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THE SAILPLANE AND GLIDER

Price 3d.

MARCH 16, 1930.



The first meeting of The London Club at Guildford. The very first R.F.D. is in the foreground.

ON THESE THREE.....

There are three things upon which we must build. On the soundness of our early building will depend the strength of the Movement in the future, the strongest tower will topple if based on sand or clay and elegancies of design or fabrication avail not at all if the foundations be not secure. These three things are: the study of the air conditions, or the Science of Meteorology; sound instruction; and the proper maintenance of our motorless aircraft. Without the first we are like sailors who would make a difficult passage without obtaining beforehand knowledge of currents and tides; without the second we should be taking unwarranted risks with consequent waste of individual effort and equipment; neglect the last and the reputation of Clubs will become so unsound that they will perish from inanition.

In our next issue we shall include a précis of Captain Entwistle's lecture on Meteorology before *The Royal Aeronautical Society* and *The British Gliding Association*. We hope also to describe for the first time the plans which are afoot for meteorological aids to the Movement from Captain Entwistle's department. These aids will help the Clubs to help first themselves and then the meteorologists

In this issue we begin the series of articles by Mr. Graham Humby which are unique in that they are written by an English *ab initio* instructor for the *ab initio* would-be pilot. We feel that although there are other pilots better known, whose performances are more outstanding, whose experiences are more extensive in time and scope, yet Mr. Humby has the advantage of being able to appreciate most fully the feelings of the *ab initio*.

He would be the first to admit that what he has written is

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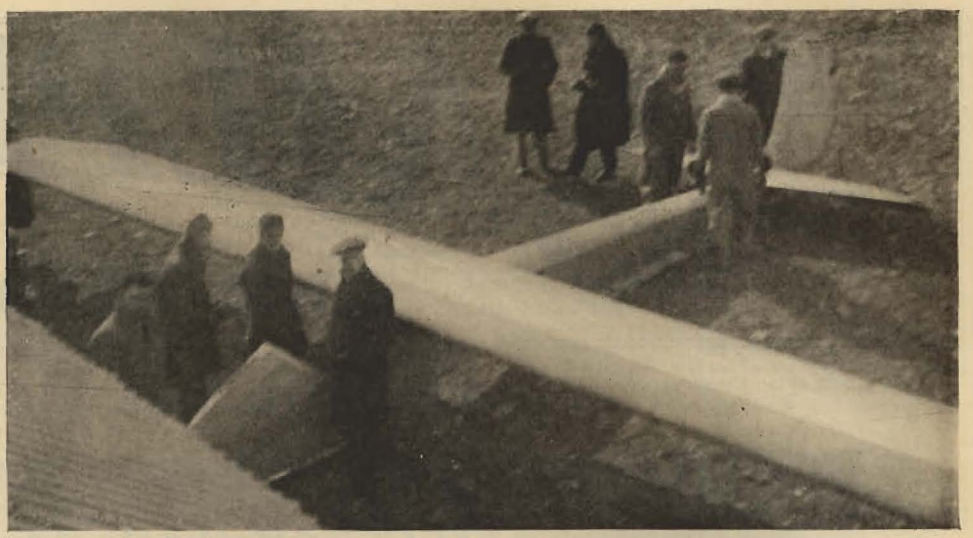
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open to criticism and enlargement. So be it. If every instructor will write and tell us how his methods differ from, or how his experiences confirm, Mr. Humby's notes we shall collect a pile of valuable data. Perhaps we may look forward to the day when this could be issued as a manual of instruction for the guidance of Clubs throughout the country.

We also begin an article by Mr. V. S. Gaunt. It had been our intention to make this as complete as possible by adding thereto any official recommendations from *The British Gliding Association*, but the Secretary informs us that none are available. Mr. Gaunt covers a wide range and if every Club would see that their acting engineer draws up a schedule of routine inspection, aided by Mr. Gaunt's articles herein, and in *Gliding*, together with the pertinent extracts from A.P.1208, the bugbear of structural failure in the air will cease to occupy such a prominent place in the editorial nightmares.



A bad picture of the new R.F.D. machine with the short centre-section in use. The wing area is then equivalent to that of a Prufling.

A VERY PRESENT HELP.

Captain Geoffrey de Havilland, whose name to-day is synonymous with all that is latest and best in the world of light aeroplanes, is a pioneer of aviation. Perhaps his experiences have made him appreciate the difficulties that beset pioneering movements. He has at any rate given fifty pounds in reply to the appeal for funds which Mr. Gordon England recently launched on behalf of *The Gliding Association*. This is an example which the aviation industry as a whole might do well to follow, seeing the indirect publicity value of motorless flying to the established branch of aviation, and seeing the fresh blood which the Movement is likely to attract to Aviation as a whole.

FORTHCOMING DEMONSTRATIONS OF AUTO-TOWING.

Mr. Lowe-Wylde, his hard-working associates and his B.A.C. gliders, will be demonstrating at Tollerton on Mar. 21 and 22. This aerodrome is the headquarters of The Nottingham Flying Club and is close to Nottingham.

On Mar. 28 and 29 the demonstrators will be at Woodley, Reading, which is the headquarters of the Berks, Bucks and Oxon Aero Club. In case there are a few people who are not aware of the invitation we will again draw attention to the fact that National Flying Services Ltd. are extending a warm welcome to all motorless flight enthusiasts on these occasions. Indeed National Flying Services are endeavouring to evolve schemes whereby auto-towing facilities can be made available to local Clubs. They will always welcome discussion on this point.

AUTO-TOWING WITHOUT AUTOS.

In 1905 experiments were being made to tow man-lifting kites into the air on calmish days behind horses. That these experiments were successful was lately disclosed by Colonel Broke Smith, who 26 years ago had a limber-winch-wagon and a specially-trained eight-horse team. This walked, trotted, cantered, and galloped across the Long Valley at Aldershot to get the kites up, and reversed the process to let them down.

With a cable 4,000 ft. long Colonel Broke Smith got up to about 1,500 ft. and was lucky enough, as he puts it, to get down without a bump. A 40 m.p.h. wind was preferable and in this one could obtain considerable heights, but Colonel Broke Smith says the kites were too flimsy and the whole procedure was too acrobatic to give really practical results.

Colonel The Master of Sempill, to whom we are indebted for this information, tells us that he is asking Colonel Broke Smith to Hanworth and hopes that he will then recount more of his early experiences of this prototype of auto-towing.



A glider-cum-outboard motor-boat. An American device which might have possibilities for tuition.
—(Courtesy Vacuum Oil Co.)

THE VERDICT AT HARPENDEN.

On Thursday, Mar. 12, at the inquest at Harpenden on the body of Thomas Eaton Lander, who died from a fractured skull as a result of the accident described in THE SAILPLANE for Mar. 13, the jury brought in a verdict of "Death from misadventure." With this we must all find ourselves in agreement.

It would probably be a good thing for readers to refer again to last week's SAILPLANE and re-read the account of the crash. It will then be quite clear to them that the cause of the accident was an incomplete understanding of the forces involved, and that the effect of the extremely small empty weight of *The Scud* had been neglected.

But let us all remember that the accident was not due to auto-towing. It happened during the course of individual experiments which were directed towards the perfection of a simple and effective launching device or catapult, a mechanism we are all likely to want in the near future, unless Mr. Howard Flanders can develop his slow burning rocket, the potentialities of which he described so ably last week.

THE INQUEST.

The inquest proceedings were watched by Mr. L. A. Wingfield (solicitor) on behalf of *The British Gliding Association Council*, of which he is a member, and other members of the Association present were Mr. E. C. Gordon England (Chairman), and Captain L. Needham, Chairman of the Technical Committee of the Association. Mr. T. Ottaway was the Coroner, and Mr. F. N. Gingell was foreman of the jury.

The Coroner, in his summing-up, said it appeared that the whole of the difficulties had arisen through someone not going deeply enough into the question of velocity. That gathering of young men, enthusiasts in what he would call a new science, although not so well equipped, technically, as some of the witnesses present, had been trying out some new methods of launching. Though it was unfortunate for those who were closely affected by the accident, one felt that, in the march of progress and science, a life had not been given in vain, if progress had been advanced, and discoveries, for the benefit of mankind, made.

In announcing the verdict, as stated above, Mr. Gingell expressed the jury's sympathy with the widow and children of a gallant gentleman, and Mr. Wingfield also associated himself, on behalf of his Association, with the jury's remarks, and also expressed to the Coroner his appreciation of the way in which he had conducted the inquiry.

BADGES FOR GLIDER PILOTS.

Glider Pilot's Badges for "A," "B," and "C" Certificates are now available. These badges are the same as those issued by the R.R.G. with the exception that the letter "G," which is the aircraft identification letter for Great Britain, has been incorporated. The prices of the badges are 2s. 6d. each *to members of the Association and Affiliated Clubs*, and 3s. each *to others*. Postage and packing is 6d. extra in each case.

Purchasers of a "B" badge will be credited 1s. 6d. on returning the "A" badge, and purchasers of the "C" badge will be credited 1s. on returning the "B" badge.

Orders may be sent to the Secretary at 44A, Dover Street, W.1, and remittances must accompany the order.

The Member's Badge is now available at 2s. 6d., 3s. post free.

We suggest that applications should include the number of the F.A.I. Certificate held by the person concerned. Alternatively that when the candidate sends his form in for a Certificate, the fee for the badge should accompany this. Thus may we prevent a repetition of those deplorable antics in which an individual indulged to the discredit of all with whom he came into contact about a year ago. This individual announced to all and sundry that he was a qualified performer on motorless aircraft. He had no credentials, but nobody had then.

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TRAINING THE "AB INITIO"—I.

By Graham Humby.

It is with great diffidence that I venture to present the experiences of an *ab initio* instructor in dealing with the difficulties of the *ab initio* would-be glider. I have, however, been persuaded by the Editor that what I have to say may be helpful.

The power pilot cannot fully realise the feelings of the *ab initio* who goes into the air for the first time; the simple reason for this is that the power pilot took his first flights with an instructor, whereas the glider pilot has to rely upon himself entirely from the very first.

Before he is launched for the first time the beginner has to know the effects of movements of the control column. At this stage I believe the rudder can be neglected absolutely. The pupil will inevitably use it as he would the handlebars of a cycle until bitter experience gets the better of "common-sense." As for the aileron control, let the pupil imagine he is banking a motor-cycle, but instead of leaning his body to the left when he makes a left turn, just ease the stick over to the left.

I have tried all sorts of ideas, including the moving of the wings and tail to illustrate the effect of the controls; I have also tried the method in which the pupil attempts to control the machine in a high wind while the glider is still on the ground. But these methods have not proved satisfactory, in that such conditions are totally different from those experienced when the machine is in the air.

It is essential that the pupil is only told the barest details necessary for control: books, pictures and lectures are useless until he has had his first "flop."

After he gets into the machine, or before, he must see for himself that the controls are in order: they must not be crossed or frayed; the safety belt must be in order and fastened properly. The pupil must learn to rely on nobody to do this for him.

The instructor must impress upon his pupil the necessity for complete relaxation of every muscle in the body. This to my mind is the most important of many important things. I have tried to find by analysis of many observations why so many *ab initios* when they make their first flights often pull the machine up, stall, drop a wing and generally bend the glider. I am convinced that it is because they tense up and stick to everything before the word "Release." Then, instead of being able to ease the stick an inch or so, they do everything with jerky movements; I believe this is the reason for "pump-handling" much more than actual misjudgment on the part of the pilot.

This analysis of experience has proved very useful to me, because at the start I had been in the habit of telling pupils to keep their arm straight to prevent them pulling the stick back when they realised the acceleration. The difference between results obtained formerly and with the new method is amazing.

The First Skid.

For the first skid with the average ten-stone man there should be two on each rope, eight "walks" and two "runs" before the command "Release" will prove ample in an almost flat field. The pupil must be told not to ease the stick back under any conditions, but to concentrate on holding the wings horizontal. By the way, the word "pull" must never be used to an *ab initio* in conection with the joystick.

After the first few skids there can be no system, each pupil must be treated according to merit, and individually. When he realises that he is still whole and that nothing has bitten him he must be told to keep the machine about a foot above the ground and hold it there by easing the stick back at the end of the flight until there is no flying speed left. This generally prevents him from diving into the ground and balloon jumping.

Somewhere about the sixth flight, when he is learning to synchronise the ailerons and elevator, and while the instructor is still whispering in his pupil's ear the old command "Relax and ease the joystick," it is sometimes handy to say, casually, "Push right to go right" in connection with the rudder bar. One must hope that the pupil will not take this remark too seriously and start thinking about direction, merely that he will automatically remember your advice should the adjacent haystack exercise too great an attraction.

Beginners often think that they are being hardly treated in not going higher every flight. They must be made to realise, however, that the surest way of proving that they are capable is by being able to do exactly what the instructor tells them. It is most important that they should not go to other pupils for criticisms about a previous flight, as fellow-pupils have not generally the same ideas as their instructor. When they can, and will, do what he says nothing can hold them back.

If everything has gone according to schedule by about the twelfth flight three can be put on the end of each rope, eight "walks" and four "runs" can be given on a slight incline.

When a pupil is starting his instruction it is best to give him as many consecutive flights as possible. As his total flying time per week-end might be half a minute, it is advisable the next time the pupil flies to give him a flip low down. This will serve to reassure him before continuing from the height which he had previously reached.

Beware, O Instructors! of the over-confident *ab initio*. He needs very careful handling. I know,—I was one myself. From being a hundred feet up to clipping a gorse bush in a fifth of a second was my record,—and I did not think I had done anything wrong!

I have said nothing about site or weather conditions. The first is outside the scope of this article. The second is not. Steady conditions are more important than actual wind strength. The Germans confine their instruction to days when the wind, I believe, is not more than 10 m.p.h. We fly in higher speeds than this, but the instructor must use his judgment. There must be no risk of the pupil being kited off the ground by a sudden gust or swung round by a change of wind direction. Under these conditions one had much better postpone instruction. Bumpy conditions can easily be produced on an otherwise ideal location by the wind blowing over an obstacle on the windward side of the site, and care should be taken to see that such an eventuality does not arise.

The "A" Certificate.

The flight for the "A" Certificate should be taken on a pretty calm day when the instructor has absolute confidence in his pupil. This test is really to show that the pupil has complete control of the machine in straight flight. Turns should not be attempted before the "A" flight for two reasons. First, because the majority of *ab initios* are unable at this stage to synchronise the three controls. The rudder and aileron generally come naturally to them, but they invariably either pull the machine up or push it down on a turn, instead of continuing in the original plane of their glide. They have been told to ease the nose down to make sure of flying speed before the turn, but they often do it half-way through the turn. This is likely to aggravate the repair bill if the pupil has not got his wits about him.

The second reason is that no beginner can ever tell you what he looked at during his flight; I have proved this by placing a large object out ahead for the pilot to steer at, and only one out of twelve ever looked at it during his flight. This convinces me that turns should not be attempted until the *ab initio* is quite at home on a straight flight.

Finally, remember "Relax, and go gently!"

THE LONDON CLUB'S VISIT TO THE WASSERKUPPE.

There is no question that the research station of the Rhön-Rossitten Gesellschaft at the Wasserkuppe is the hub of the whole motorless flight movement, and the small party organised last year was so successful that an attempt is being made to organise a similar trip on a larger scale this year. It is also hoped to arrange for the London Gliding Club to enter at least one machine for the International Competitions, and should the constitution of the party justify such action it is also hoped for a machine to be available for use by members of the party who are not members of the Competition Flight.

Fullest possible facilities will be available to members of the party to examine the organisation of the Rhön-Rossitten Gesellschaft in all its aspects and almost every known type of machine will be seen in operation. *No attempt is being made to run the trip on a profitable basis*, as the Club is anxious to make available the best possible facilities at the lowest possible price. Weather conditions are usually ideal at this time of the year and those interested can rest assured that this trip should form a new and delightful holiday.

The Hotel Deutscher Flieger, where the party will stay, is excellent, and is situated within two hundred yards of the Competition launching ground. As this is the only hotel accommodation which is less than six miles away and its accommodation is strictly limited, no reservations can be accepted after May 5, and particular note should be taken of this.

Also in order to obtain specially reduced travel rates, it is essential that the party should all start together, although the dates of return can be arranged to suit individual convenience. The party as outlined takes 18 days London to London, and the cost will be: 2nd class rail and steamer, £17 2s.; 3rd class rail and second class steamer, £15 4s.

Those who wish to join the party, which is not restricted to the London Club, are requested to apply to Thos. Cook and Son, Ltd., Berkeley Street, Piccadilly, W.1 (reference B.H.68/51435), who have been appointed to undertake all the necessary arrangements.

THE MAINTENANCE OF MOTORLESS AIRCRAFT.

BY V. S. GAUNT, A.M.I.AE.E.

Sailplane and glider maintenance should preferably be based upon the same sound principles adopted by Air Ministry approved Ground Engineers who are dealing with power-driven aircraft. The official regulations are set out in Air Publication No. 1208, which should be in the possession of every gliding club. Where clubs are fortunate enough to have a member who holds an Air Ministry Ground Engineer's Licence, Category A, or B, they should appoint him their hon. or paid Ground Engineer, and depend upon his judgment in all matters affecting the safety for flight of their aircraft.

In other cases, clubs are advised to appoint one or more members who by virtue of their training as engineers are qualified to assume the responsibility of certifying the machines. For such prospective ground engineers these notes are written, but as the Official Handbook A.P. 1208 sets out the general requirements it is not intended to repeat these, but rather to interpret and supplement them where thought necessary.

We will next consider five possible causes of damage and the way in which they are likely to affect the machine. They are: a heavy landing on an even keel; a heavy landing with nose down; a heavy landing with tail down (stalled landing); a landing with side drift; and landing on a wing tip.

Inspection After Heavy Landing on Even Keel.

We must look for defects under the various heads which are enumerated hereafter:—

1. Stretched or broken landing wires (where fitted); also examine eyes of turnbuckles and wiring plates and replace if unduly elongated.

2. Where outrigger strut bracings are fitted the end attachments should be carefully examined for elongated holes or grooved or bent pins or bolts. If struts are of wood examine for compression shakes and splits along line of bolt holes in end fittings. Sight along struts for straightness and, if bent, find how much by means of a taut thread along trailing edge. If bowed more than 1 in 600 (say 1/32 in. per 3 ft. run) it is usual (in power planes) to replace. However, as glider struts are usually only called upon to take pure tension loads in the air it is reasonable to allow twice this amount, providing the struts and fixings are otherwise sound, but, as such bowed struts are liable to fail at the next heavy landing, they should be carefully watched and replaced at the first opportunity.

3. The spars should be examined at the centre section and outer strut attachment, especially when the struts are found to be bowed. The portions of spars outboard of the strut attachments may have failed in bending, but if the fabric is not wrinkled, and the leading and trailing edges are straight, the spars are probably sound. By firmly holding the wing tip and flexing it up and down any undue weakness can usually be detected. It is impossible to lay down rules as to how extensive the inspection should be without knowing the severity of the landing. Experience must be the guide. If a crack is heard on landing, or a creaking in subsequent flights one must naturally investigate until the reason is found. The team Captain or Instructor should always fly the machine after any major repairs have been made, or in case there is a suspicion of damage which cannot be located.

4. With a rubber sprung skid or other form of shock-absorbing chassis the fuselage and centre section should be insulated from damage from any but exceptionally heavy landings in this class.

An examination of your machine will reveal by the relative disposition of wing and chassis attachments the members of the fuselage and centre-section structure which are the most highly stressed for a direct load due to this form of landing. The appropriate struts and wires should be examined for straightness and tautness and for soundness of end fixings. With ply-covered fuselages sudden buckling will usually indicate a local failure. If stones or other foreign bodies have damaged the plywood fuselage bottom the degree of damage must determine the safety or otherwise. It must be remembered that the torsional strength may be seriously impaired if a hole of appreciable size (say larger than a man's fist) is allowed to go unpatched.

5. The tail unit is not likely to have suffered except in the worst cases. In a wire-braced empennage the wires may have stretched by the pulling of the eyes, or the turnbuckles or wiring plates may be damaged; whereas in the case of the R.F.D. type, where the tail unit is only supported at the tailplane tips, the attachment of top fin to tailplane leading edge should be examined.

6. Seat fixings should be tried for rigidity.

7 Controls should be examined in case wires have jumped off pulleys.

Inspection After a Heavy Landing Nose Down.

In this case the same points as in the first case should be watched, and in addition the rudder bar or pedal attachments and the safety belt fixings. The tendency for the wings to fold forward will have been resisted by the internal drag-bracing wires, these are the diagonal wires between the spars. Slack wires can often be detected by smartly tapping the wing tip with the flat hand and listening for the "rattle." In some types there are anti-drag wires from wings to tail and these should be examined and re-tensioned if necessary.

[*And here we have to stop until next week.*—ED.]

Bibliography.

Reference has been made to the Air Ministry's Handbook AP. 1208. The full description of this is "Air Worthiness Handbook for Civil Aircraft," and it can be obtained from H.M. Stationery Office. The cost is about 3s. 6d., but leaflets are continually being added and amendments made, and clubs should therefore place a standing order for all leaflets to be supplied to them, as and when issued. The charge for the additional leaflets varies from 1d. to 6d., according to the amount of printing involved.

Club Ground Engineers may only desire to purchase the particular leaflets of this handbook which are of interest from the point of view of the maintenance of the structure as distinct from the engine and other special requirements for power-driven aircraft, the following is a list of the leaflets which they should obtain:—

A.P. 1208, Part 1, Aeroplane design leaflets B.1 to B.7 inclusive, also B.9 and E.3.

A.P. 1208, Part 1, Inspection leaflets 1, 5, 17, 21, with appendix, 40, 41, 56, 106, 116 and 132.

A further handbook which will be found of considerable interest is "The Care and Maintenance of Aircraft," published by Airways Publications Ltd.; the price is 3s. 6d. net.

Finally, any readers who have not already purchased a copy should certainly obtain the Year Book published by the Dorset Gliding Club under the title GLIDING, price 2s. 6d. net from Club Secretaries, or 2s. 9d. post free from GLIDING, 10, Victoria Street, Weymouth, Dorset, as interesting information is given therein on maintenance and materials.

[*All these publications may be obtained from* THE AEROPLANE *Book Department, Cannon House, Pilgrim Street, London, E.C.4, who will despatch books to any address on receipt of order.*]

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CORRESPONDENCE.

Decentralisation He Calls It . . . .

Sir,—Mr. Goodyear's letter suggesting the decentralisation of the Gliding Movement deserves serious attention. With the parent body hampered by lack of finance, such a scheme would lighten the load by sharing the burden.

The country could be divided into a number of local Centres, with areas defined by the B.G.A. Each Centre to have its affiliated Clubs—President, Chairman, Vice-Chairman, Treasurer and Secretary—and representatives of Clubs in that Centre. This Board could handle all gliding business within its area, acting as the executive and local adviser to the B.G.A. As Mr. Goodyear suggests, the Boards could then send delegates to the General Council of the Central Body, which would then be kept within measurable bounds.

Local Centres should be defined so as to include at least one good soaring site, to be worked by the Board. Clubs could then train at less suitable sites bringing their pupils to the Centre ground for Certificate tests. Simple competitions between Clubs, organised at regular intervals, could be made a source of income for the area. From these, inter-Centre competitions would be the next step, followed by national meetings open to all Centres, and, with the experience thus gained, International Meetings could be run without the fear of a fiasco.

Such a system would reduce the work of the B.G.A. and make possible a reduction of its overhead charges, in other words, the Gliding Movement would learn to walk before it ran!

Finally, there is ample precedent in this direction, and some of the most successful sporting organisations in this country are managed on such a system.

(Signed) "FURNESS."

[*This seems undiluted commonsense to us.*—ED.]

The B.G.A. Replies.

Sir,—Under the heading of "By What Authority" in your issue of Mar. 6 you make a statement which, I think, it is fair to describe as regrettable. Regrettable because it is unnecessary and need never have been written, had you taken the opportunity which is always cordially extended to you by *The British Gliding Association* of acquainting yourself with the facts.

The British Gliding Association certainly does not lack power to enforce its rulings on the Gliding Movement, nor will it ever do so as long as its edicts are issued with the full approval of its council. Every form of self-government rests upon the will of the majority, and if you intend to suggest that the British Gliding Movement is so anarchistical that it would prefer to exist in a state of complete demoralisation, your opinions are at variance with the known tendencies of the British, their tradition and past history.

The many means available to *The British Gliding Association* of enforcing its authority, the will of the majority, are obvious. You state that "the B.G.A. now decides to veto the method which Mr. Lowe-Wylde and N.F.S. Ltd. are doing their best to popularise." The facts are that Mr. Lowe-Wylde and N.F.S. Ltd. have done yeoman service to the Movement by, from the first, putting themselves entirely at the disposal of *The British Gliding Association* and its technical committee, so that a series of experiments and tests should be conducted without delay and expense to the Association. The experiments conducted by the Association are precisely those being made by Mr. Lowe-Wylde and N.F.S. Ltd., and here a well-merited tribute should be paid to the Directors of N.F.S. Ltd. for their great courtesy in inviting members of the technical committee of *The British Gliding Association* to accept honorary memberships to Hanworth and other clubs with which they are connected, in order that they might have full facilities for conducting these experiments as agreeably as possible.

The British Gliding Association is so impressed with the possibilities and potentiality for good of auto-towing that its sole anxiety has been to prevent the occurrence of any catastrophe due to ill-considered attempts by ignorant people to commence auto-towing. Regulations for auto-towing are being undertaken by the B.G.A. technical committee at the present juncture. The intention is to try and make arrangements that Clubs may send to an agreed centre their instructors for a course of tuition in auto-towing.

In conclusion, may I express the hope that as you are always welcome at the offices of *The British Gliding Association*, and having regard to the close proximity of the offices of THE SAILPLANE to those of the B.G.A., that when you next feel you have to take *The British Gliding Association* to task, you will first acquaint yourself of the facts, thus increasing the value of your criticisms and the reliability of the information published in THE SAILPLANE.

(Signed) E. C. GORDON ENGLAND,
(*Chairman, British Gliding Association*).

[*We are surprised that Mr. Gordon England should suggest that the "reliability" of our information could be increased. In this particular instance such a suggestion seems unwarranted in that we took the trouble to reprint the edict from the B.G.A. Presumably it is not necessary to check the "reliability" of the many circular letters issued by that Association.*

The tribute to National Flying Services is one in which we heartily concur, the fact that their directors, including Mr. Gordon England, are so keenly interested in Gliding bodes well for the Movement. We meekly accept the rebuke that "experiments made by the Association" are those made by Mr. Lowe-Wylde and N.F.S. Ltd. We evidently misunderstood a conversation which we had had with the protagonist of auto-towing.

We wish that Mr. Gordon England had continued his letter to cope with the last two paragraphs of our offending comments. The first asked why the B.G.A., if it is so concerned with the safety of gliding, did not hold an inquiry into the causes of the crash at the Southdown Skysailing Club. The second made the statement that the B.G.A. has never been able to insist on the proper inspection of machines before flight or after an alleged repair. The point of our argument was that if the B.G.A. was strong enough to veto auto-towing and only issue permits to approved Clubs, why had it not held an inquiry, and why had it not taken steps to secure adequate maintenance and inspection before flight. To reply that steps are now being, or are about to be, taken, though welcome news, will not invalidate our previous contentions.—ED.]

And Ilkley Back Them Up.

Sir,—I think your remarks in last week's number of THE SAILPLANE with regard to the B.G.A. forbidding the use of auto-towing without their permission most unfortunate.

As you yourself will realise, there must be some ruling authority to control this movement in England, and naturally this ruling authority must come up against all sorts of obstacles, and to me it seems rather an unkind, and even unmanly, trick to hamper the work of the B.G.A., which is hard enough already. They are, without a doubt, doing an immense amount of good.

It may be very unfortunate on Mr. Lowe-Wylde and others that auto-towing has so been prohibited, in that it will make it appear more dangerous in the eyes of the general public than the catapult launching method. On the other hand, I understand from the Secretary of the B.G.A. that permission has been applied for by one club already. Most probably as I write it has also been granted.

Personally I am inclined to think that auto-towing is more dangerous than the catapult launching method. I saw Mr. Lowe-Wylde's demonstration of it at Sherburn. Mind you I have not yet seen much of it and cannot give a really well-judged opinion. Of one thing I am quite certain. In the hands of the less experienced of the clubs auto-towing is definitely very dangerous. For auto-towing two experienced instructors are needed and most clubs in this part of the world have not one.

Surely the accident to the London Club's pilot a few days ago shows that considerable experience is needed. To shoot someone off at sixty miles an hour is absolute madness and I am given to understand that the launching speed was somewhere in that neighbourhood.

It seems unfortunate to me that your criticisms of the B.G.A. are so biting, and again I hardly think it the right thing to do to kick a weak institution because they are weak, rather let us try to help them on and help them to develop an air-mindedness in our public that seems to be extraordinarily lacking. (Signed) NORMAN C. HODGSON.

[*Now, if the B.G.A. is strong enough to enforce its authority, as the previous writer says it is, it must be strong enough to withstand comment. If, as Mr. Hodgson suggests, it is so weak that we are taking brutal advantage of its defencelessness, our suggestion that it was bureaucratic to legislate against auto-towing when nothing had been done to enforce adequate maintenance was justified. And why Mr. Hodgson do you couple the accident at Harpenden on a privately-owned machine (not on the London Club's ground) with auto-towing? The experiment there was a fatal one in catapult launching, even if the energy was supplied by an internal-combustion engine instead of man-power.*—ED.]

From The Wasserkuppe.

Sir,—In your issue No. 25, of Feb. 27, 1931, we notice an announcement to the effect that an English Gliding Club intends to undertake a co-operative trip to the Rhön during the Competitions. We are naturally delighted at this proposal; we would, however, like to ask the Club concerned to get into communication with us as early as possible, as the possibilities of accommodation in Gersfeld are continually diminishing.

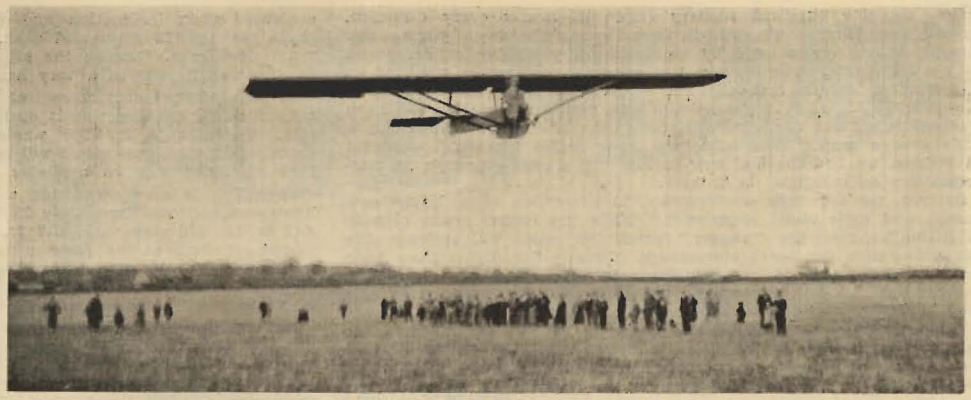
The Competitions, by the way, are expected to take place from July 22 to Aug. 5.

Thanking you for your friendly mediation, we greet you

With highest respects,

[For the] Rhön-Rossitten Gesellschaft E.V.,
GF. YSENBURG.

NEWS FROM THE CLUBS.



The I.O.W. Club fly their B.A.C.II.

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.
—The London Gliding Club. Meeting place, Turveys Farm, near Totternhoe, on Saturdays and Sundays.
Dorset.—See under Somerset.
Edinburgh.—The Edinburgh Gliding Club. Sundays, at West Craigs Farm, between Corstorphine and Turnhouse Aerodrome.
Essex.—South Essex Aero Club. Week-ends, Wheaton's Farm, Laindon (L.M.S. Southend branch).
Glam.—Merthyr and District Gliding Club. Sundays, 10 a.m. to sunset. ¼-mile left Dynevor Arms, Merthyr Tydfil—Swansea Road.
Hants.—The Southampton Gliding Club. Every week-end at Red Lodge Farm, Bassett.
—Surrey Gliding Club. Sundays from 10 a.m., weather permitting, at Stocks Farm, Meonstoke (Old Winchester Hill).
Hereford.—The South Shropshire and North Herefordshire Gliding Club at Dinmore, ¼-mile from main Hereford-Ludlow Rd. Every Sunday, and Thursday from 2 p.m.
Herts.—Herts. and Essex Gliding Club. Sunday afternoons. Eastern Roadways Garage, one mile north of Stortford.
Kent.—North Kent Gliding Club. Saturdays 1 p.m., Sundays 10 a.m. Joyce Green Aaerodrome, near Dartford.
—Kent Gliding Club. Week-ends above Lenham, on the Maidstone—Ashford road.
—The Isle of Thanet Gliding Club. Saturdays and Sundays from 2 p.m. Manston Aerodrome, Thanet.
Lanark.—The Glasgow Gliding Club. Barrance Farm, Easter Whitecraigs, near Glasgow. Every Sunday from 11.15 a.m.
Lancs.—The Furness Gliding Club, at Gleaston Park Farm, Gleaston, near Ulverston (midway between Gleaston and the Coast road). Sundays 10.30 a.m., by arrangement and weather permitting.
—The Stockport Gliding Club. Every Sunday afternoon at Woodford Aerodrome, Manchester.
—The Preston and District Glider Club. Week-ends at Butler's Farm, Beacon Fell, 2 miles from Inglewhite and 7 miles from Preston.
Notts.—The Nottingham Gliding Club, Mr. Ellis's Farm, Kneeton Road, East Bridgford, Notts. Every Sunday, weather permitting.
Somerset.—The Dorset Gliding Club, Westland Aerodrome, Yeovil.
Staffs.—The North Staffs. Gliding Club. Week-ends at The Downs Banks, Barlaston Downs, near Stone, Staffs.
Sussex.—Southern Soarers Club. Newmarket and Balsdean, between Lewes and Rottingdean, near Brighton. Week-ends by arrangement, for Soaring. ('Phone: Hove 5116.)
—The Southdown Skysailing Club. Sundays from 10.30 a.m. High Barn, Rottingdean.
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, Bishops Cannings, near Devizes.
Worcs.—North Cotswold Gliding Club. Every Sunday at Fish Hill, above Broadway Village, from 10 a.m. to sunset. Saturdays and Wednesdays from 2 p.m.
Yorks.—The Bradford Gliding Club, at The Pastures, Apperley Bridge. Saturday 1.30 p.m., Sunday 9 a.m.
—The Huddersfield Gliding Club. All day every Sunday at Bradley Bar, Huddersfield.
—The Leeds Gliding Club. Week-ends at Warfedale with the Harrogate Club.
—The Scarborough Gliding Club. Every week-end at Flixton.

[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.—ED.]

THE ACCRINGTON AND DISTRICT GLIDING CLUB.

The Accrington and District Gliding Club has again had trouble with the landowners. On Sunday, Mar. 15, we shifted camp to Hambledon Hall, where we, some 15 members, managed to get 20 flips from different points on the hill. This is the first outing since the machine crashed early in February.

THE BEDFORD GLIDING AND FLYING CLUB.

On Mar. 14, at "The Dujon," High Street, the Club held one of the most successful dances of the Season, when with a good band, a full house, and a very nice floor, everybody enjoyed themselves. Advantage was taken of the occasion to advertise the Club with an attractive hand-painted poster and leaflets, which resulted in quite a few new members.

In spite of the late hours kept by the dance-revellers, the following day, Sunday, with a nice breeze and perfect weather, saw a full attendance on the Gliding Ground, when gliding continued from morning to almost sunset.

Mr. Bevan, Vice-Captain, made the test flight, after which all the beginners carried right through with regularity, each one putting up an exceedingly good show under the watchful eyes of the instructors.

Mr. Keens, one of our "Power" members from Cranwell, gave some spectacular demonstrations on the "Dagling," to the great delight of the crowd—Mr. Hazeldine, another of our new members, who has just been handling twin-engined power craft, had his first experience in gliding, and put up an equally good show, expressing the opinion that gliding had power-flying beaten to a frizzle, and that he was absolutely converted to it.

It was pleasing to see such a big crowd of local inhabitants, who showed a keen interest in our work, and judging from the number of inquiries and the way new members are coming along, there is every promise of a good year.

THE CHANNEL GLIDING CLUB.

On Mar. 8, the wind was too high for safe operations. The hope of gliding was therefore abandoned. Two members journeyed to Brighton, and were very disappointed to learn subsequently that while they were killing time in the town, the new Dagnall Sailplane was making Gliding history some three miles away. We feel that more precise information regarding what was "going to happen on Mar. 7 and 8" should have been forthcoming. One member left Brighton in the afternoon and was fortunate in seeing the Dagnall sailplane taking tea on the road to Guildford.

The other remained, joined The Southern Glider's Club as a flying member, met some very charming people, viewed their site next day and returned to Folkestone feeling that he had made the finest half-crown investment of his life. We are certainly going to take advantage of the facilities for soaring that the Southern Club offer so cheaply, and we thank them for so generously allowing the use of their site. It shows a definite desire on their part to benefit the Movement.

On Mar. 15, our R.F.D. was taken to a new site at Itchen Hill. This is an unobstructed slope of sufficient length and gradient to give us "A's" under suitable wind conditions. Unfortunately on this occasion what little wind there was blew across the field and the best glide of the day was 20 sec. During the afternoon, attention was concentrated on beginners who received some intensive catapulting. All were successful, Mrs. Manuel doing particularly well.

We have not yet obtained permission to use our "prince of sites," but things are progressing rapidly, and we have high hopes.

THE DORSET GLIDING CLUB.

In spite of a strong wind blowing, the Dorset super-enthusiasts were not discouraged, and put in a good week-end on "Freddy," the Club R.F.D., and on Mar. 14 several successful towed flights were made of 30-40 secs. duration and 70-100 ft. height. Proceedings terminated at about 6 p.m. owing to bad light; twelve good flights had been made and everyone went home feeling very satisfied.

Mar. 15 was spent on instructional work for *ab initios*, there being sufficient members to hand-launch the glider. Soon quite good hops were made by members who will soon be ready to take their "A" certificates and members are looking forward, meanwhile, to the gradually lengthening days when more gliding will be able to be put in.

New members are still welcome and should apply to the Hon. Secretary, Mr. S. E. Wells, Pen Mill Hotel, Yeovil, or Westland Aircraft Works, Yeovil.

THE IMPERIAL COLLEGE GLIDING CLUB.

Because it is several months since we sent in our last report, the following is mainly a retrospect. If this detracts from its interest we offer our apologies.

The Dagling was delivered a few weeks before Christmas, and several days were spent during the Christmas vacation building a trailer for it. The first flying meet was on Jan. 18, at the Imperial College sports ground at Wembley. On the first day test flights were made by our hon. instructors, who pronounced the machine as very pleasant to handle. Instruction was then commenced, and some thirty glides and slides were made. This was continued the following week-end. On both these occasions the day's sport was terminated by a minor accident, the central struts being fractured on each occasion by a sideslip landing. After this we were more fortunate—or more careful.

On Feb. 8 we moved to a ground situated at Preston, near Wembley.

and comprising excellent nursery slopes in nearly every direction. Several good flights were made here, before the day's gliding was brought to an abrupt end by an involuntary display of aerobatics —on a first flight. The damage was one wing thoroughly smashed up and most of the ribs broken in the other. Thanks to the industry of the R.F.D. Co., and the same kindness and consideration we have received in all our dealings with them, the glider was repaired in a little over a week. Then after one more highly successful week-end at Preston we had the bad luck to lose the ground—through no misdemeanour on our part, be it said.

So now we are back at Wembley, in possession of a lovely new bungy, and some useful experience. While the former seems capable of lifting us over the "rugger" posts, the latter will restrain our excursions into the lower atmosphere. Exactly 201 flights have been made to date, and 24 members have received practical instruction. Several have a fair mastery of the controls, and we hope in our next report to be able to record a few "A's."

Other activities have included a lecture by Mr. F. Handley Page on Jan. 28, and another by Professor L. Bairstow on Feb. 11. The latter lecture was followed by the Club's first Annual Dinner. This event having already received prominence in the columns of The Sailplane we will only record the pleasure it gave us to entertain so many distinguished guests, and our appreciation of their benedictions.

Plans for the future include the repair of the I.C.1 during the Easter vacation. Our "Meteorological Committee" has been meeting lately, and an outbreak of home-made wind-speed indicators is expected shortly. An ingenious new method of charting wind currents has been discussed, but shortage of funds prevents the scheme being developed at present. The "Technical Committee" is also engaged on some interesting research work. The greatest problem, however, is that which confronts the "Grounds Committee."

Can any reader tell us where we might find a ground, reasonably near London . . . . But perhaps that should go in the advertisement columns.

We should like to say a few words about the last week-end. On Sunday we spent a very useful and enjoyable day at our Sports Ground and 56 launches were made.

During part of the day there was no wind whatever and we could glide in any direction without having to carry the machine back to the starting point. Towards the evening, however, there was a gentle East wind and several good flights were made.

It speaks very well for Burley's starting rope that flights of over 300 ft. distance and about 25 ft. altitude were made on a level ground with a wind of about 5 m.p.h. without undue acceleration.—P. A.

[*Please tell us more of the method of charting wind currents. We are particularly interested and might be prepared to co-operate.*—Ed.]

THE ISLE OF WIGHT GLIDING CLUB.

On Mar. 8 the members of the Constructional Section of the Club finally completed the repairs to our B.A.C.II and finished building the trailer. As it was too late in the day to do any gliding the machine was rigged and passed O.K. in readiness for a test flight, and the trailer was tested on the road under full load.

On Mar. 15, the Club met at Bowcombe Down, where, through the generosity of Mr. Long, of Park Place Farm, they have permission to use a very fine site, possessing slopes favourable in wind from any direction and clear of such obstacles as trees, hedges, telegraph wires, etc. In the absence of our Instructor, Capt. F. W. Merriam, gliding was in charge of Mr. J. A. Thompson, who, after making three successful test flights, passed the glider as O.K. and proceeded with the instruction of the other members. Good flights from an exceptionally fine slope were made by the following:—Messrs. Thompson, Gray, Stagg, Hurst, Smith, and Capt. F. L. M. Boothby. This can be regarded as our first day on a pukka slope, and it is a pleasure to record that all flights were perfectly controlled and each finished with good landings.

Our new wings are quite satisfactory, and the addition of a dihedral angle makes the machine exceedingly stable in the air. We are justly proud of the work we have done in effecting the repairs, and of the performance of our glider.

Our day's experience at Bowcombe Down justified our expectations, as it is definitely better than any site we have previously flown from. Although there was very little wind on Mar. 15, a definite up-current was experienced, and the flights finished on every occasion with a landing on a slope opposite the starting point, and on several times the landing was at a higher lever than the take-off. With a S.W. or S. wind we shall be able to use a slope from which "A's" should be easy!

The completion of the repairs now leaves the constructional section free to commence work on our new all-metal machine. As can be readily understood, this work will take some time to complete, but directly the machine has been finished and successfully test flown, full particulars of its construction and performance will be made known.—J. B. S.

THE LONDON GLIDING CLUB.

On Mar. 14, in spite of very low winds, some excellent flights were made on the Prufling, which was hard at work all the afternoon. Mr. Symmons completed the necessary qualifying flights for his "B" Certificate. The next day, Mar. 15, conditions were still more unfavourable as there was almost a flat calm, so activities were concentrated upon instruction and over 100 instructional flights were made between 12 noon and dusk, and Mr. Irwin qualified for his "A" Certificate. During the afternoon we had a visit from Messrs. Bentley and Baynes in a very handsome sports Avian.

In view of the great success of our gliding camp last summer, we are repeating the experiment during Easter, from April 2 to 6 inclusive. The charge for the whole period, including accommodation, flying, instruction and meals will be £2 3s. 6d., or without meals £1 1s. Five machines will be available for use.

The Club is also organising a trip to the Wasserkuppe for the Rhon competitions, from July 25 till Aug. 9. Inclusive cost will be £15 4s. for 3rd class, and £17 2s. for 2nd class. This party is open to non-members at the same price and those interested should communicate with the official travel agents to the Club, Messrs. Thomas Cook and Son Ltd., Berkeley Street, W.1, quoting reference BH.68/51435, when they will receive particulars and itinerary.

Now that proper hangar accommodation is available our two-seater "Popenhausen" is being brought out of cold storage and will be in regular use shortly. There are still vacancies for 1931 at a subscription of £3 3s., and those interested should communicate with the Secretary, The London Gliding Club, Empire House, St. Martins-le-Grand. E.C.1.

THE MANCHESTER R.Ae.S.: GLIDING SECTION.

Four power planes containing eight members, in addition to a large assembly arriving by road, attended the Blackpool Auto-Towing demonstration by National Flying Services in conjunction with Mr. Lowe-Wylde last week-end.

Every one was delighted with the practical demonstration of how to glide for one to three minutes without the heavy work of team launching on flat ground.

The members were glad to read in The Sailplane of the success of the Dagnall sailplane, and congratulate the designer and manufacturers accordingly. We shall be coming down to see the machine perform before very long.

Our next lecture takes place at the College of Technology, Manchester, at 7.30 p.m. on Mar. 20 and is a paper on "Machine Tools," by Herbert Terry and Co.

There are still a few vacancies for new members and every one interested in the Movement will be welcomed.—G. M.

THE SOUTHAMPTON GLIDING CLUB.

The Club resumed instruction on Mar. 15, taking full advantage of the glorious weather.

A constructional section has been formed and work will soon be started on a Secondary glider.

A new site will be inspected in the near future in view of flying the new machine, and also to gain a number of "A's."

Members offer their deep sympathy to the widow and family of the late Mr. Lander, also to the London Gliding Club in the loss they have sustained.

THE SOUTHDOWN SKYSAILING CLUB.

On account of high wind the R.F.D. was not taken out on Mar. 7, but we have to thank Mr. Dagnell and his party for an interesting exhibition of soaring by his new machine. We hope we shall have the privilege of supplying a launching team on some future occasion.

In search of the ideal ground for all purposes we again, on Mar. 15, moved our machine across country—and over seemingly innumerable barbed wire fences; this occupied all the morning. A few short glides were made during the afternoon, but the site was unsatisfactory. The machine was then dismantled preparatory to a general overhaul before the hard work of the coming summer.

There will probably be no flying next week-end and the date and place of the next meeting will be announced later.

THE SURREY GLIDING CLUB.

Our Instructor, Capt. A. W. Stratton, is to be congratulated on qualifying for his "C" certificate on Mar. 7 while flying and incidentally testing out of the new R.F.D. intermediate type sailplane at "Balsdean," the ground of the Southern Soarers' Social Club, of which Capt. Stratton is also a member.

We are also very proud of the fact that apart from this being the first Surrey "C," it is the first "C" to be taken on an all-British sailplane. This machine was produced by our Chairman, Mr. R. F. Dagnall, and we offer him our hearty congratulations in producing such an efficient and graceful glider.

The Club is very pleased with its new and extensive flying ground at Meonstoke, but unfortunately since acquiring this ground the wind has always managed to evade the correct quarter for soaring flight. Although training and Prufling flights can always be managed whatever the direction of wind, we had hoped for better conditions. However, when they arrive we feel sure of obtaining several more "B" and "C" Certificates.

The Annual General Meeting of the Club is to be held at 17, Stoke Road, Guildford, on April 1 at 8 p.m., and we hope all those members who can will attend. The Club Year also ends on this date and thereafter subs., namely £2, become due.—M. H. T.

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