May 1, 1931. Vol. 1. No. 34.

THE SAILPLANE AND GLIDER

Price 3d.

STILL LIFE.



A photograph taken from a camera strapped to the wing. A member of the "Engineers' Glider Club" takes a picture of himself above the airport.

ON THE NEED FOR A NATIONAL SCHOOL.

Inadequate instruction, even when given with the best intention in the World, has, and continues to, cost the British Gliding Movement a lot of money. For crashes, lost members and lost enthusiasm all mean wasted money and there is little enough of that commodity available.

Attention has already been drawn in THE SAILPLANE to the strong feeling which exists in the North, and in individual cases in the South: that the present method of awarding Certificates is too lax; that standards vary from Club to Club; and that generally the whole system wants tightening up.

One method, and probably the most effective for doing this, would be to have a school for instructors. This can be achieved with less difficulty than at first appears. A summer camp should be organised during the holiday period when the greatest number of people can get away. The site should be somewhere near the middle of England. We have not seen the soaring site near Nottingham, but as Herr Krause has approved it for soaring we imagine that it must have potentialities. Anyway, a number of training sites are known to exist all over the Country and the selection of a site should not present enormous difficulty.

Machines can be obtained from our glider manufacturers, and paid for out of the school funds.

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Men, or rather instructors-to-be, would come from every Club in the Country. Each Club would select two or three of its members for intensive training.

Money would come from fees. Each Club would have to contribute so much for each Instructor, plus a percentage based on the known state of the Club's capital. This would enable the Northern Clubs, which are badly hit by the present industrial depression, to get training for less than some of the Clubs which have wealthier members.

If further money can be acquired through an organised appeal so much the better. But the scheme must not be held up for that.

The management of the School would be vested in a Captain with a selected staff of instructors. These would be chosen by a select committee of the B.G.A., to be elected at a meeting of the Council. If funds allow the Captain and his assistants should be paid, at least expenses. If the instructors could include one or two familiar with German practice so much the better.

The course would aim at pushing the instructors through their three Certificates if they have not got them. But in any case all tests would be passed again so that the method of passing the tests becomes absolutely standard, and everybody would have the same ideas. As far as possible the training would be for training instructors rather than giving instruction. Thus the Captain and his band would make their pupils give instruction in turn to their own squads rather on the lines of Army Training Courses.

At this juncture we believe that such a camp would do more lasting good to the Movement than a National Meeting at the end of the Summer because such a gathering of leaders from the scattered Clubs could only result in closer communion of ideas and ideals. We commend this idea to the Association confident that it would fill a national want and secure in the knowledge that such a school could be made self-supporting.

GLIDING AND THE R.A.F.

The Air Ministry announces that the question of gliding by R.A.F. personnel has been under consideration, and it has been decided that, while there is no objection to the formation of gliding clubs at Air Force stations or to the participation of officers and airmen in this form of recreation, gliding will not be recognised either as Air Force duty or as an "organised game" within the meaning of K.R. and A.C.I., para 2313. It will, on the contrary, be treated as a purely private activity comparable with the flying of civil aeroplanes, and will be subject to the same general restrictions (save where these are plainly inapplicable) as are imposed on civil flying by K.R. and A.C.I., para. 801. In particular, the principle stated in clause 2 of that paragraph applies to gliding, and officers and airmen participating in this sport are advised to cover by insurance all the risks there referred to.

AN INVITATION TO BROADWAY.

Mr. Horace Wright, the Honorary Secretary of the North Cotswold Gliding Club, broadcasts an invitation to any Club or individual who owns a sailplane or other machine capable of soaring to attend the Club Meeting at Fish Hill, Broadway, Worcestershire, on the occasion of the Lyons Tea Demonstration on May 9 and 10. We have seen the site, which promises to offer much of interest to the accomplished pilot, and we would endorse Mr. Wright's invitation. Now that all our British sailplanes have conclusively demonstrated their ability to soar we may hope to see at least three groups accepting Mr. Wright's kind invitation.

WE OFFER OUR CO-OPERATION.

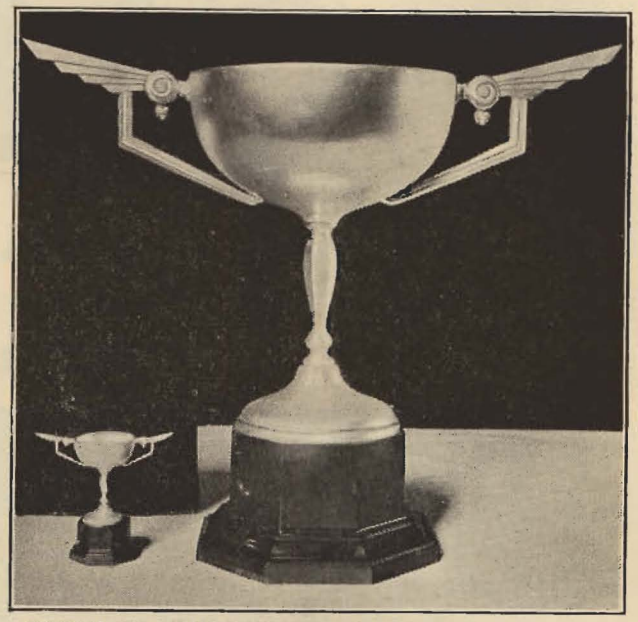
As all our readers know there is to be a Glider and Sailplane Exhibition in London from May 6 to 16. There is no reason for Clubs outside the Home Counties to think this is of no interest to them. A large number of people from all over the country will visit the Exhibition and it will be well worth while for all our British Clubs to be represented. The Sailplane is going to have a stand with someone to look after it all the time.

We therefore offer to any Gliding Club in the country free display space. That is to say, if they will send photographs, and matter describing their activies, we will see that this is displayed in such a way as most to benefit the Club concerned. Each Club will be treated alike and inquiries as to the best Club to join will be dealt with impartially on the basis of the nearest being the best.

No doubt Club Secretaries will see the advantages to be gained from such an arrangement and we ask them to send along their matter urgently. It should be boldly marked "Exhibition." Any models of gliders will be welcomed and will be looked after carefully. They will be returned after the Exhibition. No responsibility can be accepted for such loans, though every care will be taken to see that things are looked after properly.

SOARING WITHOUT TEARS.

The ever ingenious and energetic Mr. Lowe-Wylde has again demonstrated the glorious simplicity and lack of hot-



THE H. M. VOLK CUP.—A trophy presented to the B.G.A. for Inter-Club Competition. It is solid silver and stands 16½ ins. high.

making labour which distinguishes auto-towing. On April 24 Mr. Lowe-Wylde and the B.A.C.VII with sundry accomplices went to the gliding site at Lenham. The B.A.C.VII was towed off with a passenger and when height had been gained was flown over the top of the hill and there soared.

About half a dozen flights were made in this fashion with an average duration of about 5½ minutes and a best of about 8. In every case passengers were carried and in every case the glider was landed in the field close to the car. No laborious dragging the car up the hill was required.

The following Sunday the B.A.C.VII was taken to Tottenhoe, and there the machine was soared by Mr. Lowe-Wylde without a passenger for 1½ hours. A fuller description of the event will be found under the London Club notes.

Another B.A.C. was soared on the previous Wednesday when Mr. Turner, of the Channel Club, was up for over four minutes. More about this will be found under the Channel Club Notes.

Mr. Lowe-Wylde has thus amply demonstrated that demonstrations for his "revivalist" scheme can be given at any soaring site. The B.A.C. VII can be launched either from the top of the hill or from the bottom. Soaring is possible in either case. Clubs with good soaring sites should get in touch with him.

GLIDING CERTIFICATES.—III.

A complete list of the first odd hundred Gliding Certificates was published in The Sailplane for Jan. 23, 1931. The second instalment was published in the number for Mar. 6. The names below the line are those of pilots who have added to their Certificates. It will be noted that six more pilots have gained "C's."

No.		A.	B.	C.
118.	Douglas Ivor Spencer (*Driffield & District.*	16.11.30		
119.	John Lloyd (*Glasgow*)	8.2.31		
120.	Gregor Cameron (*Glasgow*) ..	8.2.31		
121.	Cecil Compton Paterson (*Sailplane*)	25.10.30		
122.	J. K. W. Wheatley (*Surrey*) ..	10.1.31		
123.	M. H. Findlay (*Hanworth*) ..	25.1.31	15.2.31	
124.	Cecil Palmer (*Surrey*)	8.2.31		
125.	A. Houston Anderson (*Glasgow*)	8.2.31		
126.	E. K. Wallis (*Leeds*)	22.2.31		
127.	S. M. Thompson (*Leeds*)	22.2.31	7.4.31	
128.	E. A. L. Parker (*Southdown*) ..	22.2.31		
129.	L. E. Falla (*Preston & District*) ..	30.11.30		
130.	A. G. Wilson (*Leeds*)	22.2.31		
131.	A. C. S. Irwin (*London*)	15.3.31		
132.	Leslie Allen (*Portsmouth & Southsea*)	20.12.30		
133.	Reginald William Etchells (*Surrey*)	16.2.31		
134.	Henry Lorimer Richardson (*London*)	6.4.31		
24.	Hamish Allan (*London*)		18.1.31	
53.	Donald Charles Smith (*London*) ..		10.1.31	21.2.31
72.	Charles Elliott (*London*)		18.1.31	
14.	Leonard Charles Williams (*London*)		1.2.31	15.2.31
26.	Joseph Meyler Symmons (*London*)		14.3.31	5.4.31
27.	Alexander Nelson Stratton (*Surrey*)		9.10.30	7.3.31
59.	Henry Petre (*London*)		4.4.31	4.4.31
84.	Cornelius John Donovan (*London*)		14.3.31	4.4.31

"SCUD"



THE PRIVATE OWNER'S SAILPLANE

The "Scud" is the craft for the man who wants to soar; for the private owner or club member who values portability; for the practical man who asks for simplicity of repair, and the pilot who demands really effective control. The "Scud," the first all-British machine to successfully soar, provides a combination of practical advantages, aerodynamic efficiency, and excellence of control, not hitherto achieved. The low weight of the "Scud"—less than half that of contemporary machines—opens up new possibilities in operation. Whereas large teams were hitherto necessary, the private owner may now—with the assistance of only two or three friends—launch the "Scud" successfully into the air.

SPECIFICATION:—

Span, 25 ft. 3¾ ins.	Length, 13 ft. 4 ins.	Height, 4 ft.
Area, 85 sq. ft.	Weight, 103 lbs.	Wing loading, 3.1 lbs./sq. ft.
Gliding angle, 15–1.	Sinking speed, 3.23 ft./sec.	Gliding speed, 30-35 m.p.h.

Mr. E. MOLE writes:—

"I am writing to congratulate you on your successful design, the 'Scud,' which seems just right at the first attempt. I soared the 'Scud' for over an hour, and it proved a revelation after other types of gliders; the controls answer quickly and smoothly, and enable the pilot to fly with much greater accuracy and confidence than with the usual sluggish control. You have obtained a really effective control without making the machine over-sensitive for the novice, and this quality combined with the machine's light weight and ease of handling, makes the 'Scud,' in my opinion, an extremely sound proposition for both novices and more experienced pilots."

Capt. R. BENTLEY writes:—

"My two flights on the 'Scud' were the third and fourth I had ever done on a glider, and I found it easy to handle and responsive to the controls, which amply convinced me that it is a very controllable and therefore safe craft of its type. I am therefore sure that it is an excellent machine for improving the ab initio glider pilot and introducing the power pilot to the art of engineless flight."

£95 AT WORKS

TRAILER CASE without chassis £10

TRAILER CHASSIS for car towing £10

HIRE PURCHASE TERMS ARRANGED.

Write for particulars.

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TUITION BY AUTO-TOWING.

A REPORT FROM AN AMERICAN GLIDING CLUB.

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

This report covers the field activities from the time the Waco glider arrived at Schlee-Brock Airport, John R and 16 Mile Roads, Detroit, Michigan, on May 10, to Nov. 4, when the hangars were torn down and the field abandoned.

During this time there were 82 flying days, in which the Club made 2,340 flights and 357 sled rides. It trained 22 members to fly the gliders and gave sled rides to 10 more. The first 15 members made 2,156 flights, which is indicative of the Club interest. The gliders were flown a distance of approximately 1,450 miles, plus 181 miles of sled rides.

Probably one of the most outstanding features of the Club's record is, that out of the 2,340 flights there occurred only 3 crack-ups, involving extensive repairs, and only 7 other minor breakages, such as landing wires, etc. All but one of these occurred during the low flight period of training. The other was the direct result of improper flying and as a consequence, required that member's resignation. No injuries were received by any of the members. No member had any previous training in a glider although two were airplane pilots. There were two others who had some flight experience during the war, but found that they had lost all of the "feel" of the air and had to start from the beginning. The others had never before held a control stick. The membership is made up mostly of experienced engineers, young men of mature judgment, the average age being 32 years. Several have had aeronautical engineering experience.

During the time we were waiting for the gliders to arrive, the club officers gave considerable thought and study to the question of how we should fly the gliders. Shock cord launching from a hil-top or auto-towing from an airport? This also involved a study of the terrain around Detroit to see which could be most easily obtained, suitable hills or suitable airports. We found no suitable hills within a reasonable distance of Detroit, which could be reached after working hours on week days, and leave any time for gliding. On the other hand there are several airports within an hour's ride after work. A canvass of the club members showed that all of them hoped to be an airplane pilot someday.

It was therefore logical for us to keep our glider flying as nearly comparable to airplane flying as possible. A shock cord launching from the top of some hill is as opposite to the take-off of an airplane as auto-towing is similar to it. In taking off behind a tow car there is the run along the ground while speed is being obtained, the take-off is smooth and even and the climbing angle must be kept consistent with the speed or stalling will result. In a shock cord launching the maximum speed, often more than 60 m.p.h., is obtained almost instantly, the climb, if any, is very sudden and completed in 2 or 3 seconds. The glider must be nosed over quickly to prevent stalling. If the launching is from the brow of a hill, the glider is held level or climbed only slightly. In either case the launching is not at all comparable to an airplane take-off. Also gliding from a hill top is a lengthy proceeding because of the trip back up the hill and relatively few flights per hour can be made. This greatly reduces the amount of training which could be given in the time available. Considering all of these factors, it was decided that we should obtain space at an airport and use auto-towing as the method which offers the most time for flying and instruction.

A tentative training programme was worked out which was designed to provide a careful step by step development of the student and to keep safe flying as the motto at all times. After a few initial trials by the Club officers, the tentative programme for training was found reasonable and was put into operation for one month. Following this practical trial a final method of training was then arranged and rigidly adhered to. At times the rulings made seemed a bit discriminating but were in the interest of the member's safety. We believe that the Club record bears witness to the wisdom of the decisions made.

It was found that the preliminary training such as sled rides and low flights could not be safely carried out in a wind of more than 5 m.p.h., or just enough to lift the wind cone on the hangar. During the intermediate stage of training, i.e., straight flights and normal landings, the members were not allowed to fly if the wind reached 10 m.p.h. Banks and turns were practised only in still air. Only those members having shown sufficient proficiency in turns and landings were permitted to fly in winds over 10 m.p.h. These rules kept the training proceeding along a careful step by step programme and practically eliminated the chances of a partially trained man being suddenly placed in an emergency situation.

Sled rides were first made with the elevator bridled down and at an air speed of 15 m.p.h. At this speed the ailerons were sufficiently effective for the glider to be kept level within a few inches measured at the wing tips. Of course the first trips were not that good. The beginner usually proved slow in perceiving the dropping of one of the wings and would not notice it until the wing skid touched the ground. He then usually over-controlled and sent the glider over on the other wing skid. The tow rope should be at least 150 ft. long, as a shorter rope makes it more difficult for a beginner to keep the glider straight behind the car, by increasing the frequency of the oscillations from side to side.

It is easy to understand that the student would become so engrossed in keeping it level that he might inadvertently pull back on the stick and if a puff of wind came along at that time, zoom into the air a few feet and pancake. This happened a few times before we began putting a bridle on the control and limiting sled rides to winds under 5 m.p.h. We had less trouble after that. After the student became able to keep the glider reasonably level, the bridle was removed so that he could begin to devote some attention to the forward position of the control stick and carry it in the position where the glider would ride the best. He was kept on sled rides until he could repeatedly go the entire length of the half-mile runway keeping the glider straight behind the tow car and practically level, never allowing a wing skid to touch the ground. Usually 10 sled rides, sometimes more, were required before he could do this.

He was then permitted to make low flights from 2 to 5 ft. high until he had overcome any tendency to "over-control." This period of training proved to be the most dangerous, for the glider, but if the altitude is kept under 5 ft. and flights are made only in still air, it is not dangerous for the man. The elevator control is quite sensitive on the glider and if operated too suddenly an upward zoom followed by a pancake landing may result. As the man develops steadiness in the air he is permitted to fly at higher altitudes, as his confidence increases. Turns were not permitted until sufficient steadiness in the air had been shown on successive flights and landings.

It was found advisable to have a quick release catch on the tow-car and an observer on the running board *AT ALL TIMES*. During the sled rides and low flights this was the position of the instructor, who released the glider if the pilot got into difficulties. Right here it is best to add that should the pilot over-control during a low flight this man must never release the glider while it is in the nose high position, but only after the pilot has nosed over and started for the ground. The reason for this should be obvious. Cutting loose the glider in a nose high position would make certain a stall which might otherwise be avoided. Thus the crew on the car have a distinct control over the glider while the pilot is in the sled ride and low flight stages. During high flights, with experienced men, it was the duty of this observer to watch out for airplanes, signal the driver when to start and stop, and at what speed to drive. The tow rope had a ring in each end, which was very convenient as it obviated the necessity of reversing the rope.

It will be of interest to know that seven of the ten accidents experienced by the Club in the period under review were due to "over-control" in a wind during low flights in the early training period, and before a rigid adherence to the wind rules was enforced. Two were the result of not taking all the necessary precautions while handling the glider on the ground. This leaves the remaining crash which was the result of the pilot "stretching his glide" and attempting a turn while at nearly stalling speed. Repeated warnings against slow flying had been given all the members. No other tendencies towards this kind of flying were encountered.

(To be continued.)

LAUNCHING ROPE FOR GLIDERS

The high efficiency Turner rope, specially built for the job, is now available from stock in standard lengths of 60 yards from the sole distributors

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HANGARS For SAILPLANES and GLIDERS

(AS SUPPLIED TO THE LONDON GLIDING CLUB)

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

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Sinking Speed 2 ft. per second.

For "C" CERTIFICATES, the same R.F.D. machine with small centre-section is unrivalled.

Gliding angle, 20.4 to 1
Sinking Speed 2.5ft. per second.

Price £190 at Works

Complete with the two centre-sections.

Coming later,

The R.F.D. Two-Seater

conversion unit; enabling the above to be turned into a high efficiency 2-SEATER with DUAL CONTROL.

THREE MACHINES IN ONE!

THE R.F.D. CO., GUILDFORD.

A DOUBLE ACHIEVEMENT!

"On Friday and Sunday last the B.A.C. VII. was soared on numerous occasions with passengers for durations of over five minutes every time. Finally on Sunday Mr. Lowe-Wylde went up solo and soared for 1½ hours. This is the longest soaring flight yet made by a British pilot in a British machine. Further, it is the first time a British two-seat machine has carried passengers on soaring flights."

B.A.C. Auto-Towing Soaring Equipment takes the drudgery out of gliding.

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

Telephone: MAIDSTONE 4111 Managing Director: Mr. C. H. LOWE-WYLDE, A.F.R.Ae.S.

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.

The Cost of Gliding.

Sir,—Much has been written lately about the finance of gliding clubs. It was recently suggested in THE SAILPLANE that £10 per annum was a reasonable subscription, and this week the cost is compared with that of a motor-cycle. Now most members of gliding clubs are young men who have only just started their careers, and to mention a £10 sub. would simply kill the gliding movement. Again, the comparison with a motor-cycle is hardly correct. A motor-cycle costs 30s. or £3 per annum. The remainder is running cost and is proportional to the amount of use.

Those clubs who have been working hard during the winter will, we hope, soon have some members who can soar. I venture to suggest that when this stage is reached, the financial question may easily be solved in the following way. All members should pay a small annual subscription, 30s. or thereabouts. They will then be charged for hire of machine at so much per minute, or hour, as the case may be. Thus all members would contribute to running costs according to the actual amount of gliding done. Auto-launching will be necessary to reduce ground crews. Hangars may be provided for those members who own machines, and a charge made for storage and launching. A gliding club could then be a commercial proposition and possibly make a profit, while the cost to members, being paid as running expenses, would not seem an impossible item.

There still remains the problem of beginners. Tuition by auto-towing is a possible solution, and members could be charged so much per lesson, in addition to the club subscription. There are, however, many districts where ground suitable for auto-towing is not obtainable, so that catapult launching will still remain, for many, the only method of instruction. Here one cannot expect members to pay a big subscription for the privilege of doing horse-work, so that, unless some means can be found to reduce the cost of crashes, etc., this department must be run at a loss. The club, however, will retrieve the losses from these members, when they become proficient and pay for hire of the advanced machines.

(Signed) E. HOWKINS.

The Channel Club Replies to Mr. Bound.

Sir,—Owing to urgent business matters I did not notice Mr. Bound's letter in THE SAILPLANE of April 17 until too late to reply. I note that he criticises our wisdom in fitting a balance cable to the B.A.C.II. He mentions in support of his argument that several excellent aeroplanes have been fitted with spring-returned ailerons and gives an illustration of the Westland Widgeon belonging to the late Dr. Whitehead Reid.

If this device is so very satisfactory it would be of interest if Mr. Bound would tell us why the Westland people dropped it in later machines in favour of a balance cable. Obviously it must be that the latter gives better control. Surely Mr. Bound does not contend that a device that answers perfectly on a power machine is equally suitable for gliders? Would not the difference in flying speed have some bearing upon the matter? It would have been more to the point if he had given as an illustration some highly efficient glider or sailplane.

I notice also that he suggests that the remedy for the vice of our machine is to keep within the "correct flying range of a primary trainer." I have tried to understand the meaning of this expression and can only imagine that it means, "don't use it in a manner other than the makers intended." Whilst admitting that the C.G.C. may be in the kindergarten stage, I would beg to point out that we are not entirely without knowledge of both construction and methods of instruction. One of our pilots spent three months at the Wasserkuppe last year when he qualified for his A. B. and C. Certificates, and spent considerable time studying the German methods of instruction. It was he who was flying the machine at the time of the accident.

I can assure Mr. Bound that the glider was being flown well within the flying range of a primary trainer. The conditions were, a nursery slope, a light breeze and not too strongly manned ropes. Could Mr. Bound have seen the flight or better still have flown the machine, he would have realised that it was particularly sluggish in answering aileron control. Once the wing dipped it continued to drop in spite of full aileron and rudder.

From the point of construction the C.G.C. is also in a fortunate position. Our ground engineer has been experimenting with and building gliders for the past thirteen years. At the moment he is engaged upon the construction of his seventh machine, a sailplane, all of which have been built to his own designs. It is because of, and not in spite of, this knowledge that we are fitting the balance cable and wing bracing wires as we are of the opinion that this is where the fault lies. In only one way can I see any benefit arising from spring returned ailerons. That is in the rigging and de-rigging of the machine. It means one or two turn-buckles less to handle. This seems to me to be a poor return for what must be loss of efficiency in control during flight.

(Signed) L. H. HINCKS
(Channel Gliding Club.)

The Hols der Teufel and the Falke.

Sir,—We would like to point out that the remarks about the *Hols der Teufel* in last week's THE SAILPLANE (they occurred in an article by a "Wasserkuppe Correspondent") can in no way claim to be correct. A new model of the *Hols der Teufel* is brought out every year and so the implication in the wording is equivalent to calling the 1931 model of a famous car "out-of-date" merely because the very first car of that make was designed and produced sometime in the 1890's.

Further, despite the disparaging remarks about the machine's performance, the fact remains that clubs throughout Germany, other European countries, and also in Canada use the *Hols der Teufel* for the training of "C" pilots. We do not know if the writer has flown the machine and is therefore qualified to criticise the controls, but we hardly imagine that any competent instructor would train pilots on an "almost uncontrollable" machine.

(Signed) ADJAC.

[*We rather imagine that our correspondent intended to draw attention to the excellent qualities of the* Falke *rather than disparage the* Hols der Teufel. *One of the latter machines will be seen in England shortly at the Glider Exhibition.*—ED.]

A Neutral Site.

Sir,—In reference to Mr. Dagnell's challenge contained in your issue of April 17, The Sailplane Club will be very happy to offer the use of its grounds at Smalldole for any event which is the outcome of this challenge.

Also, we would be prepared to provide road maps for all interested in attending.

I would make it my business to see that the event got a full press attendance, so that the Gliding Movement as a whole would benefit.

(Signed) E. G. SMETTEM
(Hon. Sec., Sailplane Club).

[*To prevent unnecessary correspondence we would point out that the Balsdean site cannot be regarded as "neutral" in that Captain Stratton has been soaring over it for some time and is as well a member of the Club in whose Flight Secretary access to the ground is vested.*—ED.]

THE GLIDER EXHIBITION.

As announced in THE SAILPLANE last week, a Glider and Sailplane Exhibition will be held in the Royal Agricultural Hall, from May 6 to May 16, 11 a.m. to 10 p.m. daily.

Members of *The British Gliding Association* and their friends and members of Affiliated Clubs should make a point of visiting the Exhibition. Each member of the Association will be entitled to one complimentary ticket to the Exhibition, and Affiliated Clubs 12. Early application should be made by those wishing to attend.

A nominal charge of 6d. is being made to the public to the Exhibition, but on production of their membership cards members of the Association will be admitted free, and members of Affiliated Clubs at half price.

THE LYONS DEMONSTRATIONS.

The first demonstrations of soaring flight which have been organised by the Lyons Tea people in conjunction with the British Gliding Clubs is to take place this week-end at Merthyr. The site is at Forest Lodge, Glanrhyd, Brecon. The others which follow consecutively are as follows:—

May 9—10.—North Cotswold. The Tower, Broadway, Worcs.
May 16—17.—Preston. Butler's Farm, Beacon Fell, Preston.
May 23—25.—Ilkley. Woofa Bank, Ilkley.
May 30—31.—Scarborough. ——.
June 13—14.—Glasgow. Campsie Fell.
June 20—21.—Stirling. Sherrifmuir, Stirling.
June 27—28.—Nottingham. Irlam House, Dovedale.
July 4—5.—Bradford. Ambler Thorne, off Roper Lane, Queensbury.
July 18—19.—Oxford. ——.
July 25—26.—Wilts. Oliver's Castle, nr. Devizes.
Aug. 8—9.—Brighton. ——.
Aug. 15—16.—Channel. *Valiant Sailor*, Dover Hill.
Aug. 22—23.—I.O.W. Afton Down, Freshwater.
Aug. 29—30.—Portsmouth. Race Course, Portsdown Hill.
Sept. 5—6.—London. Dunstable.

NEWS FROM THE CLUBS.

WHERE GLIDING CAN BE SEEN.

Beds.—The Bedford Gliding and Flying Club. Week-ends at Woolley Hill, on the Huntingdon-Thrapston road, between Spaldwick and Ellington.

—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. Saturdays, 2.30 p.m. Sundays, 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.

I.O.W.—The I.O.W. Gliding Club, at Bowcombe Down, 1½ miles W. of Carisbrook, on main Newport/Freshwater road. Every Sunday from 11 a.m.

Kent.—North Kent Gliding Club. Saturdays 1 p.m., Sundays 10 a.m. Joyce Green Aerodrome, 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 Raikes Moor Farm, Hawcoat, Barrow-in-Furness. Saturday, 2.20 p.m.; Sunday, 10.30 a.m., 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.)

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 Accrington Gliding Club. Wednesdays, Saturdays, Sundays, Hambledon Hill. One mile along Burnley Road.

—The Bradford Gliding Club. Saturdays, 2.30 p.m.. Baildon Moor. Sundays, various alternative sites are being tested with a view to permanent use.

—The Huddersfield Gliding Club. All day Sunday near the Flouch Inn, 11 miles from Huddersfield, beyond Newmill, on main Sheffield Road.

—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 BRADFORD GLIDING CLUB.

In spite of the unfavourable weather conditions, about eight members turned up on Baildon Moor on Saturday, April 25, for primary instruction. After one attempt at launching the Dickson with a crew half the normal size, actual flying was abandoned, and some good work put in instead by giving balancing practice to one or two beginners.

For some time past all the energy of the Club has been directed to the organisation of the Club's first large sailplane demonstration, for which the services of Herr Magersuppe have been obtained, to take place on Saturday, May 2, and Sunday, May 3, at Queensbury, Bradford. On Wednesday, April 22, Herr Magersuppe visited Bradford to select the site, and in the evening delivered an extremely interesting lecture on "Gliding and Sailplaning" in the Mechanics' Institute, Bradford. The lecture, which was illustrated by films and slides, was very largely attended, and was equally appreciated by the members of the Club and the uninitiated public.

The organisation of the demonstration is now practically complete, so that the only thing left to do is for members of The Bradford Gliding Club to sit down and pray for fine weather. The assistance of other Clubs in this matter is earnestly requested, and The Bradford Gliding Club will at any time be glad to do the same for them. If the weather is reasonably good the success of the demonstration is assured, and it is hoped that as many Clubs as possible will pay us a visit and make themselves known, when they will be made very welcome.—N. H. S.

THE CHANNEL GLIDING CLUB.

On Wednesday, April 22, Mr. Turner took his B.A.C. IV along to our soaring ground. The machine was rigged in record time and he was quickly in the air. A fairly decent breeze was blowing at the time though a little too westerly to enable the pilot to make the most use of the ridge. Height was quickly gained and a complete circuit of the site made. Again the machine flew along the face of the cliff, but unfortunately in making the turn at the furthest point a little of the height was lost and the pilot found himself in a spot sheltered from the breeze. This put an end to the flight, but not to the excitement of the onlookers.

Mr. Turner was now faced with one of three prospects. Rapid side drift was bringing him into the face of the cliff. Below him stretched a line of allotments complete with the type of huts peculiar to same. His only hope was to make an up-hill landing. This he did in masterly fashion, especially considering that the slope at this point was exceptionally steep. Slight damage to the struts resulted The time clocked was 4 minutes 25 seconds.

During the week-end weather conditions, for the second week in succession, curtailed our activities, an exceptionally strong wind making flying of any kind impossible.—L. H. H.

THE LONDON GLIDING CLUB.

Last week-end, April 25—26, we were by no means fortunate with weather conditions, as the wind was not in a favourable direction and there were a large number of heavy showers. We were consequently compelled to abandon all activities on Saturday, but on the following day we were able to carry on under unfavourable conditions. Mr. Lowe-Wylde paid us a visit with the new B.A.C. two-seater which has a most impressive appearance and finish. The machine was quickly assembled and after making a test flight of 8 minutes solo, Mr. Lowe-Wylde landed at the bottom of the hill and picked up a passenger.

He was then auto-towed by the indefatigable Mrs. Green up to a height of about 500 feet, when he cut loose and turned along the ridge, soaring excellently for 10 mins. and landing at the top of the hill. Heavy rain then interrupted flying for a considerable period, but when this was over Mr. Lowe-Wylde took-off solo once more and soared for 1 hr. 31 min., thereby setting up a new record for duration flight by a British pilot on an all-British machine. Interest was added to this very highly-polished performance by Mr. McCulloch flying the Club Prufling, at the same time, thereby offering an excellent opportunity for comparison.

The B.A.C. two-seater appeared to be exceptionally practical and controllable, and we must congratulate the B.A.C. Ltd. on the production of such an excellent all-round machine, and strongly recommend organisers of gliding demonstrations to include it in their programme, as it will undoubtedly prove a great attraction. A number of other good flights were made in the Club Prufling.

We were particularly pleased to hear Mr. Lowe-Wylde (who has visited and flown on almost every gliding ground in the country) express his opinion that our ground at Dunstable is the finest ground upon which he has yet flown. We were also pleased to welcome a party of members from the Kent Club, and shall always be pleased to welcome any other similar Club parties who care to pay us a visit.

Particulars of the Club may be obtained by anyone interested from the Secretary ,The London Gliding Club, Empire House, St. Martin's-le-Grand, London, E.C.

THE NORTH COTSWOLD GLIDING CLUB.

The first annual general meeting of The North Cotswold Gliding Club was held at the St. Patrick's Tea House, Broadway, on April 19, and was attended by practically all the present active members.

Mr. John Whitehouse, the Chairman of the Club and Honorary Treasurer, presided, and called upon Mr. Horace C. Wright, the Honorary Secretary, to read the minutes of the inaugural meeting held in Evesham in April last year. These minutes disclosed that valuable assistance was rendered upon the formation of the Club by Mr. Alan S. Butler and Mr. W. Cotterell, who had provided them with the use of a hangar and gliding ground without charge. It was pointed out that the subscription of Gliding Clubs in other counties was £5 per annum, which was the minimum amount which could be charged satisfactorily, but as they had received such generous help they started at a guinea. The entrance fee was half a guinea, and this had since been raised to two guineas. He was informed on the highest authority that this first year's experience had proved that gliding is going to cost members about £10 a head a year, and that is the sort of figure Clubs ought to work up to.

The items of the balance-sheet were next examined, and after some criticism and discussion were passed by unanimous consent.

Mr. Whitehouse thanked the presidents, Mr. and Mrs. Alan Butler, for their interest in and generosity to the Club. Mr. Cotterell and all others who had assisted and encouraged the Club were thanked, and donations were acknowledged from Sir Bolton Eyres Monsell., Capt. Frank Burges, Mr. John Whitehouse, Mr. Nyborg, and Mr. Noble.

Then followed a discussion as to ways and means of securing the income to the Club for next year. A proposal from Mr. Horace Wright to increase the subscription to £3 3s. was not seconded. Miss Alexander suggested that they left the question of subscriptions over and see if the forthcoming demonstrations brought in any substantial amount of money. Mr. Horace Wright described such procedure as economically unsound, as their duty was to arrange for the funds of the Club to come from the source where due, and not count at all upon precarious speculations which may or may not be profitable. Mr. Nyborg supported this statement and said that if they wanted gliding they must be prepared to pay for it, as they paid for their golf and other sports. It was eventually agreed to raise the subscription to £2 2s., and increase the charge for lessons to qualified students to 1s. each.

Mr. Horace Wright suggested that they adopt two rates of subscription, one for the advanced, and one for the poorer members. Miss

Douglas Jones contended that it was not practicable to have two rates of subscription, and the matter was dropped.

Mr. and Mrs. Alan S. Butler were re-elected as joint presidents of the Club, and Sir Bolton Eyres Monsell and Capt. Frank Burges were re-elected as vice-presidents. The following officers and committee continued in office for a further period of two years: Mr. John Whitehouse (Chairman and Honorary Treasurer), Mr. Horace C. Wright (Honorary Secretary), Messrs. T. G. Nyborg, J. C. Moore, W. Jacques, T. Wild, and to fill the vacancies caused by the retirement of Messrs. A. Hodgetts and W. G. Smith, Miss Gwynedd Douglas Jones and Mr. E. Noble were elected to the committee.

The meeting closed with a vote of thanks to Mr. Whitehouse, proposed by Miss Alexander, and Mr. Noble spoke in praise of Mr. Horace Wright.

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

Another very successful dance passed away all too quickly at Suffolk Galleries on Saturday, April 25, when the Sailplane Club and The Model Aircraft Club once again got together for fun and finance. There was a greater attendance than before and there is already a clamour for another, despite the fact that we are in Summer time.

The Sailplane Club has prepared a new prospectus giving full particulars of its gliding facilities, its grounds, training system and terms. It is illustrated with photographs and on the back is a useful road map showing how to get to Smalldole from any direction.

Gliding takes place each fine Sunday at Smalldole. There is plenty of accommodation for cars and charming surroundings for picnics. Prospectuses and road maps from Hon. Sec., E. G. Smettem, 2, Wine Office Court, Fleet Street, E.C.4.

THE SURREY GLIDING CLUB.

During last week-end (April 25-26) the weather was not good. The wind was in the best direction possible, but long and heavy showers prevented much flying. On Saturday afternoon a little indoor work was put in, and on Sunday morning some flights on the Prufling were managed—one member putting in enough time to qualify for his "B." The rain held sway during the afternoon, but some training was possible during the evening.

We are very pleased to hear that Mr. York Bramble is organising a Whitsun Meeting, and offer our hearty support. We will be very willing to give any help in any direction, and will naturally enter for what competitions we can.

GRUNAU'S EXCELLENT RECORD.



ONE HORSE-POWER.—Bringing back two E.S.G. training machines at Grunau.

We have recently received a long letter from Herr Wolf Hirth, who, as his friends over here and in the United States will remember, has returned to his own country to take charge of the Gliding School at Grunau, on the borders of Germany and Czechoslovakia. He tells us that although Grunau is a comparatively modern institution, more "B" and "C" Certificates have been obtained there than at Rossitten and the Wasserkuppe put together. This year twenty-six "C's" have been granted already.

He has already made plans to include auto-towing in the curriculum and a course of auto-towing will be given in June. In July there is a special course for pilots who intend to enter for the Rhoen Competitions. The school fleet is quite large as there are seven primary training machines available, five secondary types and two sailplanes. Further three "Falke" are in course of construction.

Besides Wolf Hirth there are three other instructors. Four carpenters and a mechanic look after repairs. There is also a local factory for sailplanes which belongs to Herr Schneider. Two hangars house the fleet, but a third is to be erected to cope with the increasing business.

When Herr Hirth's own "ship," as he calls it, the *Musterle*, arrives from America, he hopes to be able to put in some soaring himself.

RECOLLECTIONS OF A PIONEER.

Speaking at a dinner given by the Aviation Group of the Forum Club to "A Few Pioneers" on April 28, Mr. E. C. Gordon England said that he had started flying by gliding with José Weiss, a man who would one day come to be regarded as one of the greatest pioneers of aviation. Their first machine had been made of bamboo jointed with tarred twine and tyre cement. His first flight had been off the top of Amberley Mount in Sussex and in the course of it the machine had risen 100 feet from its starting point. Although it was without controls of any sort it had landed again safely.

After that they had bought engines and had moved to Littlehampton. But the engines were not very much use. When funds ran out José Weiss would paint a few pictures and when they were sold they could carry on again for a bit. As soon as they had made power-driven flights of over a few yards they had moved to Brooklands. Mr. Gordon England then described the building and testing of the Cedric Lee circle plane, a machine of unusual design but good performance. This machine was built with armed guards (the designer and his friends with revolvers at the doors of the shed), and was tested in the dark for fear of spies. It flew very well, but had a pronounced tendency to spin. It was wrecked eventually.

The speaker said that he believed that gliding and soaring flight was the real key to the aviation problems of to-day. Aviation was destined to be the greatest industry in the world and this Country had the greatest need for it. The German Government paid £16,000 a year to subsidise gliding and there were 400 Gliding Clubs in Germany to-day, most of which were connected with technical schools and similar establishments, with the result that the Movement was closely linked up with the youth of the country. In Germany a "C" licence could be gained for as little as £15 and a man holding this licence was often a better pilot than most power-driven aeroplane pilots. *The British Gliding Association* had started over 100 Clubs in Great Britain on the £1,000 given by Lord Wakefield.

NEW COMPANIES.

LONDON GLIDING CLUB PROPRIETARY LTD.—Private company. Registered April 21. Capital, £100 in £1 shares. Objects: To promote, assist and encourage gliding, soaring and aerial navigation in all its forms, and the study of aeronautics, etc.

The directors are: J. R. Ashwell-Cooke, Uplands, Mayfield, Sussex. D. G. O. Hiscox, 60, Vauxhall Bridge Road, S.W.1 (director of Park Langley Sports Club Ltd.). M. D. Manton, 19, Ebbsfleet Road, N.W.2.

The committee of the London Gliding Club may appoint and remove any director. Qualification: one share. Remuneration: as fixed by the company. Solicitors: Blount, Lynch, Petre and Colley, 8, Carlos Place, W.1. Registered office: Empire House, St. Martin's-le-Grand, E.C.1.

ROCK CARLING LTD.—Private company. Registered April 20. Capital, £1,000 in £1 shares. Objects: To carry on the business of manufacturers of and dealers in sailplanes, gliders, and heavier-than-air flying machines of all kinds, motor-cars and cycles, sailing and motor-boats, hydroplanes, glider launching apparatus, cinematograph projectors and cameras, sound film apparatus, microphones, loud-speakers, radio frequency amplifiers, etc.

The directors are: F. R. Carling, 2, Manor Drive, Mill Hill, N.W.7, engineer (permanent). Mrs. Alison J. Carling, 2, Manor Drive, Mill Hill, N.W.7. Qualification: £1. Solicitors: Lamartine Yates and Duncan, 40, Chancery Lane, W.C.2. Registered Office: 237/8, Berwick Avenue, Trading Estate, Slough.

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