by Victor W. Pagé. 8½ ins. x 6 ins. 283 pages. Fully illustrated. By the Norman W. Henley Publishing Co. Obtainable from THE AEROPLANE Book Department, Cannon House, Pilgrim Street, E.C.4. Price, 9s. 6d.]

With the upsurge of interest in gliding and soaring so evident in America as well as in England someone was bound, sooner or later, to get into print on the subject, with the odds on a professional compiler of books rather than a knowledgeable enthusiast of motorless flight.

Henley's A.B.C. draws from many sources in order to fill the book, and there is a good deal of useful information in it, but in general it impresses as being ill-balanced and poorly chosen.

The information on principles of flight, soaring, currents and suitable terrain is, as might be expected, much too sketchy to be useful, and the chapters on soaring birds, typical sailplanes, training and materials convey an apparent erudition which is not borne out in the book as a whole.

Apart from the fact that full information on the building of a training glider is unsuitable as material in a general discussion of the subject, it is also inconsistent with the author's criticism of the whole practice of such building by amateurs. A chapter on the strength and specifications of materials also seems to us out of place, because it does not come under the A.B.C. of gliding, and, moreover, appears to have been inserted more to fill up than to serve any practical purpose.

Furthermore the so-called working drawings and instructions of the Dickson glider not only omit any attempt at a bill of material, an itemisation of the total weight, or even a statement of what the builders may expect that weight to be, but also leave out any hint of the gauge and length of the wire bracing and any illustration which would inform the student that any is needed.

There is too little basic information for the absolute amateur, and only patches of information for the one who knows something of the subject.—F. D. B.

For an
"A," "B," or "C"
*Use a*
B.A.C.

The British Aircraft Co.,
LOWER STONE STREET.
MAIDSTONE.

*General Manager:*
C. H. LOWE WYLDE.

HENLEY'S
A. B. C.
OF
Gliding and Sailflying
9/6

*FROM THE :—*
AEROPLANE BOOK DEPT.,
Cannon House, Pilgrim Street, E.C.4

## AUTO-TOW LAUNCHING METHODS IN THE U.S.

The auto-tow system of launching gliders is becoming increasingly popular in the United States, where it has been recognised and approved by the Aeronautics Branch of the Department of Commerce, the governmental agency regulating all civilian flying.

Its obvious advantages include:

1. Elimination of large ground crews in favour of one man to operate the tow-car.

2. Operation from any fairly level field, instead of from hills.

3. High speed training, with ten to twelve flights per hour, each averaging from 50 to 75 seconds or more, on primary training gliders.

4. More complete air training made possible, as a primary training glider will rise 500 feet or more on a 700-foot rope, permitting full 360-degree turns and other manœuvres.

5. Complete independence of wind velocity or direction, with training possible from dawn to dark every day unless the wind reaches a velocity of more than 25 miles an hour.

At the Chicago Gliding School, where the writer received instruction, the primary training machines are operated from Curtiss Airport, scene of the 1930 National Air Races. The airport is a level, fairly smooth field of 680 acres. A smaller field of 400 acres, would be sufficient for operation with a 700-foot rope, and with a shorter rope even smaller sites may be utilised.

With auto-towing the instructor has a measure of control over the student in the earlier stages of training, and can correct mistakes by speeding up or slowing down the car.

Training is started with a 300-foot rope. In addition to the release mechanism on the glider, a quick release attachment is fitted on the rear of the open car used for towing, with a lanyard carried up to the instructor.

The new student is given a half hour on the ground learning to operate the lateral controls, which respond in anything better than a 5 m.p.h. breeze. While he practises aileron control the instructor explains the course.

Next the glider is towed across the field at slightly less than flying speed, while the student practises rudder control and learns to follow the car. The glider can be towed back downwind so long as the car speed is above five miles an hour faster than the wind velocity. In any breeze less than 25 miles an hour no trouble is experienced with downwind towing. When car speed and wind velocity are about the same the controls are reversed.

After the student has learned to follow the car and keep the wing tips level, a bit more speed is applied and he is permitted to rise two or three feet, then settle back, and become acquainted with the landing speed of the craft. The instructor has complete control, as he can alter the car speed to keep the glider near the ground or set it down at will.

The next step is a few flights in which the student tries to maintain a fixed altitude of ten to twenty feet, and he is then ready for his first free flight, cutting loose from the tow rope at about 50 feet. The glider must be nosed down just before the release is pulled, for, when it is freed of the weight of the tow rope, the nose has a tendency to bounce upward.



**The Cramcraft I on a test flight. The picture shows the unusual arrangement of the undercarriage sledge. The tail-unit is carried by a box-spar from the wing.**

Flight up to 150 feet altitude can be made with a 300- to 400-foot rope. The rope is gradually paid out until the student is using the entire 700 feet, and getting 400 to 500 feet of altitude, at which height banks and turns are taught. In moderate winds downwind landings are easy, so 180-degree turns are taught first, then half turns, a glide downwind over the starting point, and another half turn back into the wind, with a landing as near the starting point as possible. That eliminates towing back across the ground and speeds up the instruction.

The Government regulations require three flights, with moderate turns in either direction to qualify for a non-commercial licence, permitting gliding for sport and pleasure.

The commercial licence, issued to those who wise to become instructors, requires a physical examination, the same as for private aeroplane pilots, a series of flights, with 360-degree turns in either direction, and precision landings.

Gliding taught by this method is being used to reduce the cost of instruction in flying powered aeroplanes. A course in dual instruction in the States usually costs about $30 (£6) an hour, or $300 (£60) for a ten-hour course and solo. A ten-hour glider course costs $60 (£12), and glider graduates have been able to solo power ships after two hours' dual instruction, costing another $60, or $120 (£24) in all.

The glider graduate taking up aeroplanes has one or two bad habits to unlearn. The first is a tendency to skid his turns, and the second is a habit on over-controlling, which is necessary to handle a glider when it is being towed on the ground.

The aeroplane pilot, taking up gliding, on the other hand, is inclined to stretch his glide too much, under-control on the ground, and level-out for landing five or six feet off the ground, pancaking in. The habit of making perfect three-point landings about six feet too high is the hardest to overcome.

For auto-towing the standard primary glider usually is modified by the addition of welded steel-tube skids under the wing tips of sufficient height to keep the ailerons clear of the ground when the skid drags; the addition of an eighth-inch thick steel face-plate under the wooden skid, a slight widening of the landing gear to space the small wheels 18 to 24 inches apart, and sometimes the addition of an extra bay at the top of the rudder, increasing its height about ten inches and giving more control when following the car on the ground.

Any open automobile capable of standing up under the jarring shocks of travelling 30 miles an hour over a field is suitable for the work.

J. E. M.

## THE MAINTENANCE OF LAUNCHING ROPES.

The excellence of the special Turner launching ropes which Burley Ltd. have supplied to clubs throughout the country is an accepted fact. We are therefore pleased to publish the makers' directions as to how to get the best out of these ropes.

The rope should not be left out in the sun or rain when not in use.

Oil will cause rubber to perish in a few days, so great care should be taken to avoid contact with oil.

When not in use the rope should be stored in a cool, dry place, free from draughts.

It should be pulled along the ground as little as possible, as the dirt and grit tend to get through the covering material and chafe the rubber.

Water has no effect on the rubber, but it tends to rot the covering material. If, during use, the rope becomes wet it should not be coiled up for storage but suspended from the roof in long loops and allowed to dry naturally, in the same way as fire hose is dried.

## SOLVING THAT HANGAR PROBLEM.

Many Clubs are faced with the difficult question of how to acquire a hangar for their machines at a reasonable cost. We recently came across a solution to this problem in the Aviation Department of Selfridges where they have for sale a number of tents at a cost of less than a Zogling.

These tents have been specially designed to store a fully-rigged aeroplane. They are roughly triangular in shape with a clear 60 ft. of width at the nose of the machine and 18 ft. at the tail. They have about 20 ft. internal height at the ridge dropping down to 8 ft. at the tail. From front to back the length is 28 ft. The entrance is 10 ft. high. The whole tent when packed with its equipment weighs 1,755 lbs.

Enquiries should mention The Sailplane, and be sent to the Aviation Department of Selfridges, Oxford Street, W.1.

## AUTO-TOWING AT OXFORD.

The excellent article in THE SAILPLANE for Oct. 17 on "An American Method of Training," excited keen interest among members of the Oxford and County Gliding Club, and despite the fact that THE SAILPLANE did not recommend it, they decided to give it a trial.

The standard primary type Zogling was used and this machine was the first the club acquired last May. It has done hundreds of flights and is still going strong. This is a pat on the back for the Zog., the instructors and the pilots.

For towing, 450 feet of stout sash cord No. 8 was used. The car, a Morris Cowley, was found unsuitable as it could not develop the power and speed required and an Alvis Sports then managed the job beautifully on second gear only.

The site was a good one, being, in fact, an aerodrome. The cord was securely fixed to the back of the car and the usual ring slipped on the nose of the Glider. The driver kept his eye on a point on the far side of the aerodrome (in the wind of course), and kept a dead straight course. A look-out instructor at his side kept a watchful eye on the machine. By easing the throttle on the car, towing rope always fell away immediately.

Experienced pilots tried the method first and had no difficulty with a car speed of thirty miles an hour, there was a slight breeze, in climbing, going the length of the 'drome, about ½ mile, and making beautiful landings from heights up to about 250 feet.

The method of signalling was, that the pilot held out his left hand, the look-out instructor in the car shouted "stop!" the throttle was eased, and the rope fell off and the car swerved out *always to the left*, and the landing was made.

The experienced pilots were thrilled with the flights. Readers will ask "what about the novices?"

The method of towing and signalling was exactly the same. Those who were beginners went ½ mile on the skid, the Club did not put wheels on the Zogling and had excellent practice, at about 20 miles an hour, in lateral control of the machine. Some just got air-borne and kept there. A few made about 10 feet of height and held her at that.

The Club was so pleased with the show and the novices said "they had gained more confidence and learned more in one tow across the aerodrome than in all their shock-cord flips" that they are doing it again next Sunday. The experienced pilots made 30-secs. flights after the towing cord had dropped off. They are going round the aerodrome next week.

POINTS TO WATCH.

1. Exercise the utmost care and ensure that driver, instructor and pilot know exactly what the procedure is.

2. Only a very large open space, clear of all trees and obstructions can be used.

3. Make your speed before pulling her up and get down at a reasonably good angle or you will stall. (No member experienced this difficulty and no one stalled the machine).

4. Only a fast, high-powered car is suitable (one change of gear only is sufficient).

5. After climbing, keep a level course or the rope will slip off. (Do not zoom up and down when in flight.)

6. Do not climb too high, or the tow-line will slip off before the full distance is flown. (This happened but owing to the height a good landing was made, but the pilot did not get the length of flight that he should have done.).

7. Keep the spectators under control or they will wander all over the ground and make landing difficult.

8. Read the article on Auto-Towing in THE SAILPLANE of Oct. 17.

9. Read No. 1 once more.

The experiment proved highly successful and at our next meeting we hope to go a step further. It should solve the difficulty for clubs where a large open space is obtainable, instead of a hill. The experiment proved so popular that no one wanted to finish and the last landing was actually made with the use of flood lights, or rather the head-lights of members' cars.

If any readers require further information it would be willingly supplied upon application to H. G. Cox, Hon. Sec., The Oxford and County Gliding Club, 11, Frenchay Road, Oxford.

## AIR-WHEELS FOR GLIDERS.

There seems to be so much interest in auto-towing as a method of training that people will probably be pleased to learn something about the wheel equipment which is available. In an account of the experiences of the Oxford Club which appear elsewhere in THE SAILPLANE the Club state that they had to use an Alvis Sports Car for towing and that the humble Morris Cowley would not do the job. This seems to be explained by the fact that the Club were towing a Zogling on its skid instead of having it on wheels.

The Goodyear Tyre and Rubber Company (Great Britain) Ltd., whose Air Wheels are already well-known throughout the Aircraft Industry, have produced a special wheel for auto-towing. This is referred to as the 16 x 7-3 Glider Type.

It is supplied with three alternative bushes and will fit 1 1/8, 1 1/4 and 1 3/8 in. axles. The all-up weight of the Tyre, Tube, and Hub, is 7.75 lbs. The recommended load per tyre at an inflation pressure of 4 lbs. is 295 lbs., at 10 lbs. the load is 485 lbs. If anybody is interested in these wheels and cares to write to this office we will endeavour to get some more information for them.

**TO ADVERTISERS**

Will Advertisers please note that all copy and/or instructions must be sent to 175 Piccadilly by Wednesday of each week. Otherwise we cannot guarantee insertion in the forthcoming issue.

**THE SAILPLANE**

can ONLY be obtained by subscription, 3/- per quarter post free: or 3½d. per single copy post free, from "The Sailplane" Office, 175, Piccadilly, W.1.

**GLIDERS**

Balloons R.F.D. COMPANY Airships

17, STOKE ROAD, GUILDFORD, SURREY.

**REYNARD GLIDERS**

Aylestone, Leicester,

SUPPLY ANYTHING for GLIDING

SETS OF PARTS, FITTINGS, ETC.

LISTS.

*SEND US YOUR REQUIREMENTS*

TRAINING TYPE, £45, DELIVERED FREE

**"ADJAC"**

ANFANGER, £56 : 10. HOLS DER TEUFEL, £67 : 10

POPPENHAUSEN, £97 : 10

*All these prices ex quay. No duty.*

17, HANOVER SQUARE, W.1.

**MALLITE PLYWOOD**

*Telephone: Bishopsgate 5641 (4 lines).*

FOR SAILPLANES AND GLIDERS

Manufactured by the AERONAUTICAL & PANEL PLYWOOD CO., LTD., 218-225 KINGSLAND ROAD, LONDON, E.2.

# CORRESPONDENCE.

### For the Defence.

Sir,—Your leading article in the Oct. 17 issue of that splendid effort, The Sailplane, does not do you credit. To me it is disappointing because it seems to have been written with the object of creating controversy and doubt and therefore fails to maintain that high standard of purpose and thought that we who have the advantage of personal acquaintance with its Editor have every reason to expect from one so naturally gifted.

There is no need to defend the B.G.A. or the Gliding Movement at present, as to anyone who knows how to value the various factors that go to make a whole and to see them in their correct proportion and relationship can only be struck with the splendid progress that has been made up to date.

Anyone can find fault with every young and undeveloped thing; it requires little ability to see the imperfections in a young child, the early motor-car, the aeroplane, to take but a few illustrations. What does require intelligence and vision is the ability to take the young child and patiently mould its character and develop its all-round growth to the best advantage. He or she who expects the tender child to develop the characteristics of maturity during childhood lacks a sense of proportion and the right thereby to set up as mentor.

This is true of the Gliding Movement in every way, and it is no valid argument to advance the proposition that because other children born at an earlier date have reached a fair degree of maturity our child should, and would under different parental control, reach that standard of growth prematurely.

At the same time it is right and proper that should the child show any tendency to bad habits or undesirable characteristics, prompt steps should be taken to point these out and eradicate the tendency.

For the benefit of those who cannot know the true state of affairs in the B.G.A., may I just state a few facts.

The Gliding Movement in this country for all practical purposes started in February of this year and March saw the birth of the B.G.A. This young child was born without a silver spoon in its mouth, its parents were without means to support its existence at birth, happily there appeared a fairy Godfather at the moment of great need, one Lord Wakefield, and through his bounty was made possible the existence of the B.G.A. for one year if run on the most careful and frugal lines.

Those in the Movement appealed to the Aviation Industry and others in a position to help to secure its future for a period of three years and to provide it with just sufficient funds to carry on its essential work in the development of what I, for one, am sure is a Movement of vital importance. Deaf ears were turned to our appeals and blind eyes to the vision we presented.

So this young Movement was thrown entirely upon its own resources and any honest inquirer into the facts will be bound to admit that what has been accomplished is really staggering when set against the funds available for *all* purposes.

There is hardly one point that you make in your article which has not had to be handled the way it has for the simple and sufficient reason that the controlling factor was the inability to spend the money required to do this any other way.

This applies to your first point, the second, third, fourth, and many subsequent ones.

As regards the change of site it may interest your readers to know that negotiations for Itford had been going on for months, and because the negotiations broke down at the last moment it is no fault of the B.G.A. that they were not prepared to be held up for ransom.

Why accuse the hard, overworked staff of inefficiency just because they did their job and found and organised another site on exactly six days' notice? It is perhaps significant that had Itford been the site for last week-end's effort nothing could have been done as there is no ground at Itford that would have been suitable for the wind that prevailed on Sunday.

I remain quite unrepentant, for I state quite emphatically that the Meeting which you have pilloried was a great success, it is the first Meeting in this country where no damage has been done of any seriousness to competing machines, a greater number of flights were made than at any other, more pilots took part and the quality of the flying was a great improvement on anything we have done up to date. This last statement I make on no less authority than that of Herr Kronfeld.

I understand that there is every prospect that in addition a profit has been made in which competing Clubs will share.

That the organisation of the Meeting was capable of improvement all of us are conscious, but we know what improved organisation would have cost and it was avoided purposely.

To the splendid band of voluntary workers who put in so much cheerful and effective effort I tender my sincere and grateful thanks, it was they who were largely responsible for the success we had.

At no previous Meeting have the crowd been given such a continuous and interesting entertainment.

In conclusion may I say that we expect at all times to have criticism from the Editor of The Sailplane, and will welcome it, but let it be of a quality worthy of his great abilities and of the cause which with us he serves.

(Signed) E. C. Gordon England
(*Chairman, B.G.A.*).

[Mr. England says:—

There is hardly one point that you make in your article which has not had to be handled the way it has, for the simple and sufficient reason that the controlling factor was the inability to spend the money required to do this any other way. This applies to your first point, the second, third, fourth and many subsequent ones.

(1) We do not see that lack of funds prevented the B.G.A. from obtaining entries from the North. We feel sure that these would have been forthcoming had the North been given time to run off a few heats and select a representative team.

(2) We do not see that lack of money affected the selection of Events. The organising committee or contest committee which arranged the Events cost nothing. The Events which we proposed would have cost no more.

(3) To arrange a meeting before a site for it has been secured implies lack of organisation rather than of funds. In this connection we would like to point out that although Itford might not have been better than Ditchling on Sunday, it would have certainly been the better site on Saturday when the best time of the Meeting was made.

(4) It costs no more to arrange things properly in advance than in a hurry. If the Southdown Club had done the whole thing there would have been little to criticise in the Meeting as a purely local affair.

We regret that Mr. England should have suggested the whole article was written to promote controversy. Far from it; we know how much support the B.G.A. needs but we hate some of the child's habits and wish to see them eradicated.—T. J.]

### Eddies Again.

Sir,—At a Gliding Meeting of the Nottingham Gliding Club, held on Oct. 26, two members found it necessary to glide at right angles over a lane which is bounded by two rather high hedges. In each case the Glider (R.F.D. Primary) swung round to the right. One member appeared to lose practically all flying speed when over this lane.

The writer wondered whether any of your correspondents could state, definitely, if it is usual for strong currents of air to be directed down the lane at right angles to the prevailing wind.

Perhaps someone, who has had considerable experience of wind currents, would give us the benefit of his experience.

Wishing The Sailplane every success,

(Signed) W. S. Bullivant.

### Getting Her up the Hill Again.

Sir,—It may interest some of your readers to know that we have effectively solved this problem.

Park a car at the top, jack up, take off one rear wheel and slip on and bolt a drum containing sufficient 3-16 in. steel cable.

After a flight thread the cable through a roller guide driven into the ground and run it down by hand, or motor-bike if the slope permits. Slip the eye on to the launching hook, tick over in bottom-gear and up the glider comes without manual effort at a walking pace with members on the wing tips.

(Signed) H. G. Cox,
Hon. Sec., The Oxford and County Gliding Club.

### Mlle. Lippens' Appreciation.

Sir,—Might I ask you if you have room in your page of "Letters," which I might fill with a few words of my own? I feel I owe it to the British Aircraft Co. to publicly express in the pages of The Sailplane my appreciation of the remarkable way in which they repaired my Professor.

Two weeks ago, flying off the Channel Gliding Club's splendid grounds, I made a bad landing, damaging my machine. In two days, Mr. Lowe Wylde's very able workmen repaired the damage so well, that I may make them the compliment of saying I have never seen a nicer and more "finished" piece of work out of Germany.

All people concerned with gliders and their building will know that a higher tribute could not be paid.

I would like all owners of sailplanes, or prospective owners, to know that at Mr. Lowe Wylde's works at Maidstone, they will receive the kindest attention, and best of service in the shortest time.

(Signed) Susi Lippens.

# 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, on Sundays.

Dorset.—The Dorset Gliding Club, at Weymouth.

Glam.—Merthyr and District Gliding Club. Sundays, 10 a.m. to sunset. ¼-mile-left Dynevor Arms, Merthyr Tydfil—Swansea Road.

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, at Freshwater.

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.

Lancs.—The Furness Gliding Club, on week-ends, at Gleaston.

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

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. 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.

Wilts.—The Wiltshire Light Aeroplane and Glider Club at Easton Hill, Alton Priors Range.

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 FURNESS GLIDING CLUB.

Founded just three months ago, the Furness Gliding Club can now claim to be well established.

A suitable training site approved by the B.G.A., to whom the club is affiliated, has been secured at Gleaston Park Farm, Gleaston, W. Ulverston, whilst headquarters and Club rooms suitable for construction work are available at East Mount, Barrow-in-Furness.

Following visits paid by members of the committee to Gliding Meetings, the purchase of a British Aircraft Co. machine, type B.A.C II, was decided on—the machine to be delivered to our site on Oct. 26.

Following on the conference of Northern Gliding Clubs at Scarboro' on Oct. 4th and 5th at which our Club was represented, arrangements were made for the Scarboro' Club to assist us at our opening meeting.

The outcome was a most successful demonstration of Sailplaning by Herr Magersuppe at Out Park, Kirkby-in-Furness, on Oct. 25 and 26. A 2-seater Sailplane was used and passenger flights were made. As a point of interest may be mentioned that a lady was passenger on the second trip made.

On Oct. 25, rather a strong wind prevailed, and Herr Magersuppe expressed the opinion that if a sealed barograph had been available he would have attempted to break the altitude record. Duration of flights was limited only on account of the short time available. A height of 1,000 ft. above the starting point was easily attained.

On Oct. 26 the B.A.C. delivered the Club B.A.C. II type primary Glider, also the fuselage necessary to convert same to a B.A.C. III type Secondary Glider. Both types of machines were successfully demonstrated by Mr. Lowe Wylde, of the B.A.Co. A glide of some 1 minute's duration was attained on the primary.

As the secondary type was not tested until the afternoon, when the wind had dropped considerably, Mr. Lowe Wylde was unable to soar above the starting point and after gliding for some 1½ miles, he eventually landed on the hillside below the starting point. Herr Magersuppe also flew in the B.A.C. III machine with like result.

The Club, who were fortunate enough to secure Commander C. W. Cowen, O.B.E., R.N., of Messrs. Vickers-Armstrong, Ltd., as their president, hope to begin training almost immediately. Meantime inquirers and intending members should apply to the Secretary, R. Cuthill, 31, Church Street, Barrow-in-Furness.

### THE NOTTINGHAM GLIDING CLUB.

The first properly-constituted meeting of the Nottingham Gliding Club was held on Mar. 28, 1930. There had been numerous meetings prior to this date, and Mr. A. Logelain was the prime mover in the organising of these early meetings.

Fortunately, Major S. A. Currin, the President of the Club (well-known in Commercial Motor circles), was one of the first enthusiasts and he was really responsible for the forming of the Club on business-like lines—in fact, he advanced the necessary cash for the purchase of the R.F.D. Glider. The first Gliding Meeting was held on Sunday, May 11, at Oxton, by kind permission of Capt. Sherbrooke, of Oxton Hall.

Owing to a combination of inexperience and over enthusiasm the glider was damaged to the extent of £30 and this has been a serious drag on the Club's financial resources. Glider Insurance was unknown in those days, as also was personal accident cover for pilots, but now the Club has made the necessary arrangements and would be happy to arrange cover for other Clubs and glider pilots.

However, the following week-end the glider was again ready for the fray, and Mr. Marcus Manton kindly came from London and gave a demonstration of "How it should be done," to the delight of about three thousand spectators, who applauded his excellent display.

It was at a gliding ground at East Bridgford that the mechanical release made by Mr. H. A. Searby was first used on June 8. This release is sure, certain and strong. A child of twelve can and does find it simple in operation. This release obviates the necessity of at least four persons sitting on the (perhaps wet) ground, which means that four extra persons are available for other duties.

Some excellent sport has been obtained with only six members present; that is, one for the combined duties of wing-tip holding and release, two on each "bungy" and one pilot. Mr. Searby, the inventor, would be pleased to supply a replica of this labour-saving device and details of this offer can be obtained by writing to the Hon. Sec. of the Club.

With growing experience and confidence the Council of



**A CLUB-BUILT MACHINE.—A new type of training glider which has been built by the Imperial College Gliding Club to the designs of their Captain, Mr. J. H. Payne.**

the Club have for some weeks been on the look-out for "pastures new" where they can "spread their wings" with greater effect. They are pleased to be able to report that preliminary negotiations have been opened with the tenant of a hundred-foot hill with gliding slopes and very fine landing grounds in practically every direction. This is Winkin Hill, which lies between Gotham and Sutton Bonington, and is on the Estate of Lord Belper.

On Oct. 12 test flights were made, one of over three hundred yards. Unfortunately, whilst schooling a new member, on the base of this hill, the machine was crashed slightly, and, owing to the approach of evening and short time available for repairs, gliding was finished for that day.

On Oct. 19 the glider was again conveyed to Winkin Hill for further tests to be made. After erecting the machine it was hauled to the crest of the hill with the help of a large number of spectators who were present, but unfortunately, the wind, which was ideal, caught the glider under the wings and had blown it partly over backwards before it could be held. This bent the tail booms and, of course, rendered the tests impossible. ("Let other Clubs beware the enthusiasm of spectators and their 'help.'")

Another Gliding Meeting was held on Oct. 27 at Winkin Hill which drew a large number of the public. After a short test flight by the Captain of the Day, three members had one glide each, all of which would have qualified for an "A" certificate had any of the Club's B.G.A. Official Timekeepers been present.

The first, by Mr. Searby, with only three men on each "Bungy," gained height and cleared two hedges and a road, the distance travelled being nearly a quarter of a mile.

The second pilot was Mr. W. S. Bullivant and he, apparently, was under the impression he would not clear the two hedges and road, so made a right banking turn and came to earth in the launching field.

Mr. L. Burbidge made the next flight, which was the steadiest of the three. He zoomed down in a most masterly fashion to just skim the ground to gain speed to clear the road. Unfortunately, he lost flying speed after clearing the first hedge and road, landing in the field with one wing just resting on the second hedge. This did very little damage beyond the breaking of two landing wires, one or two tears in the fabric and a secondary rib in the aileron was broken.

As it was now four o'clock the members decided to "call it a day" with the Club's R.F.D. and turn their attention to the "Searby Special," which had been considerably improved since its first public appearance at Carsington Pastures. Only short hops were attempted, and the machine showed great promise. Mr. Searby (like all inventors) was *not quite* satisfied with one little point, and by the time he has really finished improving his machine here and there it is more than probable the primary glider will have developed into an advanced "Searby Cloud Soarer."

There are several lady members who are making progress and who are very willing workers.

The Club is very desirous of obtaining a workshop large enough to house a fully-rigged machine, so that they can commence building an Intermediate type during the coming Winter months.

The subscriptions are: Associate Member, Annual Subscription, 10s. 6d. Gliding Members, Entrance Fee, 10s. 6d. Gliding Members, Annual Subscription, £1 11s. 6d.

The Hon. Sec. is Mr. L. Burbidge, c/o Welbeck Hotel, Nottingham.

**THE BEDFORD GLIDING AND FLYING CLUB.**

During the week-end of Oct. 25 and 26 the weather and wind were very kind to us and enabled us to get through some useful work both with beginners and advanced pupils.

Our Engineers had worked very hard during the week and succeeded in having the new slip-undercarriage ready. This, as previously explained, consists of a light wood frame and channel to fit neatly under the skid, but now we have fitted ball bearing wheels with pneumatic tyres.

After a few trial shots, we saw that it was very necessary to balance the glider on the undercarriage with each pupil, and once this was mastered, the great advantage of a slip-undercarriage was clearly demonstrated. It was also found necessary to have the rope parties quite close, the machine leaving the ground almost at once and quickly overtaking them, leaving the undercarriage safely behind.

Later in the afternoon, when we got into swing, some very fine glides were made, particularly that by Mr. B. F. Skinner, who gave a faultless demonstration of a long, natural glide, his lengthy pipe, which while in flight he continued to smoke at ease, making the picture more natural than ever. Captain Marstrand and Mr. Bevan also made good long glides downhill towards a definite objective, and were followed by all our pupils.

We are sorry that our friends from other clubs, who were welcome visitors, were unable to stay a little longer until we had our undercarriage well in action, as we are afraid that our experimental efforts early in the afternoon were not so convincing as those which we made later.

As soon as possible we will send to The Sailplane some photographs of the undercarriage in action.

All pupils now show great improvement and we hope very shortly to have a good number of "A" pilots in the Club.

There is still plenty of room for new Members, and we would again remind those interested that our Annual subsciption is 15s. inclusive, with an entrance fee of £1.

The Hon. Sec. is Mr. A. W. V. Hendy, 5, Beresford Road, Bedford.

**THE PRESTON AND DISTRICT GLIDER CLUB.**

The Preston and District Glider Club is now in being and congratulates itself on having secured Sir James Openshaw, J.P., D.L., as president.

They have already placed their order for the first glider, which they expect to have delivery of within the next two or three weeks. A very keen interest is being taken in Preston regarding the activities of the Club, and after the machine has been on exhibition for a week the Club will hold its first flying meeting, at which it is hoped that demonstration soaring flights will be made by Herr Magersuppe, as they are getting in touch with the Scarborough Club relative to requesting a visit from this expert.

They have not as yet determined their actual gliding site, but have two extremely suitable places in mind, and it is now a question of obtaining permission from the owners of the property.

They have placed their entrance fee and annual subscription at 10s. 6d. and £2 2s. respectively, with a subscription of £1 1s. for an associate member.

Although the Hon. Secretary is at present the only member with flying experience (over 2,000 hours on numerous types of power-driven aircraft), he thinks he is qualified to instruct in flying gliders, especially as he intends paying a visit to the firm from whom the Club are purchasing their machine, to pick up first-hand knowledge.

**THE MERTHYR AND DISTRICT GLIDING CLUB.**

The Merthyr and District Gliding Club, formed in the early part of this year, now has a membership of 25, residing as widely apart as Carmarthen and Brecon, and regularly attending the Sunday meetings.

A R.F.D. machine was purchased in July, but owing to unfortunate circumstances two crashes have resulted. The last one was more or less serious, and necessitated a month of hard work on the part of the Club members.

A shed has been placed at the disposal of the Club by one member, which has been transformed into a "repair shop," and at which the additional machine, now in course of erection, will be transferred for completion.

Up to the present it has been necessary to transport the Glider to the flying field by lorry. This difficulty has now been overcome by the manufacture of a trailer. The work on this has also been done by members of the Club.

Owing to the mishaps previously referred to, it has not been possible to carry out any definite form of instruction, but with the machine now in an airworthy condition again coupled with the purchase of a new launching rope, and the additional machine now nearing completion, a systematic programme of instruction can be given, when it is hoped all members will shortly become experienced Glider Pilots.

For the winter season a series of lectures has been provisionally arranged, some of which, it is hoped, will be illustrated with films and slides.

Recently the Club held a very successful Dance, at which the Glider was on view.

Any inquiries should be addressed to the Hon. Secretary, S. Herbert, 11, Gwaelodygarth, Merthyr Tydfil, Glam.

**THE SURREY GLIDING CLUB.**

The Surrey Club feel very pleased with the results of the Ditchling Meeting as it proves that the arduous training which has been carried out during the Summer is entirely successful, and upon returning to our home-ground at Chilworth this week-end we again got down to serious training and some fifty-four launches were made on Oct. 26.

The Committee of the Surrey Club were very surprised to learn from The Sailplane that they had waived their right to the second prize in the team contests at Ditchling. This was indeed news to us.

In future, all notices concerning the Surrey Club will appear in The Sailplane, and members must look to this Journal for indication of alterations in procedure, etc., etc.

Notice No. 1.—In future flying meetings will be held on Sundays only at Lockner Farm, Chilworth, starting at 9.30 a.m. Saturday afternoon meetings are cancelled owing to short evenings.

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

EDITORIAL AND ADVERTISEMENT OFFICES OF "THE SAILPLANE," 175, PICCADILLY, LONDON, W.1.
ACCOUNTS AND PUBLISHING OFFICES, CANNON HOUSE, PILGRIM STREET, LUDGATE CIRCUS, E.C.4.
Telephones: Editorial, Gerrard 5407; Advertising, Gerrard 5407; Publishing, Central 5822.