SAILPLANE AND GLIDER

M A Y
1939
Vol. 10 No. 5

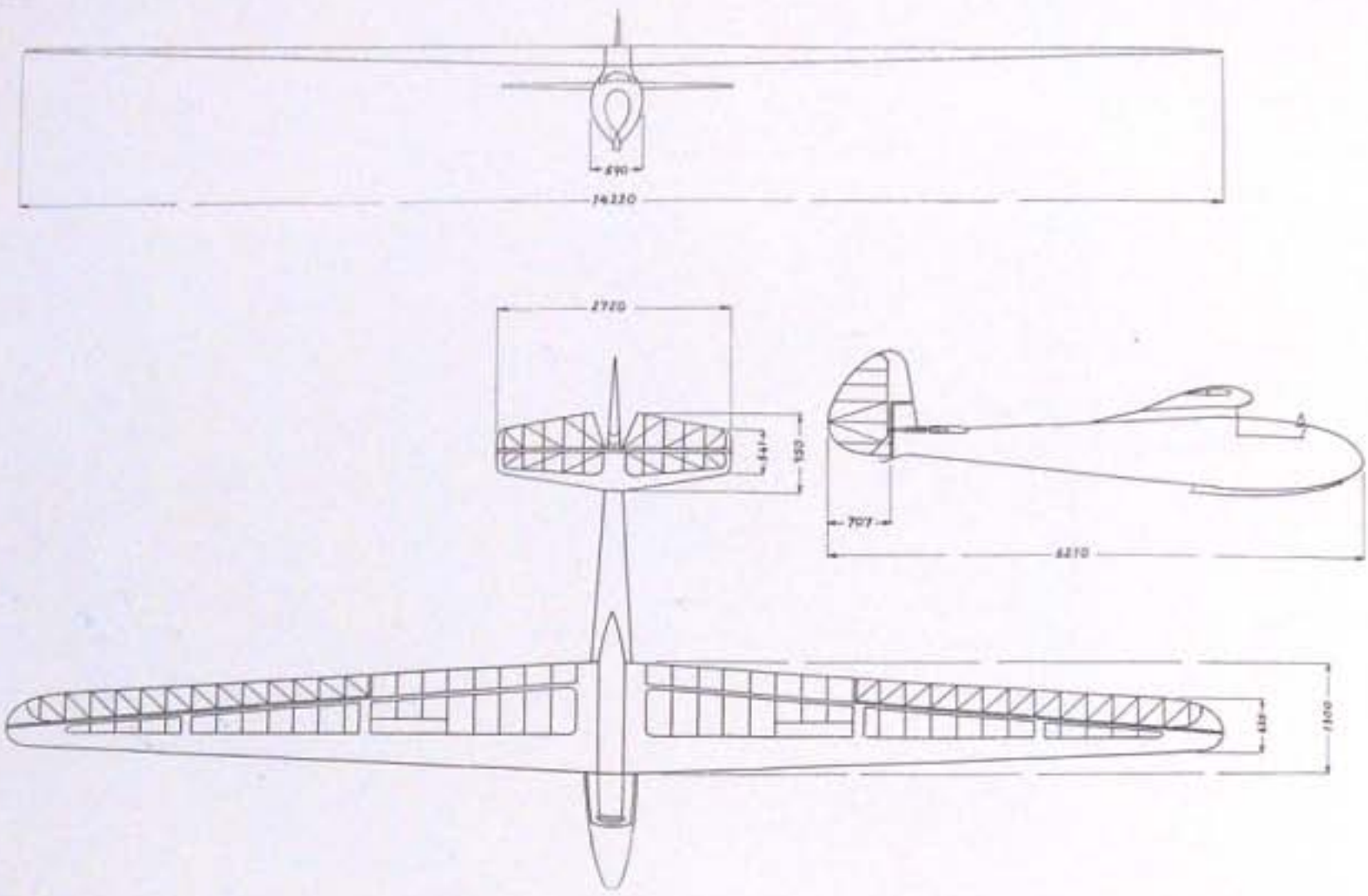
Published Mon
PRICE - -
Editorial Offi
13, Victoria St., S.

Official Organ of the British Gliding Association

EDITED BY ALAN E. SLATER



SLINGSBY SAILPLANES



HIGH PERFORMANCE SAILPLANE TYPE No. 16

MACHINE No. 16 will shortly be produced to fulfil the demand for a full cantilever high performance sailplane of medium size, with a large speed range.

The wings of No. 16 are identical with the wing extensions of the "Gull II" side-by-side two seater now nearing completion. Other components are also identical with those of machines in our range of types. The cost of special jigs, drawings, etc., has consequently been eliminated to a large extent. This will enable us to offer No. 16 at a very attractive price.

SLINGSBY SAILPLANES

KIRBYMOORSIDE, YORKS, ENGLAND

Telegrams: "SAILPLANES, KIRBYMOORSIDE." Telephone: KIRBYMOORSIDE 205.

THE SAILPLANE *and* GLIDER

Official Organ of The British Gliding Association

Editorial Offices: 13, VICTORIA STREET, LONDON, S.W.1 Telephone: ABBey 2615-6-7

Vol. 10 No. 5 MAY, 1939 Published Monthly—Price 1/-

Official Gliding Records

INTERNATIONAL flying records are officially recognised by the *Fédération Aéronautique Internationale*; national records by the various national Aero Clubs.

We have received from the B.G.A. a list of officially recognised gliding records, international and British, as existing on March 1st, 1939, and reproduce them below. It will be noticed that Kurt Schmidt's

INTERNATIONAL

Category I—Single Seaters

(*a*)	DISTANCE IN A STRAIGHT LINE (U.S.S.R.) Victor Rastorgoueff, in GN–7, from Moscow (Touchino) to Iarygenakaya, 27th May, 1937	652.256 km. (405.3 miles)
(*b*)	DISTANCE, RETURNING TO POINT OF DEPARTURE (Germany). Bernhard Flinsch, in type D–30, Bremen–Lubeck and return, 7th July, 1938	305.624 km. (189.9 miles)
(*c*)	DURATION, RETURNING TO POINT OF DEPARTURE (Germany). Kurt Schmidt, in GRUNAU BABY, at Korschenruh (East Prussia), 3rd and 4th August, 1933...	36h. 35m.
(*d*)	HEIGHT, ABOVE POINT OF DEPARTURE (Germany). Erwin Ziller, in KRANICH, Hirschberg aerodrome, 21st November, 1938	6,838 m. (22,434 ft.)

Category II—Multi-seaters

(*a*)	(U.S.S.R.) L. Kartacheve, pilot; P. Savtzov, passenger, in STAKHANOVETZ, from Moscow (Ismailovo) to Ouchinia (reg. of Tchernigov), 17th July, 1938	619.748 km. (385 miles)
(*b*)	(Germany) Heinrich Huth, pilot; Heinrich Brandt, passenger, in KRANICH, from Hamburg–Altona to Hanover–Vahrenwald and return, 10th August, 1938	258.830 km. (160.8 miles)
(*c*)	(Germany) August Bodecker and Karl Heinz Zander in KRANICH, Rossiten, 9th–11th December, 1938	50h. 26m.
(*d*)	(Germany) E. Ziller, pilot, and Quadfasel, passenger, in KRANICH, Hartau, 18th September, 1937	3,304 m. (10,839 ft.)

BRITISH

Category I—Single Seaters

(*a*)	P. A. Wills, in MINIMOA, Heston (Middlesex) to St. Austell (Cornwall), on 30th April, 1938	209 miles
(*b*)	No award.	
(*c*)	Sub.-Lieut. A. N. Young, in FALCON II, at Long Mynd (Salop), on 18th August, 1938 ...	15h. 47m.
(*d*)	P. A. Wills, in MINIMOA, Dunstable (Beds), on 5th June, 1938	10,080 ft.

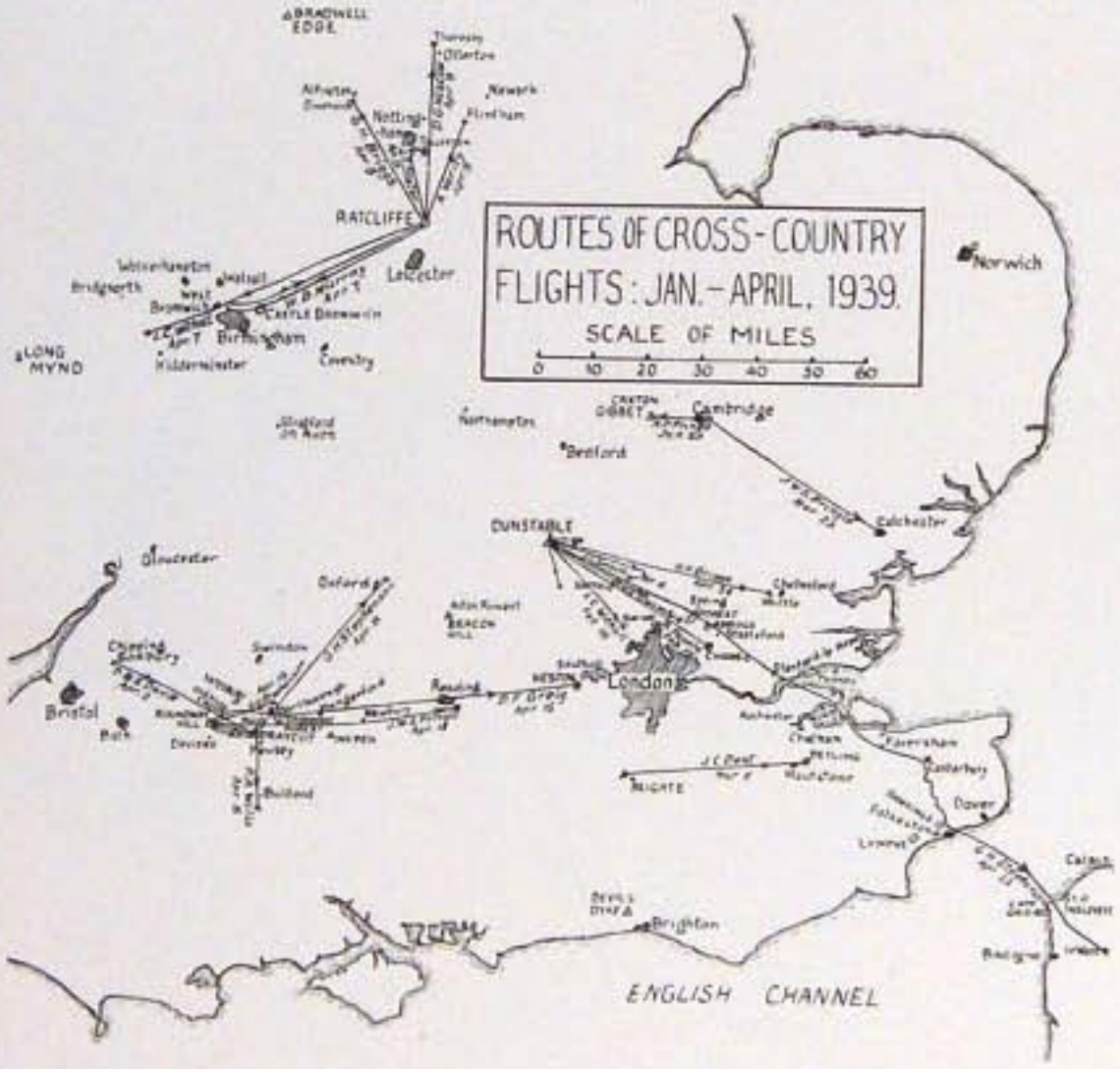
Category II—Multi-seaters

(*a*)	No award.	
(*b*)	No award.	
(*c*)	Lieut. W. B. Murray and J. S. Sproule, in FALCON III, at Dunstable (Beds) on July 9th–10th, 1938	22h. 13m. 35s.
(*d*)	No award.	

duration record set up in 1933 is still the official one, although unofficially it was exceeded by the Russian Lissitvine in October, 1935 (38 hours 40 minutes), and by Ernst Jachtmann, of Germany, in May, 1937 (40 hours 55 minutes). The single-seater and two-seater altitude records were both set up at the same place, Hartau being the Hirschberg Aerodrome; both were done in a stationary air wave under (or inside) the "Moazagotl" cloud.

There are two unofficial British records which do not appear in the British list. On the 7th of last month W. B. Murray flew in a RHÖNBUSSARD from Leicester to West Bromwich and back, 40 miles each way; it is possible that he was observed from Castle Bromwich Aerodrome, 34 miles from the start, and if so this might be accepted as evidence. Then there was a flight of 46 miles in the two-seater KASSEL on March 18th, 1934, when the late Eric Collins, with Herr W. Exner as passenger, flew from Dunstable to Little Waltham, near Chelmsford. They carried no barograph, and it is doubtful whether signatures of witnesses of the landing were obtained. During the flight a height of 3,700 ft. above the start was reached; has any British two-seater since exceeded this?

Cross-Country Flights



The accompanying map and table show all cross-country flights of over 10 miles of which news has reached us so far this year. The season opened unusually early with a flight in cloud lift by A. P. Pringle in January.

The special feature of this map is, of course, the inclusion of a portion of France in order to get in Mr. Stephenson's unique achievement. The route shown is copied exactly from that marked by the pilot on his own maps.

Another outstanding flight is that of Squadron-Leader Murray, who made an out-and-return flight of 40 miles each way.

On page 93 Mr. Greig describes a flight of 70 miles which was remarkable for its low altitude and the use of thermals too small to circle in, and for comparison J. W. S. Pringle describes a flight over the same route later on the same day.

We should like to be informed of all cross-country flights, especially by pilots of clubs which do not regularly send in news.

Date	*Starting Place*	*Pilot*	*Sailplane*	*Mode of Start*	*Landing and*	*Mileage*
Jan. 20	Cambridge aerodrome ...	A. P. Pringle ...	KIRBY KITE ...	Aero-tow	Caxton Gibbett... ...	10
Feb. 18	Dunstable Downs ...	L. C. Withall ...	RHÖNBUSSARD ...	Slope lift	Barnet	21
,, 19	,, ,, ...	R. Pasold ...	RHÖNBUSSARD ...	,,	Chigwell aerodrome ...	35
Mar. 5	Buckland, Reigate ...	J. C. Dent ...	GULL	,,	Debden aerodrome ...	37
,, 23	Cambridge aerodrome ...	J. W. S. Pringle ...	KIRBY KITE ...	Aero-tow	Colchester	40
April 1	Draycot, Pewsey ...	D. B. S. Davie... ...	H–17	,,	Chipping Sodbury ...	30
,, 2	Roundway Hill, Devizes ...	D. B. S. Davie ...	KIRBY KITE ...	Slope lift	Draycot, Pewsey ...	10
,, 7	Ratcliffe, Leicester ...	W. B. Murray	RHÖNBUSSARD ...	Aero-tow	Ratcliffe, via West Bromwich	80
,, 7	,, ,, ...	L. C. Withall	RHÖNBUSSARD ...	,,	Near Kidderminster ...	55
,, 8	Draycot, Pewsey ...	G. H. Stephenson ...	GULL	,,	Oxford	38
,, 8	,, ,, ...	P. A. Wills	MINIMOA	,,	Bulford Camp	14
,, 9	Ratcliffe, Leicester ...	D. G. Hiscox	GULL	,,	Thoresby, near Ollerton	34
,, 9	,, ,, ...	G. H. Briggs	KIRBY KITE ...	,,	Swanwick, near Alfreton	27
,, 9	,, ,, ...	A. Verity	KIRBY KITE ...	,,	Flintham, Notts. ...	20
,, 9	,, ,, ...	G. T. Slater	GRUNAU BABY ...	,,	Tollerton, Nottingham	13
,, 15	Roundway Hill, Devizes ...	D. F. Greig	GULL	Slope lift	Heston aerodrome ...	70
,, 15	,, ,, ,,	J. W. S. Pringle ...	KIRBY KITE ...	,,	Reading aerodrome ...	47
,, 16	Dunstable Downs ...	W. E. Crease	KIRBY KITE ...	,,	Beyond Hatfield ...	20
,, 16	,, ,, ...	J. S. Sproule	CAMEL	,,	Near Hatfield	16
,, 16	Roundway Hill, Devizes ...	J. C. Dent	GULL	,,	Draycot, Pewsey ...	10
,, 18	,, ,, ,,	G. H. Stephenson ...	GULL	,,	Near Marlborough ...	13
,, 18	,, ,, ,,	C. J. Wingfield ...	KIRBY KITE ...	,,	Draycot, Pewsey ...	10
,, 22	Dunstable Downs ...	G. H. Stephenson ...	GULL	,,	Le Wast, near Boulogne ...	127
,, 24	,, ,, ...	G. H. Briggs	KIRBY KITE ...	,,	Writtle, near Chelmsford ...	42

Across the Channel

By G. H. STEPHENSON



A "Kirby Gull," the type in which Mr. Stephenson made the first soaring flight across the English Channel.

ON Saturday, April 22nd, we arrived late at Dunstable, due to having made an unsuccessful attempt to get towed off from Heston. At the surface the wind was 28 m.p.h., gusting to 40. The direction was about 300° (N.W. by W.) at 4,000 ft.

I was launched at 2.55 p.m., reached the hill level with the top and hardly ceased climbing once all the way to cloud base at 4,000 ft. This shows what sort of a day it was. The clouds were smooth inside and appeared slightly lighter looking upwards than downwards. This probably helped, for I managed to fly blind to Hatfield Aerodrome.

I now made for Abridge, and just before Epping Forest the lift became scarce. I passed over Abridge and Stapleford and reached the Thames at Stanford-le-Hope. Thinking of Greig with the trailer, I hesitated a long time before crossing, but a thermal over the water decided the issue.

The Medway was crossed at its widest part at 3,000 ft., and I decided that with luck Canterbury Aerodrome was within range. We proceeded cautiously along the London road and reached the town of Canterbury with 2,000 ft. This was encouraging, and I decided to have a shot for Hawkinge. This meant aiming south-west in order to allow for drift in the weak thermals.

Previous Cross-Channel Attempts

June 19th, 1931: Lissant Beardmore aero-towed from Lympne in PROFESSOR and landed at St. Inglevert; place of casting off cable unknown.

June 20th, 1931: Opening day of "Daily Mail" £1,000 competition for double glide across the Channel; Robert Kronfeld, in WIEN, aero-towed from St. Inglevert to 10,000 ft. and glided to Dover, then aero-towed up from Dover and glided to St. Inglevert, thus winning the prize.

1932: P. Michelson kept his CLOUDCRAFT PHANTOM at Dover in the hope that one day he would gain enough height by slope-soaring to glide across with a following wind.

August 15th, 1937: P. A. Wills in HJORDIS soared from Dunstable to Dover; arrived at the coast at 4,000 ft. and tried to gain enough extra height for a crossing, but lift gave out.

July, 1938: At the National Contests at Dunstable a special prize was offered for crossing the Channel; on July 13th C. Nicholson reached Lympne at 2,000 ft., but lift had given out.

September 4th, 1938: P. A. Wills in MINIMOA soared from Dunstable to Lympne, getting to over 8,000 ft. three times on the way, but arriving at the coast to find stable conditions and too low for a crossing.

April 22nd, 1939: G. H. Stephenson in GULL made first soaring flight across the Channel, starting from Dunstable.



G. H. Stephenson in his former sailplane, the "Grey Kite."

The aerodrome was reached at 1,000 ft. and then the big surprise came. I flew slap into a newly formed thermal at 5 ft. per second, worked it up to 10 ft. per second, and immediately thought of the Channel. The lift increased to 15 and even 20 ft. per second. I checked up the direction of Cape Gris-Nez and entered a large cloud at 4,500 ft. At 6,000 ft., and probably still climbing, I let the speed fluctuate a bit, so decided

that to come out was a bird in the hand. We emerged on the south side of the cloud just off the coast. There were a few ships below, but none ahead.

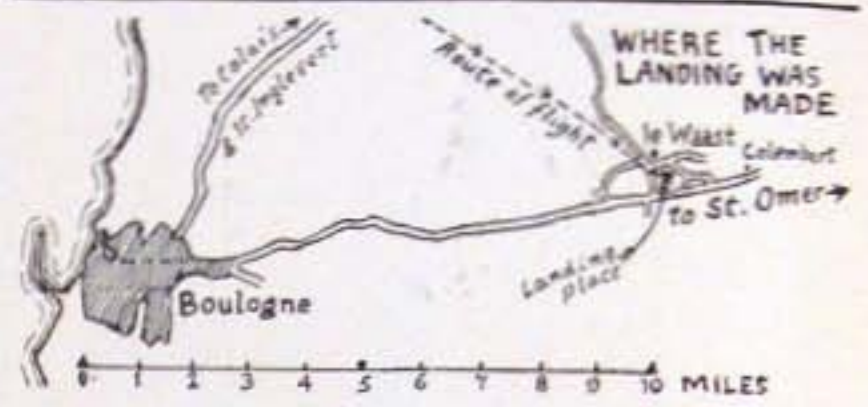
South-east of the cloud I had left, and adjoining it, was a rather broken cloud which I made for. It was very little use, and ahead of it was a 10 ft. per second sink. Ahead again was blue sky and I wondered if it was all sink; but, at 50 m.p.h., we were very quickly clear of it, and the sink was normal. I had forgotten to allow for drift, so a slightly curved course was followed.

Five miles off the French coast the sink was reduced slightly and I set the speed at about 35 m.p.h. The coast was crossed at about a mile east of Cape Gris-Nez. The height was 2,600 ft.

The sink was still a little below normal, and, forgetting about St. Inglevert, I went down-wind looking for somewhere from which I could be towed back home. There was no field large enough, and as height was running out I chose a small field at the village of Le Wast, 10 miles east of Boulogne. The landing was very gusty, but it worked out all right at 5.35 p.m.

I cannot speak the language, which was a snag, but everybody was very helpful and seemed to display intelligence in handling the GULL. I found the gliding certificate worked as a passport. If you want to know anything about wangling trailers and sailplanes through the customs, ask Ann Edmonds who, with Brian Powell, came over. Greig, who spent the afternoon driving the trailer north of the Thames, was responsible for a lot of the donkey work. I wish to express my gratitude to all those who were so helpful.





Retrieving from Overseas

[The writer of this article was one of those who went over to retrieve Mr. Stephenson and the "Gull" after his cross-channel flight.]

TO any further continental retrieving parties the following notes may be useful.

1. First of all, ring up the A.A. (Automobile Association). They will be extremely helpful and do everything.

2. Arrive at the Townsend Ferry Station at Dover at least an hour before the boat leaves. Everything necessary can be obtained from there. Then:

(*a*) Fill up with petrol—it is 9d. per gallon cheaper than in France;

(*b*) obtain a G.B. plate for the trailer from the A.A.;

(*c*) buy a ticket (£5) for the trailer, and one (£3 17s. approx.) for the car;

(*d*) buy a week-end return ticket (15s.); it is possible to return on Monday with this ticket; it can also be used as a passport if that document is unavailable, but if used as such, four pages of personal particulars have to be filled in;

(*e*) the A.A. will then remove your driving licence, and remove about 18s. for 'phone calls and return clearance papers, stick little tickets into both car and trailer, and obtain several signatures.

Now drive on to the quay, where the crane will do its stuff.

Now prepare to be sick.

Be sick.

Look at the seagulls soaring behind the boat; then look at the two dim and distant coast lines, and think that some people must be very brave.

On arriving at Calais, find the A.A. man (Captain Gregson is the chief man) and obtain some clearance papers for getting out of France, sign, and retrieve papers for getting into England, also driving licence. Then pay about 22s. for clearance papers; these papers are called "Laisser-passers" and can be made available for two days or more. Obtain an I.C.N.U.; this is instead of the car registration book if that is not carried.

Depart to look for the machine, remembering to drive on the wrong side of the road. When returning, produce the documents that have been collected and buy another ticket for trailer (£5), car (£3 17s.) and pilot (12s. 6d.). Arrive early on the quay, so that a declaration in duplicate can be made out for the machine. Sign, then get on to the boat.

The only possible difficulty comes when getting the machine through customs at Dover, for the simple reason that it has technically never left the country. Have the Certificate of Airworthiness and, if possible, receipt from the makers sent to the Customs at the Townsend Ferry Station in time for the machine's arrival, as these prove more or less that the machine was built in England.

Our most useful documents were French and English newspapers of the day after the flight; the English which stated that the machine had been launched at Dunstable at 2.30 p.m., and the French which stated that it had landed at Le Wast at 5.40 p.m. the same day.

The actual cost of retrieving, including hotel, fares, documents, etc., came to £25 5s., but everyone was extremely helpful, and there were really no difficulties at all.

A.C.E.

International Meetings

An Invitation from America

MR. ARTHUR L. LAWRENCE, Chairman of the Contest Board of the Soaring Society of America, has sent to the British Gliding Association an invitation to pilots to attend the tenth Annual National Soaring Contest. The invitation is in the form of a letter to Professor Georgii, President of the "Istus," extending the invitation to all members of that body. In a covering letter Mr. Lawrence writes:

"We sincerely hope that it will be possible for not one, but several British pilots to attend our contest and experience soaring in this country. Perhaps the added incentive of taking in the World's Fair will encourage a number of pilots to make the trip."

This is the text of the letter to the "Istus," addressed from Box 385, Glen Head, L.I.:—

DEAR PROFESSOR GEORGII,

The Soaring Society of America wishes to extend a cordial invitation to pilots of member organisations of the Istus to attend our Decennial celebration—the 10th Annual National Soaring Contest to be held at Elmira, New York, June 24th through July 9th.

It will be noted in the March issue of *Soaring* that the report of our Annual Meeting includes the following resolution: "Resolved that the Soaring Society write to the representative bodies of organised soaring in all foreign countries inviting their pilots to the 10th Annual National Soaring Contest. That these pilots shall be welcome as guests to soar during the contest, but that they shall not be eligible for the general prize money and awards." As Contest Board Chairman, I am making every effort to secure special prizes for which all pilots are eligible to compete.

The same facilities provided our own pilots will, of course, be offered to our guests. These include free cabin accommodations and all the contest facilities. It is hoped that arrangements will be made for pilots to receive their gasoline and oil during the contest. Crews for pilots can be provided, if desired, and we shall be glad to extend any other courtesies.

It is hoped that notice of this invitation can be forwarded by the Istus to member organisations, and that we shall have a number of guests from abroad. Communications should be sent to the above address.

I understand from Karl Lange that there is the possibility that you will attend our Decennial celebration and certainly hope that this may be possible. Our plans for the coming contest are well advanced, and we look forward to the most successful soaring meet that we have yet had in this country.

With kindest regards,

I remain, Sincerely yours,

ARTHUR L. LAWRENCE.

"Istus" Meeting in Poland

The scientific conference will be held in Warsaw from May 13th to 20th, while the flying meeting will be at Kattowitz Aerodrome from May 14th to 18th.

Aerobatics at Paris

The *Petit Parisien* is offering a *Coupe du Monde* and prizes amounting to 100,000 fr. for a sailplane aerobatics competition to be held in Paris (Saint-Germain-en-Laye) on Tuesday, May 28th. Entries must be received before May 10th, 6 p.m.; entry forms can be obtained from the British Gliding Association.

From Here and There

The R.Ae.S.—The Royal Aeronautical Society, in whose former premises in Albemarle Street many B.G.A. meetings and gliding lectures have been held, has moved into a four-story building of its own at 4, Hamilton Place (near Hyde Park Corner), London, W.1. In July, 1940, the society is to hold an International Aeronautical Conference at Stratford-on-Avon. Is there any site in the neighbourhood suitable for that year's National Soaring Contests?

* * *

In Parliament.—During the Report stage of the Access to Mountains Bill in the House of Commons on April 22nd, Mr. Turton (Thirsk and Malton) moved an amendment to except gliding grounds from the Bill. Mr. Noel Baker (Derby), one of the Bill's promoters, said there was a difficulty that there was no definition of what a gliding ground was. It would be within the powers of the Minister to deal with the matter by order, but the promoters would be willing to have the matter considered. The amendment was negatived by 92 votes to 43. When the Report stage had been concluded, the Bill was read for the third time.

* * *

Non-reflecting Glass.—"It is possible to eliminate the reflection of light from glass, by covering it on both sides with a multiple film having a refractive index equal to the square root of that of the glass, and an optical thickness equal to one-quarter wave-length; if this is done to any instrument having a glass front, the glass becomes invisible and the instrument can be used with light reflected at any angle, without disturbance from the 'shine' on the glass front." This sounds like good news for sailplane pilots. The quotation is from an article on "Molecular Layers" in *Nature* for April 15th, and the "multiple film" referred to is built up of monolayers (layers one molecule thick) of certain organic substances by a rather complicated process.

Glider Engineers' Certificates

Last month, on page 77, we gave a list of the first eleven recipients of the "Certificate of Competence as Glider Ground Engineer," and reproduced the syllabus of the examination for the certificate. The following further certificates have now been granted:—

No.	*Name*	*Firm*	*Date of Issue*
12.	G. E. Scarborough ...	Scott Light Aircraft ...	29.3.39
13.	E. P. Zander	Scott Light Aircraft ...	29.3.39
14.	N. D. New	—	29.3.39

B.G.A. Annual General Meeting

THE eighth Annual General Meeting of the British Gliding Association, Ltd., was held at 119, Piccadilly, London, W.1, on Friday, April 14th, 1939, at 6 p.m. Lord Sempill, President of the Association, was in the chair.

After the Secretary, Commander H. E. Perrin, had read his report (extracts from which are reproduced below) on the work of the B.G.A. during 1938, the Chairman expressed his thanks to the Secretary for the excellent report, and to the Secretary and Staff for their work during the year, and also to the Council for the work it had done on behalf of the Association.

There were only two nominations for representatives of individual members on the Council—Miss R. H. Sinclair and Captain C. H. Latimer-Needham; there was therefore no need for a ballot and the nominations were accepted.

Lord Sempill proposed a vote of thanks to Professor Brunt for the work he had carried out as Chairman of the Council; this was accorded unanimously.

Secretary's Report

Certificates of Airworthiness.—During the year 1938, the Association issued 55 new certificates of airworthiness and 63 renewals, as against 29 new and 13 renewals during 1937.

Glider Ground Engineers.—During the year the Air Registration Board commenced the examination for Glider Ground Engineers Certificates, after consultation with the B.G.A. Technical Committee. To date 14 Glider Ground Engineers Certificates have been issued. As a member of the Air Registration Board and serving on the Ground Engineer Panel, it was very pleasing to hear that the standard of knowledge of Ground Engineers in the gliding movement was exceptionally good.

Technical Committee.—The thanks of the Association are due to the Chairman of this Committee, Mr. W. O. Manning, who has examined a large number of reports on C.'s of A. between the meetings of the Technical Committee.

The Technical Committee held six meetings during the last nine months of 1938. They have dealt with a very large number of technical questions which have been placed before them, including: the requirements for Glider Ground Engineers, in collaboration with the Air Registration Board; revision of regulations for Certificates of Airworthiness; regulations on launching; airworthiness regulations; Certificates of Airworthiness forms; revision of B.G.A. technical rules; reports on accidents; stressing questions; appointment of Inspectors.

Gliding Certificates.—During the past year Gliding Certificates were issued as follows by the Royal Aero Club:—

A, 329
B, 236
C, 139—a total of 704.

This compares with a total of 574 issued in 1937.

The total of Gliding Certificates issued since 1930 to the 31st December, 1938, were as follows:—

A, 1,202
B, 785
C, 506—a grand total of 2,493.

"Silver C" Certificates.—Twenty "Silver C" Certificates were awarded to British pilots during 1938, bringing the total number to 50.

"Gold C" Certificates.—Mr. P. A. Wills has gained the international "Gold C" Certificate, No. 3. The "Gold C" was instituted in 1938 and calls for a distance flight of not less than 186 miles and an altitude flight of not less than 9,843 ft. The fact of a British glider pilot obtaining No. 3 is a great distinction upon which Mr. Wills and the British Gliding movement are to be warmly congratulated.

Subsidy.—During 1938-39 the subsidy distribution to gliding clubs was £4,999 16s., as follows:—

CLUBS WHICH HAD ALREADY RECEIVED SUBSIDY:—

	£ s. d.	£ s. d.
Cambridge	59 13 6	
Channel	92 1 6	
Derbyshire and Lancashire	557 11 0	
Furness	113 10 6	
London	858 5 5	
Midland	679 8 10	
Newcastle	416 14 4	
Southdown	66 1 3	
Ulster	171 10 11	
Yorkshire	483 19 9	
		3,598 17 0

FIVE NEW CLUBS WHICH WERE ADMITTED TO SUBSIDY DURING THE YEAR:—

	£ s. d.	£ s. d.
Bristol	182 17 6	
Norfolk and Norwich ...	283 5 1	
Oxford	460 10 5	
Scottish	38 17 0	
Surrey	129 3 0	
		994 13 0
B.G.A.		400 0 0
Audit Fees		6 6 0
		£4,999 16 0

The conditions for distribution of subsidy for future years have been revised by the Council, and all clubs have notification of this. In principle, the revised scheme for distribution of subsidy is strictly on the basis of Certificates gained during the previous year. The scheme also allows for new clubs, and clubs not yet in receipt of subsidy.

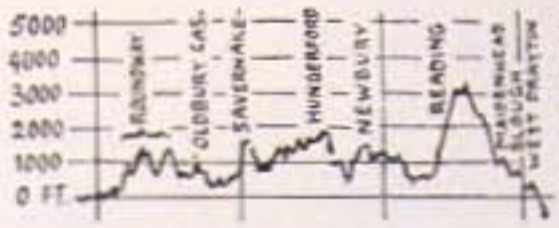
We have now been advised that the basic subsidy of £5,000 will be made available for a further period of four years from April 1st, 1939.

Air Defence Cadets.—Negotiations with the Air Ministry during 1938 have resulted in the allocation of extra subsidy for the specific purpose of the training of Air Defence Cadets, and this is also for a period of four years. For the first year, i.e., 1939, 700 Cadets will be trained, and future subsidy will depend to a very large extent on the results achieved.

Devizes to Heston Airport

APRIL 15th, 1939

By D. F. GREIG



COPY OF BAROGRAPH RECORD D.F. GREIG IN "KIRBY GULL" DEVIZES — HESTON 15.4.39. 70 MILES.

THE day was started feeling approximately 50 per cent. fit, following a very broken night's rest in the barn at Huish. However, "Steve" and I, with the BLUE GULL, reached Oliver's Castle first and I was launched by the Cambridge Club winch into a strong due west wind at 10.45 under a sky of low small broken cumulus, to find at once strong but very narrow thermals rising from the wood over Roundway Hill.

To reach 1,200 ft. was only a few moments' work, but to return to the front of the hill from only 4½ miles behind the slope, in spite of the speed range of the GULL, meant a loss of half this height. At 11.10 I was again at 1,200 ft. some way back from the slope and decided to continue to circle in very rough narrow thermals reaching 1,400 ft., but about 2½ miles back, finding no more lift, I flew cross-wind north-east to Oldbury Castle, a frightful little bowl of long tongues of slope running out from the high country stretching away to the E.N.E., and marked with a monument, a sort of needle thing about 150 ft. high, Yatesbury R.A.F. Aerodrome being just at the north side of the slope.

Without question this is the worst and most frightening slope I have ever soared over, the monument being particularly terrifying in that you are obliged to circle round it without catching your wing tip against it; so I was quite happy to leave this dreadful place at 600 ft. and continued to struggle over the plateau country, drifting due east. Needless to say, every field was a potential landing, but by making use of each little copse and farm house I managed to reach the south side of Marlborough at the same height, having been down to 400 ft. on the way.

At this point on the flight the prospect of going on was a gamble in that the town barred landings to the north, and in front the whole expanse of the Savernake Forest stretched away for five miles towards the east and south. However, I told myself that so far I had kept in the air by virtue of little scraps of lift over trees, so the Savernake should do likewise; so we took the risk and reached no less than 1,600 ft. by the other side.

Almost as soon I was down again to 800, but for the next half hour and over the town of Hungerford I managed to climb slowly in little broken thermals to 1,900, never once completing a circle with green ball up the whole way round. To Newbury was a descent the whole time, the GULL sinking between 6 in. and 3 ft. per second to arrive over the town at 400 ft., but over the long stretch of open country to Reading I again reached 1,500 ft. and was able to see the Southall Gasometer on the north side of Heston quite clearly. For some time now the clouds had been ten-tenths at some 3,500 ft. or so.

I think the thought of reaching Heston fired me with renewed desire to go on, though feeling sick with being flung about in rough ground thermals for over two hours, but the approach to Reading was again as dangerous as to the Savernake Forest in that the town appears from west to east as a vast city many times bigger than any I have ventured over by sailplane before; but at my height of 500 ft. I hoped that the GULL's speed range would just take me clear of the town to the south if let down lower.

But Reading came to the rescue, and before reaching the centre I was circling in the only thermal of the flight at 10 ft. per second to reach 3,250 ft. with cloud just above, ten-tenths. At this point Heston appeared as if you could step into it, the whole of the hangars and buildings being visible perfectly clearly although nearly 30 miles away. My desire to reach Heston now became something of a madness, and I even tried to understand Steve's chart showing the proper speeds to fly under various conditions, and descended from the peak height at about an average of 2 to 3 ft. per second at 40 m.p.h., Maidenhead, Slough, and West Drayton each giving their little bit of lift—perhaps 200 ft. over each—but down to 500 ft. lower as each in turn was reached. I left West Drayton at 500 ft. and made my last stand over the H.M.V. works at Hayes; but in spite of what the variometer was trying to tell me, the height meter went down to 450. So I gave up all caution, forgot all about Steve's chart, and for the first time put the speed up to 60 m.p.h. down-wind, and crossed the west boundary of Heston Airport with enough height to turn into wind and land at 1.45—after covering 70 miles of the most crazy, hair-brained soaring flight I have ever done, and which I shall never again attempt.

Dent fetched the trailer along with Steve and we were eating ham and eggs at the Polly tea house in Marlborough at 6.15, and went to the flicks in Devizes afterwards: all very efficient work, for which I was deeply grateful.

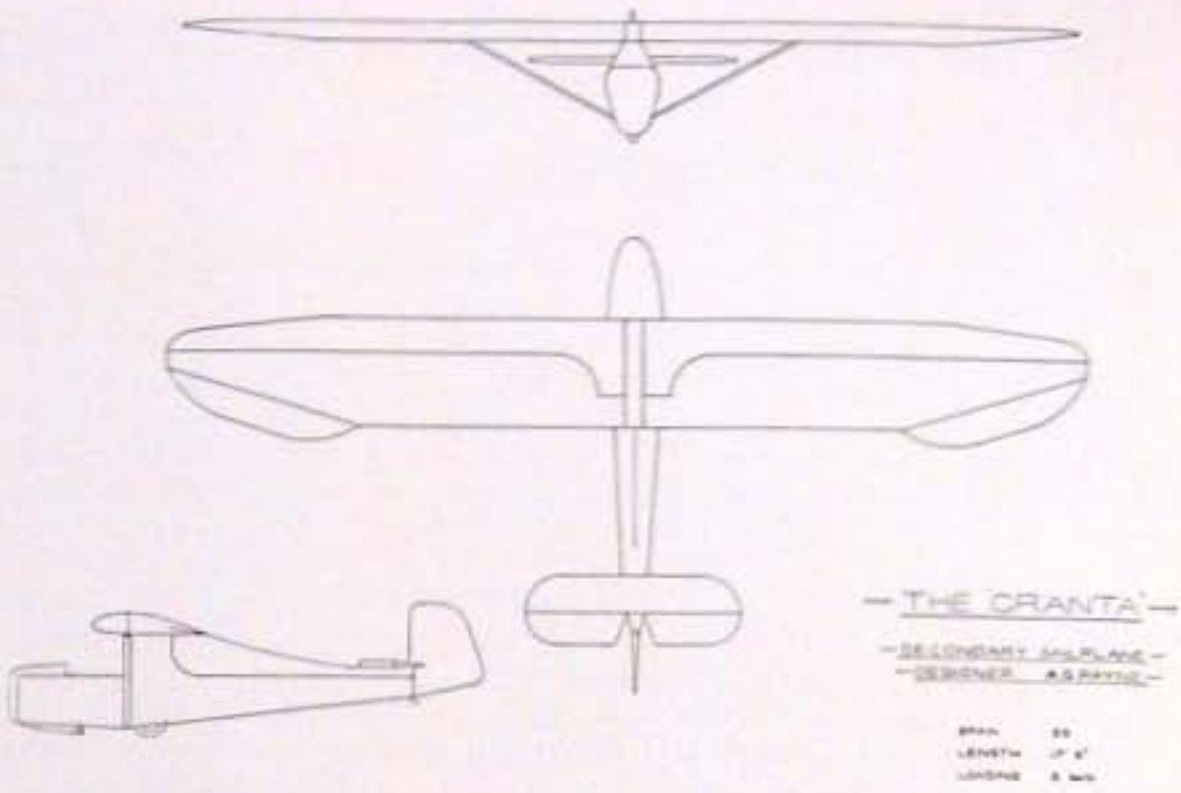
Devizes to Reading

I did not get launched in the KIRBY KITE until nearly mid-day, by which time the sheet of high cloud had become continuous and conditions did not look very promising. However, after 10 minutes of hill-soaring a large low cloud appeared at the north end of the hill and produced lift at 10 ft. per sec. up to its base at 2,600 ft., so I decided to hang on to it. Over Marlborough another patch of lift took me to 2,900 ft., and for the next half-hour good up-currents were always to be found under the darker parts of the clouds. The air in between was descending at about 6 ft. per sec., and finally over Newbury I was down to 1,000 ft., before finding a very rough patch of air which took me back to cloud base. Arriving over Reading in a straight glide there appeared to be nothing left, so a landing was made on the airport at 2 p.m.

J.W.S.P.

The "Granta"

AN ALL-PURPOSE SAILPLANE FOR THE CAMBRIDGE CLUB



[The "Granta" may be described as the first British sailplane corresponding in any way to the "Utility" type which is so much used in the United States of America. The designer and builder, who describes the machine in this article, is Ground Engineer to the Cambridge University Gliding Club.]

THE GRANTA is a training sailplane for such purposes as winch training, first aero-tows, thermal practice, aerobatics, etc. As might be expected, it is essentially a compromise, with simplicity, safety and strength as the main considerations.

N.A.C.A. 4418 is the section chosen for the main part of the wing, for such points as: good depth of spar, small travel of centre of pressure, good speed range. This section is modified over the inner part of the aileron, and then tapers to Clark YH with 3° wash-out. The ailerons have a 3:1 differential action, and with aileron fully down the section chosen gives very little break in the contour.

Wing construction follows more or less normal practice, unusual features being solid spars of ½ in. spruce and box ribs at the root instead of the normal diagonal to take torsion and drag. The rear part of the fuselage is virtually a triangular ply box, faired to diamond shape by fabric over a taut piano wire.

The wing fittings, sixteen in all, are channel-section mild steel, all being made off the same jig. A veneer-faced bakelite material is glued to the spars and bulkheads under each fitting; this immensely increases the bearing strength of the bolt holes.

Rigging should be very rapid; bulkhead fittings overhang, so that the wing tips can be placed on the ground while fitting the root pins. The strut is permanently attached to the wing, folding against the spar for storage. Four vertical bolts connect the cantilever tailplane, and the elevator connects automatically. A single wheel just behind the centre of gravity, and a tracking tail-skid will facilitate handling on the ground, and make cross-wind landing a normal procedure.

Actual performance figures will be given after the very thorough tests that we hope to give the GRANTA.

A. G. PAYNE.



Some of the pilots at the inter-club aero towing meeting at Leicester. Top row, left to right: Miss Amy Johnson, Squadron Leader W. B. Murray, G. H. Briggs, and Squadron Leader E. H. Spence (of the B.G.A.). Bottom row: Major Alan Goodfellow, C. A. Reilly, M. F. Barnes, E. H. Taylor. And, finally, the brothers Read (L. Read sitting and E. Read standing), who had for once deserted their famous "Green Wren" (born 1932, still going strong, and now immortalised in "Alice in Bungyland").

News from the Clubs

Three Clubs at Leicester

Once again Sir W. Lindsay Everard invited sailplane pilots to use his aerodrome at Ratcliffe for an aero-towing meeting at Easter. This year three clubs accepted: London, Derbyshire and Lancashire, and Midland.

Sixteen sailplanes turned up, and McMurdo brought along Major Shaw's "Avro Cadet" for towing. From the Midland Club came the Barnes-Olver H-17 (now painted black), and two KIRBY KITES, one being Amy Johnson's and the other owned by F. Davies and F. James and normally kept at Chester. Derbyshire and Lancashire brought the club GRUNAU, two privately-owned KIRBY KITES and a G.B., and the white RHÖNBUSSARD. The London Club had a brand new GRUNAU from Kirbymoorside, whence Saffery brought it by air in tow of the "Cadet"; there was also the club RHÖNBUSSARD and the CAMEL (Sproule, Davies, and Burnett), VIKING (Edmunds and E. J. Furlong), yellow RHÖNBUSSARD (Pasold and Murray), Briggs's blue KITE, Hiscox's GULL, and the blue GULL (present on Good Friday only).

Friday, April 7th, was an excellent day for lift, once lift was found, which wasn't everybody's luck. Murray was first off at 11.12 and proceeded to make the outstanding flight of the meeting. In a light north-easterly wind he worked his way slowly west under isolated cumulus until in two hours he had reached Castle Bromwich Aerodrome (see map, p 88). Here he stayed for an hour, circling around and trying to get enough height to cross Birmingham. At last he did, but on the other side dropped down to 1,200 ft. over some fields to the east of West Bromwich before getting up again. He then decided, in order to save a long trailer journey, to try and get as far as he could on the way back to Leicester. Castle Bromwich was revisited some time after two o'clock, and then cloud streets began to form. This simplified the return journey, as they all worked and it was possible to skip across from one to another. Finally, to everybody's surprise, the yellow BUSSARD reappeared at Ratcliffe, and to Murray's surprise, too, for he had done the return journey against the wind at double the speed of the outward one, landing at his starting point at 3.42. He had been in the air 4½ hours and reached a maximum height of 4,700 ft., occasionally venturing into clouds, which were rather flat, up to 500 ft. above their base. The distance was 40 miles each way; total, 80 miles—a British record.

The longest one-way flight was also done this day, by Withall, launched at 11.21 in the London Club's BUSSARD; he reached a point on the Kidderminster-Bridgnorth road, 55 miles on the direct route to the Long Mynd. Hiscox soared in thermals around Ratcliffe for 3½ hours (12.22 to 3.38); W. Adcock climbed to 5,700 ft. Duncan Swale, aged 15, who started as an *ab initio* 15 months ago, had his first aero-tow and took the Derby and Lancs. GRUNAU to 4,400 ft. The best lift of the day was at 3.30, when five machines were well up under an outsize cumulus cloud.

Totals for the day were: 25 flights; 18 hrs. 41 mins. flying time.

Saturday, April 8th.—Curiously enough, our weather was always just the opposite to that experienced by the Cambridge Club at Pewsey. This was their best day of the Easter week-end, whereas with us it was almost entirely dud. Most of the sky was covered by high cloud all day, and the few patches of blue never came our way.

To provide something to look at, Burnett was towed up in the CAMEL to 6,000 ft. to see if it would spin. It wouldn't. He took 42 minutes to come down, aided by aerobatics. Otherwise the longest flight was 35 minutes by Hiscox (it should be explained the aero-tows were normally to 2,000 ft.). A KITE from Derby and Lancs. hit a tree on landing a few fields (or trees) away.

Totals for the day: 27 flights; 9 hrs. 10 mins. flying.

Sunday, April 9th.—According to the met. broadcast, this was the only part of England to have fine weather. Warm front clouds could be seen to the north, but luckily kept their distance. Light southerly wind, east at low cloud level.

There were five cross-countries: Hiscox, 34 miles to Thornsby; Verity, 20 miles to Flintham; Briggs, 27 miles to Swanwick; G. Slater, 13 miles to Tollerton aerodrome; and the CAMEL went 5 miles to Wymswold Hall.



Scenes at the Leicester meeting. Above, J. S. Sproule in the "Camel," seen from the towing aeroplane, with part of Ratcliffe aerodrome in the background; below, a view from the control tower of machines being rigged.

Briggs, on his first (intentional) cross-country flight, chose as his landing place what looked (from the air) like an out-door tea party attended by swarms of charming young ladies; after landing elegantly alongside, he found it was, on the contrary, a religious conference. Godfrey Slater, 15 year old son of Louis Slater, of Matlock, did his first cross-country from his second aero-tow; he rose to 3,200 ft., of which 200 ft. was inside cloud, dived the GRUNAU at 70 m.p.h. to get out of it, carried on till he was over Nottingham, and then turned back so as to park on the town aerodrome.

Totals: 45 flights; 27 hrs. 33 mins. flying (not including Briggs).

Monday, April 10th.—Rather a poor day; thermals about, but weak and narrow, and none of them formed clouds. There were 38 flights, with 12 hrs. 25 mins. flying; the longest was 45 minutes by Murray. Some excitement was caused when F. James, after starting on an aero-tow, found that the wedges holding his ailerons fixed had not been removed. So he cast off and put down safely two fields away, not having dared to turn back.

Tuesday, April 11th.—The aeroplane had to go at mid-day, which left time for just seven tows in the morning, with 1 hr. 32 mins. flying, but no thermals.

Grand total for the meeting: 142 tows and just over 70 hours flying.

London Gliding Club

April 16th.—To-day provided the astonishing phenomenon of nine sailplanes up together and not one of them using slope lift. Crease took the Imperial College KITE about 20 miles. The CAMEL also got away on its longest cross-country yet; Sproule went about 20 miles to the east and then tried to get back. He managed four miles of the return journey, but came down the other side of Hatfield. He had reached 3,400 ft.

The Channel Crossed.

Saturday, April 22nd.—Stephenson's trip to France has confounded the prophets; both those who thought they knew who would do it first and those who explained how it would be done. As an account of it is given elsewhere, all we need do here is to offer congratulations. Further congratulations await him on the club notice board, including telegrams and several 'phone messages from other clubs. But we never suspected our Steve of being the word-painter that the *Daily Express* special interviewer, who sought him out by aeroplane, alleged him to be. Talking of newspapers, perhaps the best comment was made by *Les Ailes*, which began: "Un jeune pilote anglais du 'London Gliding Club,' Geffrey Stephenson, vient d'accomplir un exploit très joli. . . ."

On the same day, at 4 p.m., Murray went up to have a shot at the British duration record. Six hurricane lanterns were put out, but the wind increased with the darkness, and as a moment's inattention on the pilot's part would have meant being forced down on a pitch dark golf course, he thought it prudent to land after 5½ hours in the air.

Monday, April 24th.—Briggs, who is an *ab initio* and had his first hop only a year ago, to-day got "Silver C" distance and height by taking his blue KITE 42 miles to Writtle, near Chelmsford, and getting over 4,000 ft. on the way. He did this by going into a cloud, though he soon came out of it, and not the same way up as he went in.

Air Defence Cadets.—Forty cadets began training on the 23rd and are still at it. Full details next month.

"Prelude to Flight."—This film, taken at Dunstable, is showing at the Tatler Theatre in Charing Cross Road for seven days commencing May 15th.

Summary of Flying.

Week ending:	*Days of Flying*	*Ground-hops*	*Timed Flights*	*Flying Time hrs.*	*mins*
March 5.	2	15	81	41	34
,, 12.	3	77	32	6	22
,, 19.	4	17	22	4	16
,, 26.	5	—	25	9	20

Totals since January 1st: 920 launches, 231 hrs. 19 mins flying time.

Certificate Flights.

March 7th.—Hammond, part "Silver C" (duration).

Cambridge University Gliding Club

Easter Camp.

Flying commenced at Draycott on **April 1st,** when a light S.E. wind blowing up the south hill made hill-soaring possible. Dewsbery, in the SPERBER, was the only one to get away from the hill, and managed to reach cloud base at 3,800 ft. In the afternoon a thundery mass of cumulus hove up to which Davie, in his H-17, was aero-towed. He released at 2,500 ft., and after flying for 1½ hours in what he describes as weak lift landed 30 miles away at Chipping Sodbury in Gloucestershire. As far as we know this is the first cross-country in England to be done towards the north-west.

April 2nd provided very good hill-soaring conditions at Roundway, near Devizes, and 27 hours' flying were logged. Hill-lift extended very far in front of the hill and up to 1,500 ft. Davie in the club KITE flew the 10 miles back to the home site, getting very strong lift from a front that went over.

Little flying was done on the next four days owing to low cloud or rain. But luckily Wiltshire is a very pleasant county even if it is not possible to glide there. A few members went to Bristol to skate; others indulged their archæological taste by visiting Avebury, an ancient Druid earthwork of considerable interest, while the "Moth" departed under Q.B.I. conditions for Brussels.

On **Friday, April 7th,** the party moved to Inkpen, where soaring was just possible in a very light N.E. wind. Only two machines got away from the hill, neither getting more than 2,000 ft.

On **April 8th** we were back at Draycott, where an extremely light S.W. wind reinforced by the heating effect of the sun on the south slope made hill-soaring just possible; thermals were narrow and fierce, but several machines got away and toured the countryside. A stable layer at 4,000 ft. prevented anyone from getting high; Stephenson flew the GULL 38 miles to Oxford, and Wills set out to visit an aunt near Salisbury, but had to land at Bulford Camp, 20 miles up-wind from Huish.

April 9th brought similar conditions with slightly wider thermals; no one thought it worth while going off across country.

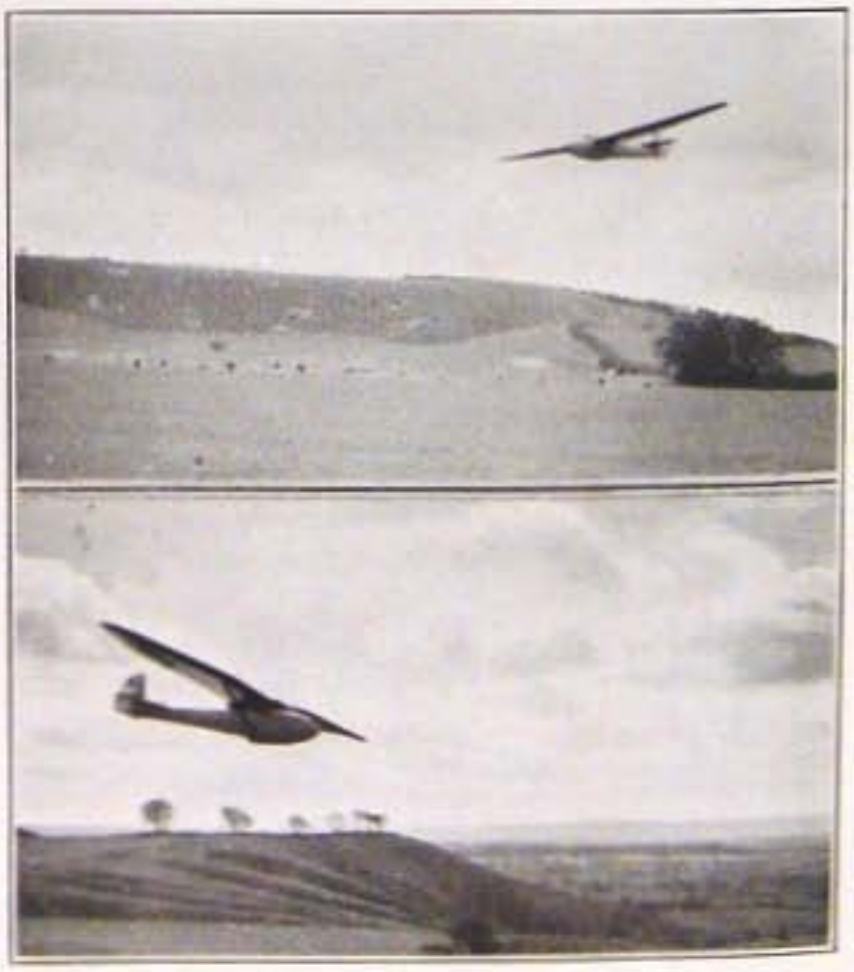
On **April 10th** the wind was so perverse as to move to E.S.E., which we thought was the one direction not soarable in the Wiltshire district. However, by 1 o'clock an exploring party had discovered a bowl facing this direction, and three machines headed by GRACIAS were towed over to it. They soared well and got up quite high in the thermals that boiled up later. At Draycott, Simpson soared at 3,000 ft. for over an hour, and D. L. Payne flew 12 miles to Yatesbury and most of the way back.

April 12th.—A 15 m.p.h. S.W. wind brought excellent soaring conditions at Draycott. Several machines toured the district up to a maximum height of nearly three thousand. In the afternoon hill-lift extended up to 2,000 ft. over the whole six miles of downs. J. P. Elton, flying the TOTTERNHOE for the third time that day, was blown into the hill and turned completely over. He was concussed and broke his right leg, but is now, we are glad to say, making good progress. The TOTT will probably not fly again.

Soaring continued at Draycott till **April 15th,** when the wind was sufficiently far west to make a move to Roundway necessary. Conditions looked poor, but most machines got quite high and cross-countries were made to Reading and Heston. Similar conditions next day after a cold front.

The last day of the camp brought magnificent cold sector weather, and a very strong wind which made the get-away difficult; no one did better than 12 miles.

Totals for the camp: 180 hours, about 250 miles of cross-country flying. One "Silver C" duration, McClement; 10 "C" certificates: Dykes, Cooke, Lynn, Bramwell, Pinckney, Fowler, Bolton, Elton, Crossfield, Varley.



Two of the many slopes used during the Cambridge Club's camp in Wiltshire. Above, the "Viking" about to land on the Draycot field after soaring along the Downs above Huish. Below, a "Kirby Kite" making a cross-wind approach to a landing on the edge of Roundway Hill, Devizes.

Derbyshire and Lancashire Gliding Club

March.—A certain amount of soaring and training has been possible again this month, but the week-end weather is only relenting very slowly. A point of particular interest is that the slope at Siggert has been used three week-ends in succession in N. and N.E. winds, and some good soaring has resulted. Furthermore, two return flights to the home site have been made from this slope. A flight by B. Thomas on March 26th was an unusual one, and was all done in hill lift.

Many privately owned machines are re-appearing after winter renovations, looking far too smart to use, but no doubt they will all be making their appearance at the meeting at Leicester, a week-end which all are looking forward to, particularly those who were there last year.

Congratulations to Rita Rowlands, who has become our first lady private owner by joining a group with a KIRBY TUTOR, also to J. Parker, who has become a member of the redoubtable G.B. group.

Saturday, March 4th.—Wind S., 15-20 m.p.h. One of those few days when the wind was really blowing square on to the south slope, and some good soaring took place along the whole of the three-mile beat to Eyam, only limited by low cloud which descended to 300 ft. It was good to see the chief instructor in the air again after his indisposition.

Sunday, March 5th.—Wind W.S.W., 35 m.p.h. The third soaring week-end in succession, and at this time of the year too!

A full day of excellent flying in a strongish wind—in fact, too strong for winch launching—so a bungy off the N.W. slope was the order of the day. It was surprising that quite a number of our soaring pilots had never been launched by this method before, which points to the fact that our numbers are ever increasing.

The landings to-day were certainly a test of "he-manship" in some of the roughest gusts we have experienced for a long time, so much so that after one flight the two-seater was grounded for the rest of the day by its pilot.

Sunday, March 12th.—Wind N.N.E., 20 m.p.h. A fine bright morning with cumulus forming into streets quite early in the day, so a group of members departed to Siggert with a G.B. Here the hill lift proved to be excellent, assisted by thermal activities. After nearly two hours in the air, G. Thompson received instructions from the ground to fly back to Camphill if possible, as the trailer, which was collecting a further machine, had met with an accident. He duly carried out instructions, and arrived home with 700 ft. to spare, after a grand ride downwind.

Meanwhile, at Camphill, the trainees were making up for weeks of inactivity due to bad weather, one stout soul having driven 240 miles for a circuit in the NACELLE.

The RHÖNBUSSARD re-appeared, resplendent in a new coat of paint and cockpit cover, and put in a few test circuits. A new member to this group, in place of Robertson, is one of our 15-year-old members, D. Swale, whose father is one of the owners.

D. Hobson, flying his own G.B., failed to release from the winch, and the axe having done its good work, he trailed about 400 feet of cable around the district for several minutes, but landed again without any difficulty.

On this day we were glad to receive a visit from a group of the Yorkshire Club's new branch at Holmfirth.

Sunday, March 19th.—Wind N.N.E., 20 m.p.h. Training all day. A G.B. again visited Siggert, and several flights took place in hill-lift up to 500 ft., with occasional thermals up to 1,000 ft.

Sunday, March 26th.—Wind N.E., 15-20 m.p.h. A roughish wind prevented any training, as yesterday, so as soon as the cloud base showed some signs of lifting the G.B. group again departed to Siggert., and were followed by the KITE owned by Thomas and Sugden.

Thomas took off just following a lull in which the G.B. had descended to the bottom, and had an interesting flight of just over an hour. After the launch he gained height all the way to Mam Tor and, crossing over to the north side, left the Hope Valley and continued soaring along the north face of Rushup Edge over the rifle range as far as Dalehead. Here a perfect bowl presents its face to a north-east wind, and the KITE rose from 200 ft. to 1,200 ft. in steady hill lift, and lost very little on the return journey to Greenlands, but in the lee of Lose Hill a down-draught became apparent, and Thomas decided to leave the Edale Valley and return to Siggert. He again soared in good hill lift and, on reaching 1,500 ft. above the launching point, turned down-wind and made for Camphill, which he only just reached, as most of Bradwell Valley was in the curl-over of the now almost easterly wind.

Meanwhile the G.B. had been retrieved three times from the landing field below Siggert, Armstrong having given a display of aerobatics for the benefit of the crowd which had now reached considerable proportions, and the last member of the group was launched in gathering darkness to complete an interesting afternoon's flying.

Summary of Flying During March.—Bungy launches, 119. Winch launches, 48. Flying time, 27 hrs. 43 mins.

Yorkshire Gliding Club

On **Wednesday, March 1st,** Fleming and Espley, new members, turned up and did certificate flights—the former flying an hour for his "B." He made a flight of 15 minutes for his "C" later on, and Espley flew 42 minutes for his "C."

On **Sunday, March 5th,** Shaw managed 28 minutes soaring in rough conditions just before dark. All day the wind had been south-west, at least 50 m.p.h. There was further flying on the 10th, and training.

On **Wednesday, March 15th,** Fleming had a short flight in TUTOR, but flew too far out from the hill and had to go to the bottom. The retrieving party was busy until dark!

Saturday, March 18th.—In the afternoon W. Sharpe and Shaw made short flights, but weather conditions were not attractive. There was no flying the next day (Sunday) due to poor weather.

March 23rd.—Wind 20 m.p.h.; thermal activity abounding. Morton flew the TUTOR for 2 hours and 5 minutes and was over 1,000 ft. about the hill top.

March 30th.—More mid-week training. The GULL arrived back from Kirbymoorside with spoilers fitted, but the following week was taken away to Welburn for aero-towing. At the end of this month we were sorry to lose Holdsworth, who has been ground engineer (and latterly instructor) to the club since its formation; he has taken a job in aircraft construction, and we wish him the best of luck.

Easter week-end lived up to its usual reputation of easterly winds. Except for a small party who pushed ahead with training, there were not a great many people week-ending at the club, aero-towing being "off" due to the Ratcliffe meeting. Barker brought SCUD III back again after his winter overhaul, and was unlucky in damaging the fuselage in landing after a test flight.

There was no mid-week flying due to the temporary absence of a ground engineer, but at the week-end (Sunday, the 16th) we had a good thermal and hill-soaring day and Saffery, Wordsworth, Raphael and Pick all reached heights well above 3,000 ft. A number of Durham branch members came along with Mr. Maw in search of "C's," but the wind was too strong until the evening, when one of them was sent off, but got behind the hill and, stalling rather badly, finally spun into the ground. The machine was badly damaged but the pilot escaped with little more than a sprained ankle.

Weather conditions were too "tough" on Saturday, the 22nd (the day of the Channel crossing, incidentally—good show, Stephenson!), but Sunday brought only a very light wind which dropped away to nothing about 12 o'clock (Summer Time). Joe Fisher, who was flying the GRUNAU at the time, found himself getting rather low, and, apparently due to misjudging his air speed, got into a spin from which there was insufficient height to recover, and crashed very badly, practically writing off the machine, injuring his ribs and sustaining a fractured leg. He is, of course, in hospital, and his condition is said to be satisfactory. There was no lift of any kind later in the day, but a number of members made winch circuits, and Warren qualified for his "A" and "B."

The instruction course programme is very extensive this year, and in addition there are the Air Defence Cadets. All arrangements are now complete in both these respects. The Slingsby two-seater has been brought back, and as soon as SCUD III appears again the fleet will be complete once more, unless it is added to in the near future in the event of some of the *intended* private owners "taking the plunge." The new ground engineer should commence his duties within the next few days, and mid-week facilities will then be restored in full.

It is disappointing that we are obliged to record two crashes in these notes, and it is perhaps as well for many of us to remember at times that the air must be treated with respect. Soaring flight, like any other art, is subject to certain rules and conditions which are fundamental, and familiarity with the art should breed greater respect for them!

Southdown Gliding Club

Sunday, March 5th.—The B.A.C. two-seater returned to the hangar yesterday after a thorough overhaul to the fuselage, and everything was got ready to start assembling it to-day.

N.E. wind, 20 m.p.h. R. Stafford was launched twice from the slope west of the hangar in the SECONDARY, in an effort to complete his "B." On the first flight he unexpectedly caught a down-current and landed in the rough after 33 seconds. On the second, he went further out from the hill and turned to land down-wind, but his time was just under the minute.

Saturday, March 18th.—N. wind, 15 m.p.h. The two-seater was test-flown by S. Stevens and several other flights were done by other members. T. G. Griffiths qualified for his "C" at the close of the day in a very light breeze.

Sunday, March 19th.—With a steady N. wind blowing several hours were put in and G. C. Kiberd was up for 12 minutes for his "C."

Saturday, March 25th.—Wind N., 15 m.p.h. The two-seater was launched from the north site, and after two short flights by members, S. Youles got into the cockpit. About ten years ago he completed his three hours solo and test flights for his power "A" all in one day. He has done no flying for over two years, and had never been in a glider before, although he has been a member of the club for several years. After pump-handling for the first few seconds he stayed up 12½ minutes, doing an excellent landing. The remaining four flights were done in quick succession, and the total time taken to do the flights for his "A," "B," and "C," was only one and a half hours.

Sunday, March 26th.—Wind N.N.E., over 30 m.p.h. Overcast. It was considered inadvisable to attempt many landings in the gusty wind, so F. A. Grantham decided to do five hours as a leg for his "Silver C." The wind being at an angle to the site there was little chance of going far along the ridge. The highest reached was 1,750 ft., but most of the time was spent at varying heights and in different attitudes below 800 ft. One member reported that it was too windy for C.A.G. flying at Shoreham.

Sunday, April 4th.—Wind S.E., 15 m.p.h. Full advantage was taken of the removal of two fences across Atlingworth valley, and flights of up to two minutes were made from bungy launches. R. Stafford both completed the tests for his "C" and glided the farthest down the valley, within 20 yards of the end of the field. Gouland got his "A" in the TWIN.

Friday, April 7th.—With an east wind flights were made from the slope beside the hangar. Stafford, for some reason best known to himself, went birds' nesting with a wing tip of the TWO-SEATER. No eggs were broken and the glider landed in the approved manner, undamaged.

After reading the direction of winds at Easter for the last six years in the April SAILPLANE, there was little hope of much soaring, but things turned out otherwise. The PRIMARY continued to slide and hop on the Saturday, and on Easter Day and Monday over 10 hours were flown off the east slope. During the mornings only one glider was up at a time, but as the day got warmer the GRUNAU and TWO-SEATER were often in the air at the same time. Sydney Cox soared the TWO-SEATER for eight minutes for his "C," and several attempts were made by other members, who failed by being out of sight below the level of the hill.

Sunday, April 16th.—Several energetic members cleaned out the hangar, burning the rubbish with an old Chrisler body. Volumes of smoke rose in a clockwise direction as seen from the ground, but no attempt was made by those hopping the PRIMARY to go up in the thermal.

The club finally took over Filmer's GRUNAU at the committee meeting on Monday; he had been generously paying the club for his flights in it this year. We look forward to seeing his new VIKING and wish him many happy landings.

Norfolk and Norwich Aero Club

The gliding section gained another member in Mr. B. Adcock, of Norwich. Now that the warmer weather should be on the way we can expect very much longer flights, and it is gratifying to notice that even during the past winter the sailplane pilots have gained considerable experience, enabling them to double their times of the previous winter, when this section was formed by Mr. A. R. Colman.

Surrey Gliding Club

Saturday, April 1st.—Hopping and bouncing. Thom nearly got his "A."

Sunday, April 2nd.—Wind S.W., very light. The CAMBRIDGE managed to stay up, as also did the TUTOR. More hoppery.

Wednesday, April 5th.—Bucknall came and did some more circuits in the GREY KITE.

Easter Week-end.—Miss Matthews made a very nice "A" flight, and everyone else did circuits on Good Friday.

The CAMBRIDGE did some soaring, Thom and Mitchell got their "A's," and A. D. Jones got his "B" on Saturday.

East wind on Sunday, but the TUTOR managed to stay up. A. D. Jones had the club's first chop on the winch.

On Monday, for some reason, everyone came along and did circuits in the NACELLE.

Wednesday, April 12th.—Brian Powell and Ann Edmonds arrived back from Huish fairly early in the morning, found it soarable, and at once rigged the GRUNAU and flew. By the end of the day, O. P. Jones and A. D. Jones had got their "C's." Captain Horsey had got his "B," and White had nearly got his. Bill Murray arrived with his BUSSARD and flew; also the CAMBRIDGE.

Friday, April 14th.—D. L. Payne arrived very early, and was launched, trailing a wing, by a solo winch driver (axe between the teeth) in the G.B. for his five hours. Soon, however, the clouds came down, and it started to rain. The G.B. disappeared and was not seen until several hours later, when it was discovered in the middle of a patch of gorse 200 square yards in extent, two miles behind the top of the hill—fortunately without being damaged. Later Captain Youell got his "C" on the TUTOR with a flight of 23 minutes.

Saturday, April 15th.—Brian Powell was launched early for his five hours in the TUTOR, and almost immediately got a thermal to 2,500 ft., without a variometer, but the TUTOR's penetrative properties wouldn't play, so the flight ended after 50 minutes two miles away, in a ploughed field. Later in the day Colonel Murray got his "A," and L. G. Ditton got his "A" and "B."

Sunday, April 16th.—Wind west, veering to north-west. John Neilan managed to soar the TUTOR off the end of one of the spurs, in spite of the fact that the wind was blowing down the hill.

At Huish.—Ann Edmonds and B. Powell have had the GRUNAU at the Cambridge Club's camp for twelve days over Easter, where they have been joined by various members at different times for first aero-tows, and practice cross-countries. Everyone indulged in weird aerobatics, and Desmond Payne did an out and nearly return flight of twelve miles to Yatesbury Aerodrome on an apparently stable day. The weather was not all it might have been, but this was made up for by the C.U.G.C. in providing such an enjoyable holiday.

Imperial College Gliding Club

Easter Camp, 1939.

Our annual camp, which, as usual, was held in conjunction with the London Gliding Club's Easter instruction course at Dunstable, was probably the best as regards weather and certificates that we have had in recent years. The following certificates were gained:—

Brooks, "A," "B," and "C"; Davie and Yates, "C"; Fletcher, "B" and "C"; Ibrahim, "B"; Riley and Naylor, duration for "Silver C."

We started our gliding in almost summer weather, with four or five days of hopping—ideal conditions for preliminary work with the newer members. And then, after a couple of days, light westerly winds prevailed, enabling certificate flights to be made from the hill-top, and also enabling the more advanced members to get in some soaring.

We pitched our tents in a field adjoining the landing ground, and thanks to our vigorous secretary, who procured and equipped a hut in a very efficient manner, our living, and especially our catering conditions were infinitely superior to previous years. So that we were all quite comfortable and well fed, in spite of burnt porridge and amateur cooks.

The end of the camp came all too soon for us, and several members stayed on a few days. Altogether the camp was a great success, and we wish to express our sincere thanks to the officials of the London Gliding Club for their efficiency and consideration, which enabled us to make the camp so successful.

PIONEERS 10 YEARS AGO

Right from the earliest days of Civil Aviation, Manufacturers, Operators and Owners of Aircraft realised the necessity of Insurance protection.

In 1924 this organization was formed to specialise solely in AVIATION INSURANCE and to meet the vital demand for adequate and reliable Insurance cover of British needs the world over.

Valuable pioneer work was carried out, and now it is recognised that the security of sound insurance has contributed a very great deal to achieve the stability that the British Aircraft Industry now enjoys.

The British Aviation Insurance Co., Ltd., after over 10 years of successful operation, can justly proclaim

RECOGNISED LEADERSHIP TO-DAY

Over 90% of the leading British Aircraft Manufacturing and Air Line operating Companies entrust their Insurance business to the Company.

In ever increasing numbers, private owners and those hiring Aircraft are realising the advantages of the sound Policies and technical appreciation of their needs.

Experience counts—the pioneer work of yesterday has been the foundation on which has been built the unrivalled leadership achieved by the Company in the Aviation World to-day.

THE
BRITISH AVIATION INSURANCE CO., LTD.

3-4, LIME STREET, LONDON, E.C.3.

Telegrams: Aviacoy, Lime, London. *Telephone:* MANsion House 0444 (5 lines). *Underwriter and Principal Surveyor:* CAPT. A. G. LAMPLUGH, F.R.Ae.S., M.I.Ae.E., F.R.G.S.

DUNSTABLE SAILPLANES

	Drawings.	Materials.	Semi-Manufactured.	Complete.
KESTREL Sailplane	£5 0 0	£24 10 0	£70 0 0	£110
KESTREL Secondary	£5 0 0	£22 10 0	£67 10 0	£90
DAGLING Primary	£2 10 0	£17 10 0	£39 10 0	£50

ALL MATERIALS AND INSTRUMENTS SUPPLIED
Spruce, Plywood, Cable, Dope, etc.
The Kestrel Fluid Light Aero Compass - 15/6

THE DUNSTABLE SAILPLANE CO.
(Luton Aircraft Ltd.)
Phœnix Works, Gerrards Cross, Bucks.
Telephone - 2545

BLUE PRINTS FOR AMATEUR BUILDERS OF THE "WOLF" SAILPLANE

The Complete Drawings for the utility Sailplane Type "WOLF" (50 sheets of 24 in. × 34 in.) are free for sale. The "WOLF" carries a German approved type certificate and also a permit for simple aerobatics. The price of **£8 : 0 : 0** for the drawings includes the right to build one plane. For an additional royalty of **£4 : 0 : 0** for each, more planes may be built after one set of drawings.

Sportflugzeugbau Schempp-Hirth, Goeppingen,
GERMANY.

DART AIRCRAFT LTD.

29, High Street North
Albion Street
DUNSTABLE, Beds.

Phone: DUNSTABLE 429

■

Construction and Repair of Powerplanes and Sailplanes to A.I.D. Standards.

AEROPLANES and SAILPLANES to OWN DESIGNS.

Reconstruction and Reconditioning of HISTORICAL AIRCRAFT.

SUB-CONTRACT and EXPERIMENTAL WORK relating to Aircraft.

Wind Tunnel and High Precision Models.

Oxford University and City Gliding Club

During the period of just under four weeks since our last report was sent, seven members have qualified for "A" certificates, three for "B" and four for "C." The "A's" are F. C. Butler and H. S. Ford, both power pilots; P. J. Torrie, whose qualifying flights were made between snowstorms on March 25th, when snow freezing on the wings of the DAGLING prevented him, on one attempt, from getting enough height; G. Mueller, of Budapest, who had his first gliding practice with a Hungarian club; M. C. Hay, who has become a gliding enthusiast whilst home on leave from Malaya; W. H. Wilson, who is one of our veterans; and Ruth Walder, who had firmly announced that she intended to do her "A" on All Fools' Day, and did it! In Easter week she qualified for her "B" with a flight of 80 seconds, this being the first "B" flight made on our Beacon Hill site which has consisted of S-bends only, instead of a circuit. The other "B's" are F. C. Butler, and our youngest pilot, John Aspell. The "C's" are: Barbara Nicklin, the club secretary; A. Archangelski, who is now working for the club as ground engineer; and Squadron-Leader H. J. Kirkpatrick who, up to the end of last term, was instructor to the University Air Squadron, and whom we are very sorry to lose now that he has been transferred.

On **April 16th** H. J. Curtis, the club's vice-chairman, soared in the KIRBY TUTOR above the south-west slopes for 2 hours 20 minutes and had a good chance of completing the duration test for his "Silver C," when a sudden calm after a squall of rain forced him down on the hill top. When he failed to appear at the end of the beat everyone hurried up the hill, looking anxiously into the tree tops, and found him sitting in the ploughed field in which he had made a good landing. Kronfeld was bungy-launched from the hill top and flew the TUTOR down to the field.

Curtis recently acquired a Kronfeld "Super-Drone," which has been overhauled and repainted, and was flown by Kronfeld to Beacon Hill, where it is now housed in a hangar built for it by its owner. On April 16th Mr. Appleby, who is well known as a "Flying Flea" pilot, visited the club and took the "Drone" for an airing. Curtis, who has learnt flying on gliders only, then taxied the "Drone" up and down the field, made a couple of practice hops, and then took off, made a successful flight and a good landing, thus proving Kronfeld's contention that his system of gliding instruction is an efficient training for power pilots.

We were glad to welcome a visiting team of London Gliding Club members with their GRUNAU BABY in March. We were also pleased to see the Editor, who called at Beacon Hill in Easter week on his way to Huish. Arriving on the field in his famous Austin, he drove up to a machine which had just landed and was taken for a new member with a new (?) retrieving car and was asked peremptorily: "Will you take the machine or the cable?"

The NACELLE came to pieces in the hands of a pilot who thought that the ground was still quite a long way off when it suddenly hit her hard, but one of our DAGLINGS has returned from its holiday fitted with a nacelle and wheels, and the damaged KADET has also been restored to active service.

There has been flying, or at least ground trundling, almost every day, and we have been able to test the possibilities of our new ground in nearly every wind direction. The "associated activities" mentioned in our constitution have included a morning's hard work on the removal of a stout fence with wire trimmings. One member had already made some impression on it by charging it in a DAGLING, to the detriment of the horizon bar and his own nose, after which we decided that crowbars and mattocks would be better tools for the work of destruction. Some of our more adventurous members have been heard to regret the removal of this exciting hazard.

We welcome a steady influx of new members, and our secretary has been busy with the arrangements for the Air Cadets whom we expect in July. Since Summer Time came in, some of our busy City members are able to come out for evening flying, and the last few hours of the day are reserved, as far as possible, for them.

The club has again been invited to take part in the Empire Air Day programme at Upper Heyford.

Apologies to the Cambridge Club for our mistaken reference in the last issue to the "joint Oxford and Cambridge camp," at Pewsey.

The club secretary is Miss B. Nicklin, 532, Banbury Road, Oxford. Publicity secretary: Mrs. FitzRandolph, 376, Banbury Road, Oxford.

[CORRECTION.—The scale of the map published last month (page 79) is 2 miles to the inch, not 4 miles.—ED.]

Notice to Soaring Pilots and Prospective "C's"

IF you want soaring "par excellence" come to Longmynd and extend yourself. All we can offer you at present is a warm welcome, and soaring "ad lib" on what is admitted to be one of the best, safest and yet most dynamic sites in the Country.

On normal days there is hill soaring up to 1,500 feet, and an abundance of thermals of gratifying proportions—come and try them for yourself. Hill-top scraping may be good training, but we suggest you come and try out our six-mile site on Longmynd, and soar into the blue to your heart's content. We doubt if you will want to go away, for there is enough scope up there to satisfy the greatest gourmand.

Prospective "C" Pilots should remember that 14 ab initio "C" flights were done on one week-end in 1936, the greatest number ever in that time in England, with no breakages; and 51 more "C's" have been recorded since. We have converted a larger proportion of "A's" to "C's" than *any* Club in the British Isles; ask anyone who has flown there and get first-hand confirmation!

FACTS SPEAK LOUDER THAN WORDS

Club Fleet at Mynd—

2 KITES. 2 FALCONS.
1 TUTOR. 2 CADETS.
2 DAGLINGS (Nacelled).

Site—

Soaring beat 6 miles, averaging 500 feet above Valley.
First option on all West Winds!

For Ordinary Membership, Country Membership, University or Service Memberships, or Instructional Camps, apply to the Hon. Secretary, F. Leslie Felton, 1, Newhall Street, Birmingham. There are still a few vacancies left for the Whitsuntide and August Camps, starting on the 27th May and 5th August respectively.



FOX CLOUD BASE PREDICTOR

indicates directly without calculation the height of low-lying clouds. It forecasts possible clouding-over of a clear sky and also shows the absence of rising air currents.

NEGRETTI & ZAMBRA

38 Holborn Viaduct, London

ELLIS'S HANGAR

(No. A7)—*As supplied to Gliding Clubs for the housing of Sailplanes, Gliders & small Airplanes. Carr. paid within 100 miles of works. Easy terms arranged.*

£116/0/0

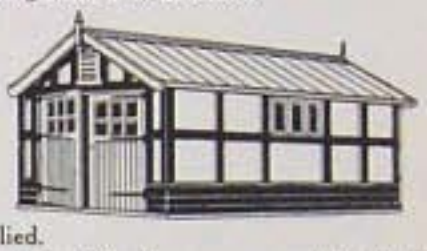


SPECIFICATION 50 ft. long, 30 ft. wide, 8 ft. to eaves, 15 ft. 6 in. to ridge. In complete sections for easy erection. Walls ¾ in. T. & G. Stormlock weatherboards on 3 in. x 2 in. framing. Iron-bound roof principals 7 in. x 3 in. on 5 in. loose studs. Iron tie rods and brackets 10 ft. apart. Purlins 4 in. x 2 in. covered ¾ in. T. & G. matching one-ply bitumen roofing felt, finished barge boards. Three windows each side 21 oz. glass. One end fitted with single hinged doors and light removable shutters. Two 5 in. x 4 in. raking struts as wind braces.

The 'RAINHAM'

Strong framing with 1 in. weather-boards to string course. Upper portion of asbestos sheets with broad wood overlays. Roof frames of principals and purlins with covering of Italian Pattern Galvanised Iron. Half glass doors strongly framed and braced. Despatched in sections, all nuts and bolts supplied.

From £13/11/6



12' x 8' x 6'	... ...	£13 11 6	16' x 9' x 7'	... ...	£19 9 9
14' x 8' x 6'	... ...	£15 3 3	20' x 10' x 7'	... ...	£24 10 9

Available on Easy Terms. Carriage paid in England and Wales.



Carriage paid within 50 miles.

ARMY TYPE HUT

Built in complete sections on strong framing covered T.G. and moulded weather-boards Suitable as store shed, canteen, etc.

16' x 12' x 7'	... ...	£14 3 0
24' x 12' x 7'	... ...	£18 18 0
32' x 12' x 7'	... ...	£23 16 0

Send for FREE CATALOGUE

G. ELLIS & CO. Coombe Wharf, Gainsborough Road, Eastway, London, E.9

Proved by years of service to be the best instrument of its kind

THE

COBB-SLATER VARIOMETER

ULTRA SENSITIVE ACCURATE SIMPLE
INEXPENSIVE RELIABLE NEAT

GET ONE of these remarkable units to-day and enjoy "sitting on top" of your friends.

£6 : 15 : 0 *Post Free in England*

R. B. COBB, Instrument Maker, MATLOCK

FOR SALE

"H-17" SAILPLANE

Complete with Trailer, £85

Condition Perfect.		C. of A. September, 1939.
Fully Aerobatic.		Fitted A.S.I. Altimeter, Compass, Clock.
Reason for Sale	-	No gliding facilities available where owner will be working.
Also for Sale	-	Cobb-Slater Variometer. Pullin Electric Turn Indicator.

Apply to—

D. B. S. DAVIE, Trinity College, Cambridge

gliding holidays at Camphill

Members' Camp during Whit-week

12 gns. inclusive

Summer training course open to non-members **Sept. 2 to 16**

full particulars from
Hon. Camp Secretary,
Derby & Lancs. Gliding Club,
17, Sackville Street,
MANCHESTER, 1

SCOTT LIGHT AIRCRAFT

LIMITED

(formerly SCOTT & ZANDER)

Manufacturers of
GLIDERS
SAILPLANES
LIGHT AIRCRAFT

Designers and Manufacturers

of the Famous

"VIKING"

HIGH PERFORMANCE SAILPLANE

Primary Trainer	£57	15	0
Nacelle Trainer	£65	0	0
H-17 Sailplane	£125	10	0
VIKING	£265	0	0
Trailer for Viking	£36	0	0
Trailer for H-17	£28	10	0
H-17 Complete Kits with materials to finish	£57	0	0

SIDE-BY-SIDE 2 SEATER VIKINGS shortly available £335

Suppliers of Aero Plywood to specification B.S. 1.V.34 and 4.V.3. Spruce cut to size. Dope. Fabric. Sundries.

• •

Samples and Prices on Application. Machines Overhauled for C. of A. Instruments purchased from us fitted free of charge at works.

• •

REPAIR WORK A SPECIALITY

• •

27, ALBION STREET DUNSTABLE, BEDS.

Phone 555

FOR SALE

HOLS DER TEUFEL. Light wind Sailplane. In good condition. Will soar when other secondaries cannot. Used to try out many sites in Scotland in the last year. **Price £30**

ALSO

PRÜFLING. In good condition. Slingsby built. **Price £30**

DELIVERY BY ARRANGEMENT

Apply—J. V. CAMPBELL, Kirklea, Cardross Road, Dumbarton

POCKET BAROGRAPHS

Leatherette covered steel and aluminium case. Size approx. 4½"x3"x1½". Weight 15½ ozs. Reads 0 to 15,000 feet. Records every 30 seconds. Accurate Calibration.

Price - **11 Gns.** Complete with 50 Gummed Charts, Ink, Key and Calibration Certificate.

INSTRUMENTS REPAIRED, CLEANED AND ADJUSTED.
Barograph Calibration Certificates prepared within 48 hours.

CHOWLES, Instrument Maker, WINSLOW, BLETCHLEY, BUCKS.

FOR SALE—NEW DUNSTABLE KESTREL, C. of A.

Please apply to W. J. BROWNING, BARRINGTON, ILMINSTER

RECOMMENDED GLIDING CLUBS

Southdown Gliding Club

(Affiliated to the B.G.A.)

Secretary :—S. G. Stevens, "Southerlea," Meadow Close, Hove. (Tel. : Preston 3284.) Soaring at Devil's Dyke and Atlingworth Ridge. One of the finest Primary and Secondary training sites in England. Clubhouse and hangar ¼-mile S.S.W. of Devil's Dyke Station. Subscription, 2 guineas and 1 guinea entrance. Auto towing and winch launching facilities. Very moderate flying fees and expert tuition.

Oxford University and City Gliding Club

(Affiliated to the B.G.A.)

Secretary :—Miss B. M. Nicklin, 532, Banbury Road, Oxford. (Tel. : 58300.) Primary training and soaring site at the Lambert Arms, Aston Rowant, Oxon, 15 miles E.S.E. of Oxford on the Oxford-High Wycombe-London road and 39 miles from London. Resident full-time Instructor : R. Kronfeld, A.F.R.Ae.S. Flying every day except Mondays. Subscription, 3 guineas p.a. Entrance fee, 1 guinea. Flying charges, 1s. to 2s. per winch launch. Temporary (course) members, entrance fee, 1 guinea. Subscription, 1 guinea per week. Flying charges, 1s. to 2s. per launch.

Scottish Gliding Union

(Affiliated to the B.G.A.)

Patron : Lord Weir. President : Hon. A. R. Boyle. Secretary and Treasurer : R. B. Rogerson, 20, Blythswood Street, Glasgow, C.2. (Tel. : Central 4209 and Shettleston 1328.) Main training and soaring site and clubhouse : Feal Farm, Bishop Hill, Lochleven, Kinross; also other training sites in other parts of Scotland. Primary training and soaring. Full residential accommodation, including rooms for married couples. Flying and training every week-end, together with organised camps. Flying charges from 6d. per flight. Soaring flight from 2s. 6d. Subscription, £3 3s. flying member per annum. Associate, £1 1s per annum. Entrance fee, £2 2s. Full range of machines for members' use. Large hangar accommodation.

CASTROL GIVES YOU

20 MILES PER 1d

if you DRAIN AND REFILL every 2000 miles

Lubrication is one of the most essential safeguards of pleasurable motoring. It is also one of the cheapest. Therefore it is both unwise and unnecessary to "economise" on oil. See how little good oil really costs... the average 10 h.p. car holds six pints of Castrol costing 5/6. Allow two pints (costing 2/2) for topping up and total oil cost for 2,000 miles is 7/8 . . . or, rather less than one penny for every 20 miles travelled.

WAKEFIELD Castrol

LUBREQUIPMENT SERVICE

YOUR LOCAL STATION STOCKS THE GRADES APPROVED BY YOUR CAR MAKER

C. C. WAKEFIELD & CO. LTD., *All-British Firm*, Wakefield House, Cheapside, London, E.C.2

CONGRATULATIONS
TO
G. H. STEPHENSON
of the London Gliding Club

CHANNEL GLIDING RECORD

A new landmark in gliding history has been established by Mr. Geoffery Stephenson with an unassisted flight across the English Channel in a "Kirby Gull" Sailplane from Dunstable, Bedfordshire, to Wast, near Boulogne, France, 130 miles distant.

THE
"KIRBY GULL" SAILPLANE

Designed by experienced sailplane designers, and constructed by experts, Slingsby Sailplanes are active testimonials to the efficiency of British Sailplane construction. The latest motorised machinery has recently been installed at the Kirbymoorside works, where these modern sailplanes are now being assembled.

Slingsby Sailplanes range in price from £57 15s. to £266

Write for details of our complete range.
We are agents for Slater-Cobb Variometer and Collins Variometer.

SLINGSBY SAILPLANES

Office and Works: Kirbymoorside, Yorks, England

Published by H. O. Davies, 13, Victoria Street, London, S.W.1. and Printed by Hicks, Wilkinson & Sears, 4, Dorset Buildings, Salisbury Square, E.C.4.