

THE SAILPLANE

Price
3d.

AND GLIDER

SOARING FLIGHT.



The "Darmstadt" soaring above Gersfeld Valley at the Wasserkuppe. The picture was taken from an aeroplane.

EXTRANEOUS AID.

We have all known for some time now that J. Lyons and Co., Ltd., were working on a big scheme to give demonstrations of soaring flight throughout the British Isles. For this purpose they have had specially built in Germany a sailplane of the Westpreussen type, a sister ship to the *Schloss Mainberg* on which Mr. Haller recently put up the American Record for a distance flight with one of 21 miles. They have also had built a Falke as a standby. Their pilot is to be Herr Krause, who has a very good reputation in Germany and was selected on the special recommendation of Herr Kronfeld.

Readers of THE SAILPLANE will remember the description, together with the illustrations, which appeared in this paper for Nov. 21 of the flapping-wing machine designed by

Dr. Martin Brustmann and Herr Lippisch. Herr Krause was the pilot of this machine during its trials.

These Lyons demonstrations are to be held every weekend from the beginning of May to the first week in September on gliding sites throughout the country. The actual arrangements cannot be broadcast until the report of Herr Krause, who is now inspecting the proposed sites and conferring with the clubs concerned, is available.

The fact that once again the British Gliding Movement is to have the stimulus of demonstrations made by an expert with machines which are the outcome of ten years practical experience by a people famous for their scientific application is to be heartily welcomed. All the more so as so far nothing has been announced about any nationally arranged

"Titanine" Glider Dopes

TRANSPARENT & COLOURS, FOR FABRIC OR PLYWOOD

Manufacturers and Sole Proprietors

TITANINE-EMAILLITE LTD

HEAD OFFICE:—

Empire House, 175, Piccadilly, London, W.1

CABLES:—
"TETRAFREE,"
LONDON.

CODES:—
A. B. C. 5th EDITION
& BENTLEYS.

WORKS:—

HENDON - LONDON, N.W.

and also at:

NEW JERSEY . . . U.S.A.
MILAN . . . ITALY
BREMEN . . . GERMANY

meeting wherein our own Clubs and foreign pilots might compete.

The fact that our sport is being used for publicity purposes does not seem of particular import in that Lyons famous slogan is "service," and it seems as if their latest venture will irrevocably link their names with a great service to the Gliding Movement.

For a year or less Clubs have been struggling forward under difficulties which their pristine enthusiasm could hardly appreciate. Members desirable and undesirable came thronging in at subscription rates and entrance fees which were far too low. Undesirable members cost the Clubs much money and put a subsequent strain upon their funds.

Even enthusiastic members find things somewhat cheerless after the endless struggle to find a suitable site and one which is available for all weathers. These demonstrations will afford vivid reminders of the goal at which all Clubs have set themselves, that of soaring flight.

Club executives must remember that they have more to do than organise the meeting, that must not be the end in itself. They must consider ways and means of strengthening their Club. The sale of programmes will probably raise something for their funds, but not enough. The Club must have new members, the passage of new members through the Club from the instructional to the soaring stages must be regarded as the life blood of such an organisation.

Therefore before each Meeting the Club must have worked out schemes to attract new members at an economic figure for subscriptions. Experience shows quite definitely, although we know that certain small Clubs have been operating successfully for lower figures, that gliding is going to cost members about £10 a head a year, and that is the sort of figure Clubs ought to work to. This amount need appal no one, for we all spend vastly more on stock forms of amusement.

A rough calculation shows that one Club spent £6 for every "A" Certificate gained by its members in the first year of working, including power-pilots. This is a Club whose "A" Certificates probably outnumber those of any other.

In return for the subscription Clubs must offer something cut and dried, not a vague offer to use their machine when it is not broken and to participate in endless pullee-hauler work. There is no excuse for excessive man-handling, car-recovery of gliders, either by direct towing or by ropes and tackle, is so obvious an aid that Clubs who do not take advantage of it are inviting their members to go to less exhausting Clubs.

For Clubs with flat ground there is Mr. Lowe-Wylde's carefully prepared scheme of auto-towing.

Over this question of finance and membership we are perfectly prepared to do everything we can to co-operate. We will discuss with any Club that is interested their financial position and how it can be improved. Enough figures are available to show that Gliding is the commercial branch of aviation, and, unlike air mails and air transport generally, can be made to stand on its own feet.

Lyons' demonstrations are going to show that there are a certain definite number of sites for soaring. At present there are far too many Clubs whose sites are useless for soaring flight. Such Clubs are obviously limited in their scope and must really regard themselves as primary training institutions solely with no inducement for their members to go further.

Thus Lyons are going to show England that certain Clubs have soaring sites. The conclusions are obvious. Let these fortunately placed Clubs invite their less fortunate neighbours to use the soaring site. This co-operation will have the further advantage that a common meteorological service can be arranged and overheads such as the erection of hangars can be cut down. Further, in the very early stages a number of Clubs might share a soaring machine.

There is another point. As the B.G.A. has yet to arrange an international meeting, could they not, in conjunction with Lyons, arrange perhaps three inter-club meetings, north, south-west and south-east, at which competitions could be run for points, to count towards the winning of the Cup, which we believe Mr. Volk, of Brighton, is likely to present to the Association. The Wakefield and Manio Trophies are only for international competition and will, therefore, not be available.

A FRENCH GLIDING PRIZE.

Monsieur Georges Dreyfus, a well-known French Industrialist, has given 20,000 francs (£161) as a prize for motorless flight in his own country. The regulations governing the award will be drawn up by the French Aero Club.

OUR DISTINGUISHED VISITOR.



An old picture of Wolf Hirth taken in Germany.

The name of Wolf Hirth is known to everybody in the Gliding Movement as a very famous sailplane pilot, who shares with Herr Kronfeld the unique distinction of wearing the silver-crested "C" badge which is awarded by the R.R.G. to pilots who have made outstanding motorless flights. Herr Hirth has just been appointed Director of the rising sailflying school at Grunau, which lies about 2½ miles north of the important Silesian town of Hirschberg, and he is visiting England on his way from New York to take up his new appointment.

The school at Grunau, according to the German flying paper *Flugwesen*, was organised by the Silesian Group of the Deutsche Luftfahrt Verband. The Galgenberg, the ascent of which takes about half an hour from Grunau, affords a good take-off for flights either north, south or east from its summit. A fold of high ground called the "C" foothill runs out at an angle from the Galgenberg, from which it is divided by a saddle, in a north and south direction with an even slope about three-quarters of a mile long to the west. In 1927 the famous glider pilot Ferdinand Schulz made a flight of 2½ hours' duration from this foothill on a primary training machine.

The accommodation of the school is quite extensive. There are two hangars, living quarters, workshops and administrative buildings. A modified form of Zögling is used with a detachable fairing which can be used for soaring flights.

As Herr Hirth talks excellent English and has an extensive connection in the United States it seems quite likely that the School at Grunau, although some way from this country, will become a popular training centre for English-speaking people.

Herr Hirth succeeded on Mar. 11 in making a lengthy soaring flight over the buildings of New York along Riverside Drive and 165th Street. He started in the afternoon from a small plot of clear ground only 150 yards wide between Riverside Drive and the Hudson. This piece of ground is about 90 ft. above the river. Twenty strong men, on a treble shock-cord shot the *Musterle* into space. Within ten minutes Herr Hirth had gained enough height to work his way back over the twelve-storey buildings. Here he worked himself up to a height of 1,000 ft. and floated for about an hour above the buildings of New York.

As the neighbourhood at the time of the flight had been put out of bounds by the police, Hirth had to come down prematurely, although he could have stayed in the air considerably longer. The flight took place in the presence of thousands of onlookers, reporters and photographers.

Herr Hirth is very disappointed that the police would not allow him to stay up longer, as the wind, which was blowing from the west on that occasion, blew steadily for three days, and he is certain that he could have broken all the endurance records. He says that flying above the city is ideal for an endurance flight, as there are lights all night and always something to watch.

He would also have liked to have worked his way down

to the higher parts of the city, where he could have gained even greater heights in the thermal up-currents and so crossed over to Long Island, where he could have landed.

It would probably be as well to mention here that Manhattan Island, upon which New York is built, runs from north-east to south-west, with the Hudson River running along the western face. Thus in a west wind there is a steady up-current blowing up from the river up this western face.

Herr Hirth has, unfortunately, to leave England on Easter Monday, or sooner, but he is going to try and fit in some sailplaning in various machines. His first mount is likely to be a B.A.C. VI, down on the South Downs, at Pirle or Balsdean.

On Thursday Herr Hirth is giving a lecture to members of *The British Gliding Association* and other gliding enthusiasts.

TOO ROUGH FOR POWER-CRAFT.

There was quite a lot of excitement at Reading last Sunday during Mr. Lowe-Wylde's demonstration of Auto-Towing. The arrival of the "Comte de la Vaulx," which is the Ford Trimotor recently acquired by the new President of the F.A.I., Prince George Bibesco, was not without interest, especially as it had come down with Herr Wolf Hirth from Hanworth. A Moth had previously got so enraged with the sight of a glider on a bit of string that it had buzzed through all the local telegraph wires with consequent dislocation of the district's telephonic communication.

The Autogiro had also arrived and landing cross-wind, or rather turning across the wind on landing, was blown over on to its side with consequent detrimental effects to the still spinning rotor.

But in spite of these mishaps to powered craft the B.A.C.VI continued to fly and land on its Goodyear Air-wheels exactly where its pilot in his own inimitable way decided to put it. A certain amount of instruction was also given. Herr Hirth flew the B.A.C.VI and is alleged by the excessively glider-minded to have succeeded in prolonging his flight by soaring in various assorted currents due to hangars and similar obstructions.

GLIDING IN AUSTRALIA.

Gliding is going ahead in Australia, and although to date no Australian Gliding Association has been formed to control the sport throughout the Commonwealth, associations in the various states affiliating local clubs are already in existence. There is one in Queensland and another in Victoria. An Association is to be formed to affiliate the four or five recently formed clubs in Western Australia.

CLOUD-SOARING AND SEA GULLS.

On Saturday afternoon, Mar. 14, we witnessed a phenomenon which we had never observed before. It was a warm day, especially in comparison with the severe cold which had preceded it. Over London the wind was south-westerly with low cumulus clouds.

The editorial flat is blessed with an excellent view over the Holland Park district of London and we were leaning

lazily from the window when our attention was caught by the sight of a number of gulls gliding upwards in weaving spirals. This rather puzzled us as there was no obvious cause of an up-current. No high building was there to deflect the wind upwards.

Then we lifted up our eyes and saw the front edge of a large cumulus cloud and thereafter we watched the gulls, who occasionally reached heights as great as 800 ft., for some twenty minutes. All the time they sailed away along the front of big banks of clouds. We feel that they must have been taking advantage of the up-current known to exist about such clouds and we shall be very interested to hear if others have noticed these birds cloud-soaring.

GLIDING COURSES AT THE WASSERKUPPE.

Elementary courses are being held at the Wasserkuppe from June 3 to June 30; Sept. 7 to Sept. 30; and from Oct. 5 to Oct. 31. For these no previous experience is necessary and the acquisition of the "B" Certificate is aimed at. An improved type of Zogling is used.

Advanced courses are being held from April 7 to May 2; Aug. 14 to Sept. 2; and from Oct. 5 to Oct. 31. Pupils with "B" Certificates are eligible and the aim is the passing of the "C" test. "Falke" machines are used.

Scientific courses will be held from May 18 to May 30; and from July 6 to July 21. These are open to "C" pilots. Opportunity is given to sufficiently skilled pilots to practise cloud flying and to make distance flights. Lectures are also given by members of the Research Institute. The latest type of Professor with improved aileron control is used.

Foreigners pay R.M. 300 for a full course, R.M. 240 for 2/3, and R.M. 150 for 1/3 or less. Germans pay half these amounts unless they are members of certain associations in which case they pay one-third.

Power pilots after passing certain qualifying tests can join an Advanced or Scientific course.

Applications should be addressed to the "Leitung" of the School fourteen days before the intended date of entry.

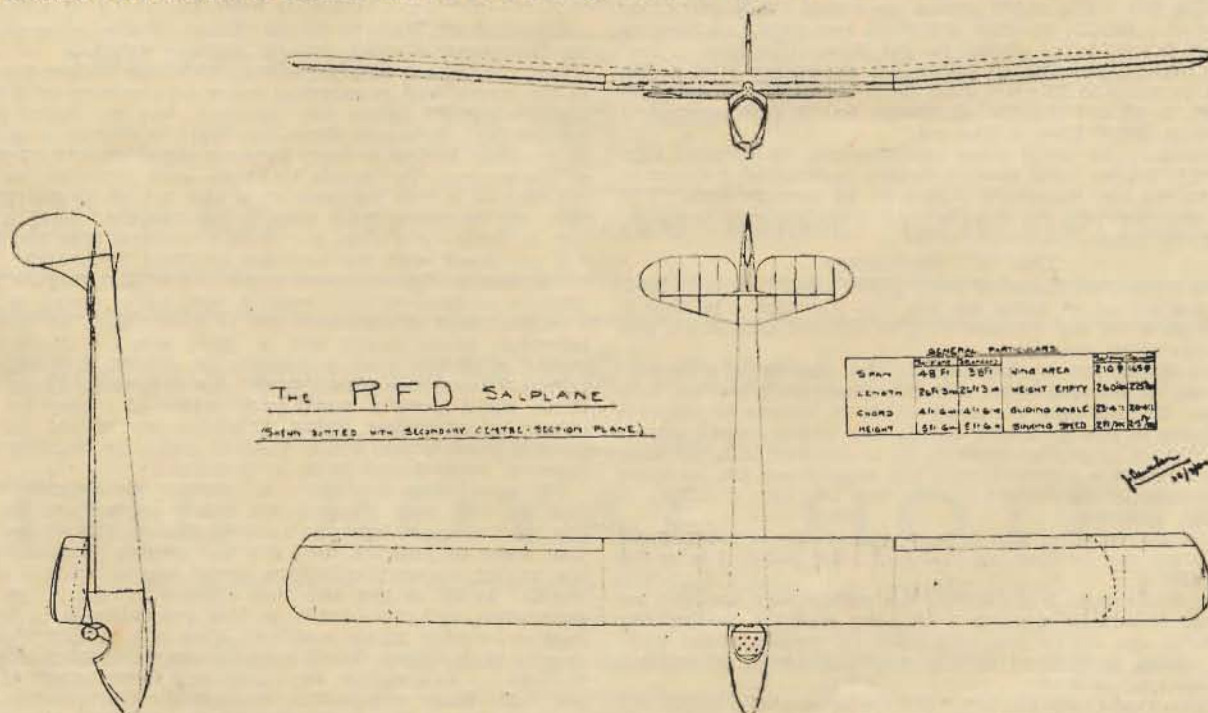
AND NOW NEW ZEALAND.

A Gliding Club has been formed in Wanganui, New Zealand, so here is another chance for our active manufacturers, the name of the secretary is Mr. U. B. Haworth.

TOWED FLIGHT.

According to *The Times*, Herr Starck flew in a glider from the Darmstadt aerodrome to the Frankfurt aerodrome and back on Mar. 19 and Mar. 20 respectively in about two hours each way. (The distance between the two places is about 15 miles.) The glider was on each occasion taken in tow by a motor-driven aeroplane owned by the Rhön-Rossitten Gesellschaft up to 8,000 ft. or 10,000 ft. before being released.

Some form of rocket launching apparatus should be cheaper than an aeroplane. After all, if one has to tow the glider to the requisite height by an aeroplane, one might as well fly all the way. We suspect, however, the real object of this flight was scientific investigation.



A line drawing of the R.F.D. sailplane, of which various pictures have already been published.

TRAINING THE "AB INITIO"—II.

BY GRAHAM HUMBY.

(Continued from page 224, Vol I, No. 28.)

We will assume that the *ab initio* has now obtained his "A" Certificate, which sounds to be more of a feat than it is in reality. Actually the only qualification which its owner possesses is his ability to glide in a straight line for 30 seconds in a steady breeze of at most 10 m.p.h.

In one or two cases the possession of an "A" Certificate has simply meant the ability to hold the control-column perfectly still through the entire flight. The beginner who "over-corrects" invariably makes more progress than he who sits "clam-like." The latter obviously has not the feel of the machine and experiences more difficulty when coming to banked turns and coping with gusts of wind.

The instructor must be certain in his own mind that his pupil is a genuine "A" pilot, otherwise he must keep his weather eye open and not allow the pupil to bank until the latter has shown proof of his ability to sense the feel of his machine more fully. Some *ab initio* "A" pilots do not realise whether they are nosing the machine up or down when they are banking. Many are unable to explain how they keep their machines at the most efficient angle. Instinct and the wind in one's face are all right after long experience, but the way to get the best out of one's machine is to train oneself to listen to the sound of the wind in the rigging wires when gliding at the proper angle.

TURNS.

When the pupil is thoroughly at home in straight flying he must be started on turns. These form an important part of the training for the "B" Certificate tests. Turns must be attempted on a fairly quiet day when there are no bumps with which to contend.

The pupil must, after flying his machine at its most efficient gliding angle, nose it slightly downwards in order to make certain that it possesses enough speed to be banked with safety. Those pupils to whom banking does not come naturally must keep the stick in the same fore and aft position as for gliding in a straight line, but it should be eased to the right or left at right angles to the skid, taking care not to pull it backwards or push it forwards. Before the bank is put on it is better to press the rudder slightly.

A turn must never be attempted during this period of training until the machine is well away from the hill or there is a danger of the pupil losing his head for the moment, putting on too great a bank and so diving into the hillside, besides if he starts to turn back too soon there is the lift from the wind to cope with as well.

There are two schools of thought which debate the proper height at which one should learn to turn. My own opinion is that of the school which says that the pupil should be launched fairly low and slightly out of wind so that a small turn will bring him into wind for landing. Should he lose control of his machine he will come to less harm because he is flying low. The other school says that turns should be made at a height so that the pupil has plenty of time to correct his mistakes should he get into difficulties.

My experience with *ab initios* has shown me that if the pupil is going to lose his head he is certainly not going to regain it at any height at which he may be,—surely a bruise is better than a fracture.

Gradually the pupil must be launched from places successively higher until enough height is obtained for him to try for his two qualifying flights of 45 seconds each. The final test for the "B" is a flight of one minute with a complete "S" turn.

THE "C" CERTIFICATE.

Now comes the dream of every glider pilot. As yet I have not trained an *ab initio* for his "C" Certificate so that I, as an *ab initio*, will recount some of my own difficulties, and theories about soaring.

The first point to consider is the structural difference between a training type and the elementary soaring machine. By this time the pupil will have become accustomed to sitting in the open with hardly any visible means of support, but in a soaring machine he is enclosed in a fuselage. Here he is more sheltered from the wind; there are no flying wires to help with their sound; and the line of sight is slightly obstructed.

To a power pilot this type of a machine is much more like home and he does not realise the big jump it is to the *ab initio*.

For this reason I think that the preliminary training for soaring should be done in a training machine so that the *ab initio* can realise the rudiments of soaring flight without having to contend at the same time with an entirely strange type of craft.

While qualifying for his "B" Certificate the pupil will have experienced the uplift from the hillside, but now he must learn to turn within the narrow limits of this rising belt of air. Provided that he has obtained from such a

turn sufficient height he must carry on parallel to the crest. If he finds that he is losing height, however, he must immediately turn away from the hill.

I do not advise anyone to make a full turn on his first soaring flight and endeavour to come back. A half-turn at the end of the ridge and a glide down is quite enough. After a few such flights the more advanced machine should be brought out and the pupil made well acquainted with its fundamental points of difference before making his more serious attempts at real soaring flight.

SOARING.

At this stage a breeze of about 15 m.p.h. blowing up an appropriately contoured hill is ample. Herr Kronfeld with his big span machine says the sailplane should be launched out of wind and a good way back from the slope of the hill and that the take-off together with the subsequent turn should be made almost parallel to the ground. I believe myself that small machines such as Daglings and Pruffings should be launched much closer the slope. The rudder and stick should be banged over in a climbing turn directly the rope leaves the machine. Thereby as much height as possible can be gained as well as a turn while the machine still possesses the energy imparted to it by the rope.

The pilot must learn to take advantage of, and select, the best of the upward gusts in which to turn, as he is bound to lose height in so doing. He must describe a course back slightly to the right over the hill before a left-hand turn and vice versa so that half of the turn is made before he comes over the brow of the hill into the up-current. If he does not and the band of rising air is too narrow he may not be able to turn with a sufficiently small radius to stay within the up-current. It is this need to be able to make turns of small radius which makes training machines unsuitable for more than the very earliest stages of soaring training.

One of the best ways to turn without losing much height is to quite neglect the rudder and bank with a little elevator. A fairly safe rule for the pilot to follow on soaring turns is never to attempt to double back on his course unless he is at such a height that he can make a slight turn back over the hill before making a full turn the other way.

IS HE THE ONLY ONE?

Flt. Lt. W. H. Wood (R.N. ret'd.), of Hove, believes that he is the only holder, in England, at any rate, of all four F.A.I. Certificates, i.e., those for Balloons, Airships, Aeroplanes and Gliders. Captain F. L. M. Boothby, R.N., who is now training with the I.O.W. Club for his gliding Certificate, already holds the other three F.A.I. Certificates, so it looks as though Mr. Wood will not be alone in his glory for long.

ASKING FOR IT.

Speaking on Mar. 17 in the House of Commons on the Air Estimates, Captain Harold Balfour said:—

"... I repeat as regards civil aviation, we are starting at the wrong end in carrying passengers instead of freight. Light aeroplane clubs are excellent, but we ought to go beyond light aeroplane clubs—we ought to start with gliding. If we could in this country increase the democratic interest of the mass of the people in flying—and, after all, we cannot impose a new industry or a new art on people unless they are receptive, and wish to receive that new art or new industry—if we can get them interested, then the thing will go ahead with the national goodwill behind it.

"A light aeroplane is very much out of the reach of most average citizens of this country, and even joining a light aeroplane club is somewhat out of their reach, but modern motorless flying is not out of their reach. Germany, I think, gave last year a subsidy of £16,000 for motorless flying; France has given £26,000 for motorless flying; and if we could spare a small contribution of money for this system of motorless flying, I believe we should lay the foundations, on the widest possible basis, for building up a national interest and pride in aviation.

"In every new age there is one new development. We had the iron ship, we had the steam engine, and we had the internal combustion automobile engine, though we gave that away to America. We are the leading shipbuilders of the world; we are the leading steam engine builders of the world. There is just one new chance in every age and generation, and our chance in this generation is to be the leading country in air matters. This is a matter which is so vital that I trust it will never become a counter of party politics. It is a matter for which any Government of any party is vitally responsible, because the Government have in their power the furthering of the greatest gift which this House can give, and that is the gift of development and progress to future generations."

DICKSON GLIDERS AND SAILPLANES

are teaching the World to fly.

£45 to £210

Aircraft Materials and
Workmanship throughout.

The CLOUDCRAFT GLIDER Co.
Osborne Road, Southampton.

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.

HANGARS For SAILPLANES and GLIDERS

(AS SUPPLIED TO THE LONDON GLIDING CLUB)

In complete sections for Size 50' x 30' x 8': **£87:13:0**
easy erection or removal. Any size to order.

G. ELLIS & CO., GAINSBOROUGH ROAD,
HACKNEY WICK, LONDON, E.9.
Telephone: Amherst. 1091 (4 lines).

JUST PUBLISHED

THE A.B.C. OF GLIDING AND SAILFLYING

By

MAJOR VICTOR W. PAGÉ

Author of "Modern Aviation Engines," etc.

This book has been prepared to meet the demand for a simple and practical treatise on modern Gliding. The leading types of gliders and sailplanes and their construction, control and launching are described. Instructions are given for building a strong yet simple, primary glider, including working drawings.

CONTENTS: History of Early Glider Development—Causes and Nature of Air Currents—Principles of Gliding—A Study of Soaring Birds—Influence of Bird Flight on Glider Development—Sailflying and Typical Soaring Planes—How to Form a Gliding Club—Description of Modern Gliders and Sailplanes—Gliding and Soaring Terrain—Training Glider and Sailplane Pilots—Some Detail of German Sailplane Construction—Materials Used in Glider Construction; Details of Training Glider Construction—Building the Dickson Training Glider.

310 pages, illustrated, 10/6 net; postage 9d.

CHAPMAN & HALL, LTD.

11 Henrietta Street, London, W.C.2.

THE R.F.D. SAILPLANE,

The **FIRST BRITISH** Sailplane, has proved highly
SUCCESSFUL.

THE ONLY BRITISH "C" CERTIFICATE MACHINE

If you want your "C"

Use an "R.F.D."

THE R.F.D. CO., 17 Stoke Road, GUILDFORD

When you come to **SCARBOROUGH** this 1931
arrange to stay at

THE ROYAL HOTEL

Headquarters of the Scarborough Gliding Club. On the sea front.

The Gliding World of Europe will be there this year. Book now for June.

Accommodation 300. Hot and cold water. Terms from 15/- incs. Magnificent Ballroom.

CORRESPONDENCE.

Prohibition!!!

Sir,—May I extend my congratulations on the wisdom and foresight shown by *The British Gliding Association* in its new plan to make towed flight popular by forbidding it.

We solved the drinking problem here in the States in the same way. What with soda fountains, soft drinks and a growing public opinion the fine art of drinking, ten years ago, had practically become a lost art, practised seriously by only a few confirmed toppers. Millions of Americans, to paraphrase the story of the new Pharaoh, "knew not alcohol."

In that emergency the all-wise farmers and politicians, in Congress assembled, prohibited alcoholic drinks. To-day, but ten years after, even the school children have their speakeasies—in fact, four, operated for children between the ages of 12 and 16, have been raided within the last four weeks in this city of Chicago alone.

Of course, under the B.G.A.'s new plan, you may have to issue a bootleg edition of *THE SAILPLANE* containing towed flight information for scofflaws alone, but you, no doubt, will be willing to make that sacrifice.

And to help the good cause along I beg leave to offer, through your columns, a prize of a copy of the biography of my fellow-townsmen, Al Capone, entitled "On the Spot," for the best duration record made in a bootlegged towed flight prior to July 1st, of this year. And for the second best duration mark I will give an autographed copy of my own private recipe for synthetic gin.

(Signed) JAY EARLE MILLER.

One writes from America.

Sir,—Auto-towing of Gliders in the United States is rapidly becoming the only method used for training purposes. At the North Beach Airport in New York City the Bowlus-Hirth Institute of Soaring use the Auto-tow method for the training of students and later send them to the soaring terrain which is located at Mount Peter, Warwick, New York. I have seen several boys 13 and 14 years old, who have never been in an airplane in their lives before, flying for the first time using the auto-tow method. For this work the Franklin utility gliders are used.

You may be interested in knowing that on Feb. 22, Herr Wolf Hirth and the American Pilot Jack O'meara, soared for four hours and fifteen minutes and four hours and five minutes respectively, at the Mount Peter location. This was their first attempt to try out this terrain and proves that we have the most ideal conditions in this country. Hirth used his German Kegel sailplane, whereas O'meara used a Franklin Utility Glider.

Herr Wolf Hirth will leave for Germany on Mar. 15, after which we all look forward to his returning to this country for the next National Soaring contests.

(Signed) THOMAS L. BULGER.

Auto-towed Gliding.

Sir,—I feel compelled—though quite voluntarily—to give my humble testimony in favour of what is known as auto-towed Gliding.

By chance I arrived in Blackpool this week-end (Mar. 14-15), and on going to the Municipal Aerodrome to see my old friends, I was delighted to see a Glider in the hangar. I was informed that it was known as a B.A.C.6, and was being demonstrated by Mr. C. H. Lowe-Wylde, using the auto-towing method of launching.

I was interested, and was introduced to Mr. Lowe-Wylde, and persuaded him to give me a little instruction.

The result amazed me, as, I imagine, it will amaze anybody who has not either tried or seen the auto-towing method of launching.

Here I must emphasise that not only had I never operated a glider, but that I had never even seen a motorless aircraft of any sort, and yet, by simply following Mr. Lowe-Wylde's simple instructions, I qualified for my "A" Gliding Certificate, and even made a couple of glides of about a minute's duration each, including turns both left and right, within an hour of having first set eyes on the machine. In fairness I suppose I ought to state that I hold a pilot's "A" licence for power-craft, but am quite a mediocre performer in that sphere.

As far as the actual craft is concerned, the points that struck me most were, first the extraordinary degree of controllability, not only when airborne, but when being towed prior to attaining air speed; second, the robustness of the craft, and the ease and speed with which small damaged parts are replaced, thus keeping the craft serviceable for the longest possible space of time.

But I feel that with all the good points the actual craft possesses—the lesson that cannot fail to be learned from this my most pleasant experience is that in "auto-towing" a method of getting would-be gliders right ahead has been discovered, and that the old methods, which necessitated literally hours of hauling the glider up hills for each few seconds' glide, must now definitely be considered as out of date.

I pronounce gliding the most pleasant sensation I have ever known, and say emphatically to all who wish seriously to "glide"—instead of look on—take up the auto-towed method without delay.

(Signed) E. W. STEWART.

THE BLUE RIBAND OF GLIDING.

The R.R.G. has issued a Gliders' "C" badge with a silver crest. The badge, according to *Flugsport*, will be granted to those gliding pilots who attain a height of 1,000 metres (3,280 ft.) above the starting point in a glider, and also make a long-distance flight of 50 km. (30 miles) in a straight line, and a duration flight of at least five hours.

The duration flight may not be combined with the distance flight; on the other hand, the altitude flight can be combined with one of the other flights. The flights must be authenticated by the proper sporting authorities.

The first German pilots to receive the special badge will be Robert Kronfeld and Wolf Hirth.

This badge will be really worth getting. It does not seem too much to hope that some of our own pilots will qualify even if the badge remains solely a R.R.G. institution and is not taken up by the F.A.I.—A. E. S.

GLIDING, 1931

2/9 Post Free, or through
your Club Secretary 2/6

THE DORSET GLIDING CLUB
10 Victoria Street, Weymouth.

Still Another Development of B.A.C. Ltd.

"We've Become Revivalists"!!!

Club Secretaries are invited to write for particulars
of our scheme for assisting them to obtain new
members and more funds.

B.A.C. LTD., Lower Stone Street, Maidstone, KENT.

Telephone: MAIDSTONE 4111.

Managing Director: Mr. C. H. LOWE-WYLDE, A.R.Ae.S.

NEWS FROM THE CLUBS.

THE BEDFORD GLIDING AND FLYING CLUB.

All arrangements have now been completed for gliding during Easter and special attention is drawn to the fact that we shall be operating on an entirely new ground on Woolley Hill, which is on the Huntingdon-Thrapston road, the actual site being between Spaldwick and Ellington.

Weather permitting, gliding will continue on Friday, Saturday, Sunday and Monday, and if the site proves to be as good for soaring as it looks, this will become the Club's future permanent training centre.

A large attendance of members and friends is expected and visitors can be assured of some really interesting work. After the Easter holiday we shall report fully on the tests and the future possibilities.

THE CHANNEL GLIDING CLUB.

A Chinaman describing tobogganing said, "Walkee muchee way up big hillie, long time. Whizzee down hillie, little time. Walkee long way up hillie again, muchee hard work. Damm silly."

This aptly describes the activities of the Channel Club on Sunday last. With the principle of "try anything once" fixed in the minds of a few members, we hied ourselves to Postling. There we found a short range of hills with a south-west aspect, an altitude of approximately 125 feet, the dickens of a gradient, a belt of trees half-way down the slope, and a field full of sheep at the bottom. The approach was well strewn with hedges and fences, water courses and rabbit holes.

This was "The Prince of Sites" to which reference has been made before. Throw in an easterly wind of about 25 miles per hour and you, dear reader, will understand, quite readily, the day's enjoyment. Sundry mishaps such as lost control wires dropped on the way delayed the rigging crew somewhat, but at last all was ready. Climbing upwards, sliding backwards, struggling every inch of the way, we hauled and pushed the R.F.D. to the top of the hill.

One of the members sat on the seat of the glider, took the joystick and his courage in both hands and was launched over the brow. As he was one of the dauntless spirits responsible for this visit and its resultant work, this, to my mind, seemed fit and proper. He made a good flight and landed in 25 secs. It really was a splendid attempt considering the conditions. He stated that varying winds made things rather bumpy but that he had enjoyed the flight.

Again the fatigue squad "did their stuff." It took exactly 50 minutes to get the glider back to the top of the hill. So you will see that comparing the work entailed with the length of the glide it works out at a ratio of 120 to 1. This time one of the Club's instructors made a flight. He did it in 19 seconds. The idea apparently was to get down quickly in order to increase the ratio.

This was going up so rapidly that a few members of the by now fatigued squad were muttering dire threats of going on strike. Anyhow, common sense and tired muscles decided that we should glide from the top of a gentle slope down the aforementioned sheep-strewn field. In this manner the afternoon, or rather what was left of it, was spent pleasantly. A spot landing competition added to the enjoyment and closed the session. My only hope is that no one ever mentions Ben Nevis to certain members of the C.G.C. or of a certainty we "shall try it out."—L. H. H.

[Then application of a little more common sense would have suggested the use of a motor-car and pulley. The device which every intelligent Club is now using with consequently improved ratio of gliding time to recovery time.—Ed.]

THE FURNESS GLIDING CLUB.

Lack of favourable weather, and latterly the loss of our training site, has prevented this club from featuring in the news columns of late.

We have been fortunate enough to secure a site for operations this coming week-end, when we hope to put in some concentrated training, and arrangements are in hand for an extended lease of the same.

A constructional section of the Club has been formed, and a trailer built for the transport of our machine. Although not completely

finished, the trailer gave every satisfaction when called on to assist in the removal to our new training site.

With the approach of the long evenings, and as our new site is only 2 miles out of town, we hope to have no lack of attendance at future meetings.

Members from this Club visited Blackpool on Mar. 15, to witness the Auto-Towing Demonstration arranged by the National Flying Services, arriving just in time to see Mr. Lowe-Wylde, of the British Aircraft Co., take off from the roadway and alight on the aerodrome—a neat piece of work. Quite a number of instructive flights were given, impressive of the safety of this method of instruction, in capable hands, and of which film records were secured.

THE IMPERIAL COLLEGE GLIDING CLUB.

On Sunday, Mar. 23, we were the guests of the Sailplane Club at Smallhole. The Dagling, and ten members, travelled down the previous evening, and three more men turned up in the morning. We started flying at an early hour. The wind was in a direction unfavourable for flying from the top of the hill, but we made a number of short flights at the bottom of the basin. By the irony of fate our Sailplane friends arrived just in time to see the least impressive flip of the morning—one of our members will not forget the safety belt in future.

About midday, on the advice of our hosts, we moved to a field near the top of the down, and were well rewarded for the effort. During the afternoon further successful flights were made in a S.W. wind of 6-8 m.p.h. The longest flight, by our "flyweight" Technical Secretary, Mr. J. B. C. Keeble, being timed at 24 seconds. A few yards away the new R.F.D. sailplane reposed on its trailer, waiting in vain for a favourable wind for soaring. It was a most enjoyable day for us, and we thank the Sailplane Club for its hospitality. The new hangar, which they have recently built, looks a most serviceable building, and we were glad to see they were flying again. Good luck, Sailplane Club!

The next day, by the kind invitation of Mr. A. York Bramble, we used the ground (or rather, a small part of the ground) of the Southern Soarers' Club, near Rottingdean. Mr. York Bramble, piloting us to the ground in the morning, led us straight to the very site for which we had been wishing; a shallow horse-shoe valley facing S.W., with a wonderful surface, and no obstacles worth mentioning. As we assembled the glider the morning mist lifted and we saw all around what must be the finest soaring ground in England—and our little bit of it "the glider's paradise." During the morning the more experienced members made practice flights with a very gentle breeze blowing up the valley. A new Club record flight of 56 seconds was made by Mr. Keeble. The less experienced members toiled manfully to launch and retrieve the glider, in return for short flips from lower down the slope.

In the afternoon Mr. York Bramble very kindly came over again from Brighton to do some official timing. The wind had dropped by this time, and, in a dead calm, five "A" certificate flights were made in 1½ hours by Messrs. P. Adorjan (32 seconds), G. H. Jackson (31 seconds), J. B. E. Keeble (45 seconds), G. Kouried (36 seconds), and J. H. Payne (35 seconds). Messrs. Adorjan and Jackson, our hon. instructors, had done some previous gliding in Germany. Mr. Kouried, an associate member who has flown with the Auxiliary Air Force, has done all gliding with this Club. Messrs. Keeble and Payne have been trained with the Club in nine weeks' *ad initio*.

Our thanks to Mr. York Bramble for letting us use the ground are coupled with congratulations on its excellence. The Southern Soarers should have a great future.

Having brought an enjoyable trip to a successful end, we reluctantly bade farewell to the South Downs. At nine o'clock we started back for London, towing the glider, and arrived shortly after midnight. Another event has become a pleasant memory.

THE LEEDS GLIDING CLUB.

During the last three or four weeks we have been looking for a new site, having been stopped, along with two other unfortunate Clubs, using the Warfedale site.



HOW HUDDERSFIELD GO TO WORK.—The Dickson glider of the Huddersfield Club on its trailer ready for towing to the ground at Flouch.

On Sunday last, Mar. 29, we took Reynard II to Bardsey, where some 40 flights were made. The wind was nasty, and, although there were a few bad landings, no damage was done. Mr. Waplington, of the B.G.A., paid us a very welcome visit. Mr. Thompson made some very good flights, but, owing to the direction of the wind flights had to be very short.

Much progress has been made in the workshop, where we are building new wings, etc., for Reynard I. The Dinner Dance held on Mar. 13, proved very successful. This is the second successful dance we have held this year.

THE MANCHESTER R.Ae.S. GLIDING SECTION.

On Mar. 29 members of the Club attended the Gliding Demonstration by Herr Magersuppe at Rivington Pike, organised by the Bolton Gliding Club.

Many motorists experienced an exciting time in reaching the site for the demonstration, but judging from the comments of the large crowd present everyone thoroughly enjoyed the fine show put up by Herr Magersuppe.

Great interest was taken by passengers, who accompanied him in his two-seater sailplane.—G. M.

THE NORTH COTSWOLD GLIDING CLUB.

A soaring site has been found close to the tuition area which is used by the North Cotswold Gliding Club and this has been approved by Herr Krause, who is a competent German soaring pilot, who has been selected upon the recommendation of our good friend, Herr Kronfeld. Arrangements have been made for Herr Krause to give demonstrations of soaring in a "Westpreussen" and also a "Falke" during the week-end, May 9-10.

THE NORTH KENT GLIDING CLUB.

Our "Slow and Sure" policy is progressing steadily. Some six members have completed their ten slides, have been shot into the air again, and have achieved good flights with moderately good landings. The complete absence of crashes has been greatly appreciated by our Hon. Treasurer.

On Sunday, Mar. 22, we took delivery of our new Dickson Primary machine, and we were very pleased to welcome two visitors.—Messrs. Woodley and Brooks, of the Southampton Club. Mr. Woodley came up to demonstrate the Dickson. Just before he was going to fly he went under a wing to examine a flying wire and unfortunately managed to cut his head very badly on a stray wire-end. We endeavoured to persuade him to postpone his flight, but he insisted upon flying, and we were very thrilled to watch him throwing the Dickson about in the air, wearing a temporary bandage rakishly over one eye, and with "gore" streaming down his face! After lunch he made two of the cleanest flights we have seen on our B.A.C.3. We offer our apologies to the Southampton Club for returning Mr. Woodley in bandages, but congratulate the Club upon having an excellent, sporting instructor.

Later in the day several of the members took their turn on the new machine, but unfortunately the wind had completely dropped, and with the exception of that of our heavy-weight, no good flights were made.

At Joyce Green Aerodrome during the week-end, Mar 28-29, a large number of really enthusiastic members turned up for instruction and although winds were rather high and gusty, some good work was put in.

On Saturday afternoon a new ground training device was tried out and found to be very effective.

The "gadget" is simply a large hardwood ball and socket with a clamping device for fixing to the skid at the "point of balance." The machine is put into the wind when the pilot is required to balance the machine, using all controls. Our B.A.C. behaved very well indeed thus mounted and excellent practice was obtained. We should be very pleased to send further particulars to any clubs interested.

Our Dickson proved its robustness when it was "pancaked" from about 14 ft. by one of our lightweights, and only suffered from stretched landing wires which was soon rectified.

On Sunday we suffered a rather regrettable accident. We have been using for some considerable time a length of hemp rope attached to the launching rope at each end, so that the whole length of the latter is effectively employed to store up the energy of the launching crew. One of the knots slipped, allowing the elastic rope to fly back and injure the pilot waiting to take off; this necessitated his removal to hospital. We understand that the injury is not serious, but might easily have been so.

Other clubs using similar methods or in any way attaching hemp rope to the elastic would be well advised to watch their knots very carefully. We should be glad to hear if anyone has found a satisfactory method of attaching either "eyes" to the elastic rope or alternatively joining hemp and elastic ropes. As a direct result of our accident we are trying out at our next meeting a single length of hemp rope from the apex of the launching rope to the hook on the glider; this, we hope, in the event of a breakage or a slipped knot will prevent the elastic reaching the machine.

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

The Club opened its 1931 flying activities and incidentally its new hangar on Sunday at Smallhole, when members rolled up in full strength. After their long period of inactivity and in view of the

presence of some newer members the older pilots agreed to make it a day of short and frequent hops on a gentle slope to get used to the feel of the controls again. By this means all members managed to get in three flights each in the afternoon, the morning being spent in re-ensembling and cleaning-up the training machine.

Notably good first flights were made by beginners who had been trained on the Sailplane Club's own system of wind-balancing. In particular Miss Mary Knightly, the Club's first lady pilot, who took off, reached an altitude of about 20 feet and made a good landing. Mr. Cecil Compton-Paterson, the Club's popular instructor, was in attendance.

A soaring demonstration which was to have been made at Smallhole had to be postponed because there was not enough wind.

Flying will take place every Sunday, weather permitting, from now onwards. The best way to Smallhole by road from London is via Horsham and Henfield and thence on the Shoreham road. Flying members for 1931 are being enrolled at £3 3s. a year inclusive of training and use of machines. £1 ls. for ground and technical members.

Another dance is being held at Suffolk Galleries on Saturday, April 25, and tickets may be booked from Hon. Sec., E. G. Smettem, 2, Wine Office Court, Fleet Street, London, E.C.4.

SOUTHERN SOARERS' CLUB.

This Club, which is the flying branch of the Southern Gliders' Social Club, having made a good start, is maintaining very good going. Last week Mr. Lowe-Wylde, in his latest type of auto-tow sailplane, succeeded in soaring in almost still air for nearly five minutes, from a release-point some 300 feet above ground level. [You cannot soar in "still air." A definite upward component of about 3 ft. per sec. is the minimum needed. Where did the machine land—above or below its start point?—Ed.] Both he and another member of this Club enjoyed a day's soaring over the southern end of our Flight Secretary's soaring site, and confirmed the already-expressed opinion of several experienced pilots that this is one of the finest soaring sites in the Kingdom.

Again, on Monday last, a large contingent of the Imperial College Club visited us and are to be congratulated upon securing a batch of five "A" tickets. This makes a total of six Gliding Certificates gained for the Southern Soarers' Club in the last fortnight. By the way, is the fact of five "A's" in one day a record?

Next week a soaring machine, privately owned by one of our members, is attempting a record. The unanimous good wishes of the Club are with him for his attempt.

Over the Easter week-end Mr. Lowe-Wylde will be demonstrating auto-towing; and it is probable that Mr. Dagnall will be flying his new sailplane.

We are pleased to be able to record that our membership is now nearly 150, and that members are affiliated from the following clubs:—London, Surrey, Channel, Southdown, Imperial College, and Kent.

Our next monthly social takes place at Club Headquarters on Saturday, April 4, at 8 p.m. Members of all B.G.A. affiliated Clubs are welcome.

Full particulars as to the use of our Flight Secretary's ground may be obtained from him at Headquarters, The New Yorke Hotel, Bedford Square, Brighton.—F. W.

THE SOUTHBEND GLIDING CLUB.

A Gliding Club for Southend-on-Sea and district has now been formed, with a membership of twenty.

A start is to be made immediately with the construction of a primary machine, and in this connection it may be mentioned that they are fortunate in having amongst their number a professional constructor, a rigger and pilot.

Gliding enthusiasts within reasonable distance of Southend-on-Sea are invited to communicate with the Hon. Sec., 43, Northview Drive, Westcliff-on-Sea.

THE SURREY GLIDING CLUB.

Flying Meetings recently have not been so well attended as they might have been, but no doubt this is due to the cold weather. Despite the smaller attendance, there has been very good flying and a large number of flights, both on the Club's Dabling and Puffling. Incidentally these flights have been obtained with little fatigue to members, as the mechanical horse constructed by two enthusiasts simply returns machines to the starting point while you wait, this mechanical horse being an air-cooled engine employing friction drive to a winch to which is attached approx. 500 yds. cable. When working happily, it is so geared that the machine travels at walking pace, a man on each wing tip is all that is needed to steady the machine. This has proved satisfactory for its job, and at the moment it is undergoing further improvements.

A new release gear produced by another enthusiastic member has been tried out and proves entirely satisfactory. This is a much lighter built release gear than that used by the Club for some time, its chief advantage being that it does not require so large a pressure to release; this gear can also be operated from the wing tip as before.

Our next insertion in THE SAILPLANE will be brief details of the Annual General Meeting when we hope to disclose a very successful first year's working.

"THE SAILPLANE" IS PUBLISHED EVERY FRIDAY. ANNUAL SUBSCRIPTION 15/- ORDER FROM 175, PICCADILLY, W.1.

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 Regent 1918; Advertising: Regent 5373; Publishing: Central 5822.