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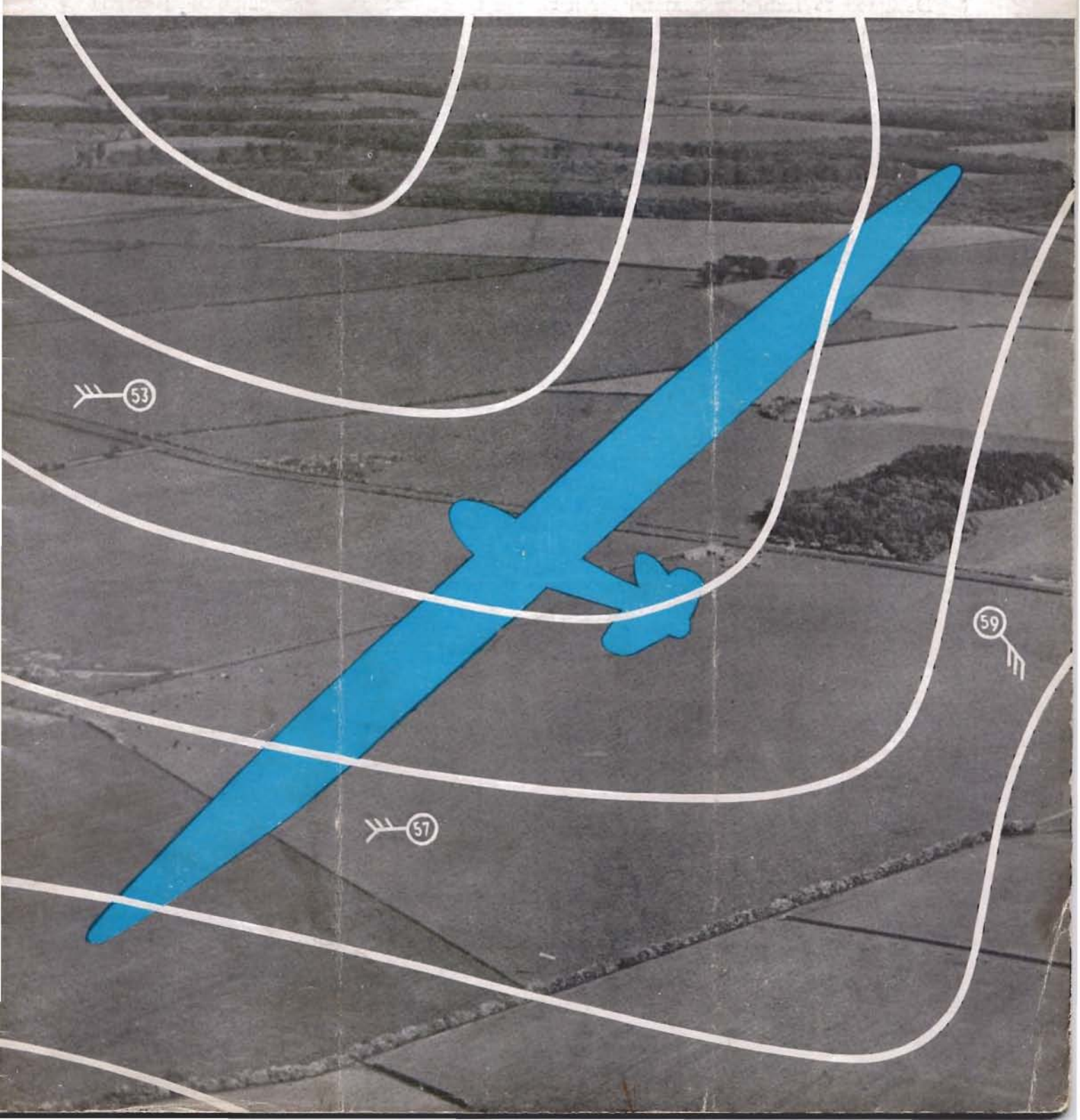

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Editorial Offices: 13, VICTORIA STREET, LONDON, S.W.1 Telephone: ABBey 2615-6-7

Vol. 7 No. 4 APRIL, 1936 Published Monthly

Easter at Camphill

THE Easter meeting of the Derbyshire and Lancashire Gliding Club at Camphill, Great Hucklow, is the first big competition meeting staged by this club, and may be regarded as introducing to the public one of the finest gliding and soaring centres in the country; one from which some notable flying has already been done, and which promises still greater things in the future.

Though it is little more than a year since the flying possibilities of this site were first tried out, the Derbyshire and Lancashire Gliding Club is by no means a new-comer to the gliding world; in fact, there can be few British gliding clubs which can claim a longer history.

The club had its origin in April, 1929, when the construction of its first primary glider was commenced in Manchester, and there has been no cessation of its flying activities since that machine was completed. It is almost as long a time since the Matlock Gliding Club, later to become the Derby Gliding Club, first started flying; and, when the amalgamation of the Derby Club with the Gliding Section of the Manchester Branch of the Royal Aeronautical Society took place in July, 1935, there came into existence an organisation rich in experience and enthusiasm.

The Club's Facilities

The club was one of the first to benefit under the Government scheme of subsidy to gliding clubs, and is thus enabled to provide the best and most up-to-date equipment for the training of pilots. Five primary and secondary training machines are in use, and workshops have been well equipped for the maintenance of these machines, which is carried out under the supervision of an approved ground engineer.

The flying and training organisation is under the control of a committee of instructors, each of them with a great deal of soaring experience and qualified in every other way for the work they have undertaken. For the primary training of gliding pilots there are gentle slopes suitable for each wind direction, while for soaring flight there is Bradwell edge, three miles long, facing west, and Eyam edge, four miles long, facing south. In south-westerly winds both slopes can be used, thus providing a beat seven miles long. Already four members trained by the club have obtained their "C" soaring certificates on the site.

For more advanced pilots the surrounding country provides unlimited scope for cross-country flying. This was shown last summer when Mr. Robertson, a club member, soared in the GOLDEN WREN sailplane 52 miles to Hessay, near York, while in the autumn Mr. Wills flew the HJORDIS to the outskirts of Sheffield and back to the site.

The club house, a picturesque farm house, provides bodily comfort and refreshment, including sleeping accommodation. Subscription rates are £2 7s. 6d. *per annum* for flying members, £1 1s. for non-flying; there is no entrance fee. Flying charges are 6d. per launch for primary training, 2s. 6d. for soaring flights up to 15 minutes, and 6d. for each five minutes extra. All club members have also the privileges of membership of the Manchester branch of the Royal Aeronautical Society. Membership application forms can be obtained by sending a stamped addressed envelope to either Mr. R. E. Garner, hon. secretary, Derbyshire and Lancashire Gliding Club, Highfield, West Avenue, Shelton Lock, Derby; or to Mr. J. A. E. Waterfall, hon. secretary, Royal Aeronautical Society (Manchester branch), 7, St. Andrew's Road, Stretford, Manchester.

"Daily Dispatch" Prizes

A special feature of the meeting is the pair of cash prizes offered by the *Daily Dispatch* for soaring flights commencing at or near the site of the Derbyshire and Lancashire Gliding Club at Camphill.

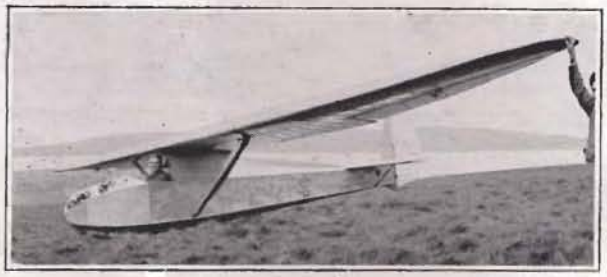
£100 is offered to the pilot of any type of motorless glider or sailplane who completes a flight with the starting point at or near the club headquarters at Camphill, and terminating at Stanley Park Aerodrome or Squires Gate Aerodrome, Blackpool, or any other suitable landing place within the boundaries of the township of Blackpool. The competition is open until September 30th, 1936, and if by that date no pilot has succeeded in reaching Blackpool but has got within 20 miles of Blackpool Tower, and nearer to it than any other competitor, he will be adjudged the winner.

Up to the time of going to press, entries for this prize have been received from P. A. Wills (HJORDIS sailplane), G. O. Smith, A. L. Slater, and R. G. Robertson (GOLDEN WREN sailplane), J. C. Neilan (KIRBY KITE), and Robert Kronfeld.

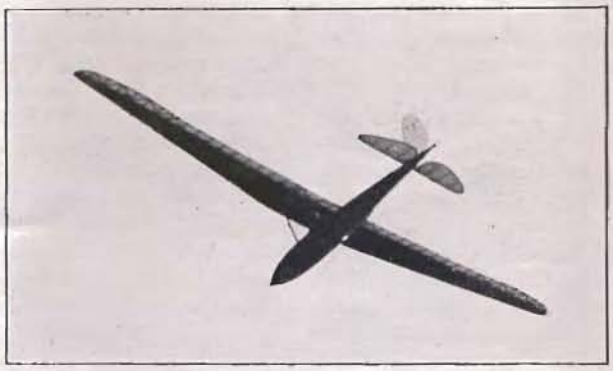
A **£25** prize, also offered, must be won during the meeting. The feat required of the pilot will be decided at the time, as it will depend on weather conditions, but it will probably be a cross-country flight. Every entrant for this prize must be the owner-constructor or part owner-constructor of the sailplane which he flies. Machines so far entered for this competition are the GOLDEN WREN, a GRUNAU BABY II., built by F. Coleman, another built by S. and D. Hobson, and the WHITE WREN, built by D. M. Morland and H. L. Richardson.

Sailplane Types at the Camphill Meeting

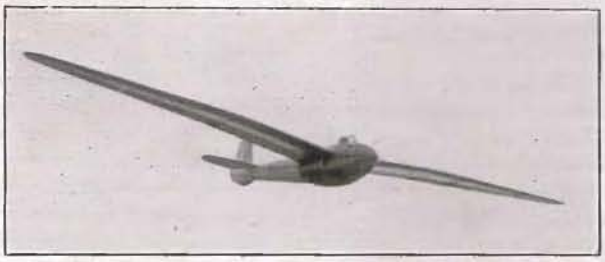
WREN.—Four are entered: Golden Wren, by G. O. Smith, A. L. Slater and R. G. Robertson; White Wren, by D. M. Morland and H. L. Richardson; Willow Wren (green) by members of the Cambridge Club; and Crested Wren (red), by E. Thomas.



GRUNAU BABY II.—A German design now being produced in England. One is entered by G. B. Baker; another by Capt. Heath, W. Liddell and H. C. Bergel; another by F. S. Coleman; and one by S. and D. Hobson.



SCUD II.—A successful light-weight British design: entered by S. Fox and T. G. Armstrong.



RHÖNSPERBER.—One of the latest German designs, entered by C. Nicholson and J. P. Dewsbery.

KIRBY KITE.—A British design by Slingsby Sailplanes. Three are entered: one by D. G. Hiscox, one by J. C. Neilan, and one by Capt. Heath, W. Liddell and H. C. Bergel.

HJORDIS.—High-performance sailplane, entered by P. A. Wills and G. M. Buxton, its designer.

CAMBRIDGE.—Designed and built by Zander & Weyl, of Dunstable. One is entered by Cambridge Club members, and another (white) by R. S. Rattray and E. J. Furlong.

List of British Gliding Clubs and their Secretaries

England.

ACCRINGTON AND DISTRICT.—67, Eagle Road, Accrington.
CAMBRIDGE UNIVERSITY.—I. S. Paget, 20, Trinity Road, Cambridge. (Flying Ground: Caxton Gibbett.)
CHANNEL.—F. G. Whitnall, 16, High Street, Cheriton, Folkestone.
DERBYSHIRE AND LANCASHIRE.—R. E. Garner, "Highfield," West Avenue, Shelton Lock, Derby. (Flying Centre: Camphill Farm, Great Hucklow.)
DEVON.—S. G. Tolman, Journal Office, Exmouth.
DORSET.—J. Laver, 9, Commercial Road, Weymouth. (Flying Ground: Maiden Newton.)
EAGLE.—H. J. Turner, 109, Colmore Row, Birmingham.
EAST LANCASHIRE.—J. Crosby, 116, High Audley Street, Blackburn.
ESSEX.—W. Webster, 113, Coombes Road, Dagenham.
FURNESS.—B. Winder, 16, Powerful Street, Walney, Barrow-in-Furness. (Flying Centre: Ireleth, Askam-in-Furness.)
IMPERIAL COLLEGE.—L. S. Holt, Imperial College of Science, South Kensington, S.W.7.
JERSEY.—K. J. Carter, 8, Queen Street, St. Helier, Jersey. (Flying Ground: St. Ouen's Bay.)
KENT.—Miss R. H. Sinclair, Lady Place, Sutton Courtenay, Berks. (Flying Ground: Lenham, near Maidstone, Kent.)
LEICESTERSHIRE.—D. J. Williams, 17, Tennis Court Drive, Humberstone, Leicester. (Flying Grounds: Clack Hill and Six Hills, near Leicester.)
LONDON.—H. O. Davies, 13, Victoria Street, London, S.W.1. (Flying Ground: Dunstable Downs, Beds.)
MANCHESTER.—J. Saunders, "Davenport Hayes," Hanbury, near Macclesfield.
MIDLAND.—F. L. Felton, 131, Edmund Street, Birmingham. (Flying Centre: Long Mynd, Church Stretton. Additional training grounds at Birmingham and Hereford.)
NEWCASTLE.—A. P. Miller, 25, Holme Avenue, Walkerville, Newcastle-on-Tyne. (Flying Centre: Moat Law, near Matfen.)
NORFOLK.—N. C. Hunt, Station Road, Sheringham, Norfolk.
NOTTINGHAM.—R. V. Sowerbutts, 426, Woodborough Road, Nottingham.
PORTSMOUTH AND SOUTHSEA.—V. R. Yelf, 14, Middle Street, Southsea.
PRESTON AND DISTRICT.—L. E. Falla, "Lendor," Lawrence Road, Penwortham, Preston.
ROCHDALE.—J. McLoughlin, 7, Clovelly Street, Murland, Rochdale.
RYEDALE.—F. Slingsby, Kirbymoorside, Yorks.
SHROPSHIRE.—G. B. Muir, "Ireland," Halford, Craven Arms, Salop.
SOUTHDOWN.—A. York Bramble, 7A, First Avenue, Hove, 3, Sussex. (Flying Centre: Devil's Dyke, Brighton.)
ST. AUSTELL AND SOUTH CORNWALL.—J. W. Graham, Red House, Tywardreath.
TEES-SIDE.—H. P. Dean, 11, Redwing Lane, Norton-on-Tees, Co. Durham.
WORKINGTON AND WEST CUMBERLAND.—C. D. Muntz, "Woodland," Ellerbeck Lane, Workington, Cumberland.
WHITLEY BRIDGE AND DISTRICT.—T. E. Armes, "Darrendale," Snaith, Yorkshire.
YORKSHIRE.—A. Cox, "Overdale," Boston Avenue, Kirkstall, Leeds; and H. T. Blakeston, Aspen House, Driffield, Yorks. (Flying Ground: Sutton Bank, near Thirsk, Yorks.)

Scotland.

ELGIN.—D. M. McRae, Park House, South Street, Elgin.
PERTH.—R. Mackelvie, View Cottage, Union Road, Scone, Perthshire.
SCOTTISH GLIDING UNION.—J. W. Gardner, Journal Office, Alloa.

Ireland.

ULSTER.—N. P. Metcalfe, c/o Ulster Spinning Co., Ltd., Belfast. (Flying Centre: Downhill, Magilligan Strand, Co. Londonderry.)

Wales.

PWLLHELI.—E. R. Wilson, "Bryn Tawel," Pwllheli, Carnarvonshire.

Enquiries for information regarding gliding clubs should be addressed to the Hon. Secretary of The British Gliding Association at 66, Victoria Street, London, S.W.1.

Learning to Glide

WHEN the art of soaring flight was first mastered, which happened in Germany in the year 1922, its only exponents were pilots who had already had experience with aeroplanes. Then, in 1926, a machine called the PRÜFLING was introduced which, for the first time, enabled pilots without previous flying experience to progress right up to the stage of being able to soar, which is the ultimate object of all gliding instruction.

Of the clubs listed in the adjoining column, nearly all provide gliding facilities at week-ends, and sometimes, during summer, on week-days too, though only a limited number have sites suitable for soaring flight. Those who are thinking of joining a gliding club should write to its secretary, or, better still, visit the club's ground and see it at work.

For prospective pilots who would get on a little faster, and are willing to give up a holiday for the purpose, there are certain facilities for *continuous* gliding and soaring instruction.

The Yorkshire Gliding Club is holding a fortnight's instruction camp at Sutton Bank, near Thirsk, from August 2nd to 15th inclusive. The fee for the course, which covers flying instruction, meals in the club house, and full camping accommodation, is £12 12s. for the 14 days. A seven-day course can be taken for £7 7s., but the full course is recommended where possible. Early application should be made to the Assistant Hon. Secretary of the Club at Aspen House, Driffield, Yorkshire.

The London Gliding Club proposes to hold seven-day instruction courses, also open to non-members, about Whitsuntide and August Bank Holiday. Particulars are obtainable from the Hon. Secretary of the Club at 13, Victoria Street, London, S.W.1.

In Austria there is a gliding school near Salzburg which is willing to take foreign pupils. The Anglo-Continental Express Co., Ltd., of 177, Regent Street, London, W.1, will make all arrangements for anyone going from this country to attend the courses, which last just under three weeks each. The charge is £16 18s. for the beginners' course, and £21 8s. for the advanced course, and the fee includes third class travel (second on boat) from London to Salzburg and back, board and accommodation at the school, and flying fees. Beginners' courses start on April 20th, May 11th, June 8th, June 29th, July 20th, August 10th, August 31st, September 21st, etc.; pupils are billeted in farm houses, and glide over the lower slopes at the foot of the mountain. Advanced pupils live in a hotel on the Gaisberg mountain and fly from there; courses begin on May 11th, June 8th, July 6th, August 3rd, and August 24th.

In Germany there is the old-established and well-set-up gliding school at Grunau in Silesia, which also takes foreigners. Application should be made, not to the school, as stated in our last issue, but to headquarters at Berlin. We suggest writing to: Deutsche Luftsport Verband, Abteilung Segelflug, Berlin.

British Cross-Country Soaring Flights

1930

June 15th.—Robert Kronfeld in his WIEN sailplane, Firle Beacon to Bedhampton Hill, 50 miles.

1931

June 30th.—Robert Kronfeld in WIEN, Hanworth to Chatham, about 40 miles. Aero-towed start.

July 1st.—Robert Kronfeld in WIEN, Chatham to Hanworth *via* Biggin Hill. Aero-towed start.

August 15th.—G. M. Buxton in PROFESSOR, Dunstable Downs to Luton Hoo Park, 6¼ miles.

August 24th.—Carli Magersuppe in TERN, Stoupe Brow, Ravenscar, to Scarborough, 8·3 miles.

1932

September 4th.—G. M. Buxton in BRITISH FALCON, Ireleth to Monk Park, Coniston, 13¼ miles.

September 17th.—H. S. Crabtree in HOLS DER TEUFEL, Beamsley Beacon to Ilkley, over 5 miles.

1933

March 11th.—J. P. Dewsbery in CRESTED WREN, Buck Barrow to Pike Side and back, 3 miles each way.

July 3rd.—G. E. Collins in B.A.C. VII., with Mrs. Collins as passenger, Huish to All Cannings, 6 miles.

August 19th.—S. Humphries in CRESTED WREN, Dunstable Downs to Ivinghoe Beacon (3½ miles) and back.

August 23rd.—G. E. Collins in PROFESSOR, Dunstable Downs to South Mimms, 19½ miles.

October 8th.—Flights from Sutton Bank: P. A. Wills in SCUD II., to Swainby, 12·7 miles; D. MacClement in FALCON II., to Osmotherly, 10·8 miles; G. A. Little in TERN, to High Bannescue, 6 miles.

November 25th.—P. A. Wills in SCUD II., between Beachy Head and Willingdon, 4 miles.

1934

March 18th.—Flights from Dunstable Downs: S. Humphries in CRESTED WREN, to Hertford, 19·3 miles; G. E. Collins in KASSEL, with W. Exner as passenger, to Little Waltham, 45·9 miles; P. A. Wills in PROFESSOR, to Latchingdon, 55·8 miles.

April 22nd.—G. E. Collins in RHÖNADLER, Dunstable Downs to Rayleigh, 52·3 miles.

May 21st.—G. E. Collins in FALCON II., from Cwm along Clwydian Range, about 7 miles, and back.

May 26th.—N. P. Metcalfe in SCUD II., Downhill to Limavady, Co. Londonderry, 5 miles.

May 27th.—G. E. Collins in RHÖNADLER, Dunstable Downs to Ivinghoe and points within 5 mile radius.

July 14th.—Joan Meakin in RHÖNBUSSARD, Bristol to Salisbury, 40 miles. Aero-towed start.

July 15th.—Flights from Dunstable Downs: G. E. Collins in RHÖNADLER, to Hanworth, 31 miles; P. A. Wills in SCUD II., to Abridge, 32 miles.

July 22nd.—G. E. Collins in RHÖNADLER, Dunstable Downs to Luton (6 miles) and back.

July 29th.—G. E. Collins in RHÖNADLER, Dunstable Downs to Blakesware, 25 miles.

August 5th.—Flights from Sutton Bank: J. P. Dewsbery in BLUE WREN, to Rudston, 37 miles; P. A. Wills in SCUD II., to Welburn, 11 miles.

August 5th.—G. E. Collins in RHÖNADLER, Dunstable Downs to Holkham Bay, 95 miles.

August 18th.—G. E. Collins in RHÖNADLER, Dunstable Downs to Luton and back.

August 19th.—P. A. Wills in SCUD II., Dunstable Downs to Ware, 26 miles.

Flights from Sutton Bank, B.G.A. Competitions:—

September 3rd.—G. E. Collins in RHÖNADLER, to Osmotherly (11 miles) and back; P. A. Wills in SCUD II., to Kildare, 18 miles.

September 4th.—J. P. Dewsbery in BLUE WREN, to Hawsker, 30¾ miles; G. M. Buxton in SCUD II., to North Ormesby, 22¾ miles; G. E. Collins in RHÖNADLER, to Pickering, 18½ miles.

September 7th.—R. G. Robertson in GOLDEN WREN, to Ampleforth (5 miles) and back.

September 8th.—G. M. Buxton in SCUD II., to Oswaldkirk (7 miles) and back.

September 9th.—R. G. Robertson in GOLDEN WREN, circular tour of about 30 miles, *via* Thirsk and Osmotherly.

1935

April 6th.—W. W. Briscoe in SCUD II., Dunstable Downs to Amwell, 12 miles.

April 14th.—G. E. Collins in RHÖNADLER, Dunstable Downs to Grand Union Canal, etc., and back.

June.—G. E. Collins in RHÖNADLER, Reading to Heath Row, 22 miles. First part aero-towed.

June 11th.—R. G. Robertson in GOLDEN WREN, Eyam Edge to Hessay, 52 miles.

July 6th.—Flights from Dunstable Downs: H. C. Bergel in GRUNAU BABY I., to Hornchurch, 39 miles; P. A. Wills in SCUD II., to Heston, 27 miles.

July 21st.—S. Humphries in CRESTED WREN, Dunstable Downs to North Weald, 32 miles.

August 9th.—J. C. Neilan in FALCON I., Sutton Bank to Welburn, 11 miles.

August 18th.—J. C. Neilan in FALCON I., Sutton Bank to Thirsk, 7 miles.

Flights from Sutton Bank, B.G.A. Competitions:—

August 27th.—J. C. Neilan in KIRBY KITE, to Garton, 54½ miles; C. Nicholson in RHÖNBUSSARD, to Catfoss, 48 miles; P. A. Wills in HJORDIS, to Gribthorpe, 32 miles; L. H. Barker in SCUD II., to Coneysthorpe, 15 miles; W. E. Filmer in GRUNAU BABY II., to Welburn, 11 miles.

August 28th.—J. C. Neilan in KIRBY KITE, to Ingleby Cross, 13 miles; P. A. Wills in HJORDIS, to Arncliffe Hall and part of the way back.

August 29th.—P. A. Wills in HJORDIS, to Arncliffe Hall (12 miles) and back; W. E. Filmer in GRUNAU BABY II., to Wombleton, 10 miles; W. W. Briscoe in SCUD II., to Easingwold, 7½ miles.

September 29th.—P. A. Wills in HJORDIS, Bradwell Edge to Sheffield (11 miles) and back.

1936

February 2nd.—W. Liddell in GRUNAU BABY II., Downhill to Coleraine, 6½ miles.

February 21st.—F. Charles in KIRBY KITE, Ireleth to Roose, 6 miles.

A Passenger at Sutton Bank

IT was a beautiful day. Sunshine and heather and white clouds in a blue summer sky. Pilot and passenger sat side by side, securely fastened in. The steel rope tautened and off we went, no jar and a steady rise, but I had a feeling that she did not like being pulled by the nose. It reminded me of our small yawl being towed in a calm. She struggles a little with the helm and holds her bow at a protesting angle. FALCON III. had the same air of gentle protest, and I nearly said to Mr. Slingsby, "She doesn't like it," when the safety catch clicked, down dropped the rope, and we were free of earthly communications. There was a similar sensation to being launched in a boat. The water is like a friendly hand that gives support where most needed. One felt that the air treated the sailplane in the same manner. There was none of the violent thrust of a power machine, which seems to bore its roaring way through the protesting atmosphere. We were obviously at ease, and not particular about destination. I remembered the usual farewell from our sailing club: "Where are you going?" "Depends on the wind. We're out for fun."

I said to Mr. Slingsby: "This beats power flying into a cocked hat," and he agreed, while flying back and forth along the edge of the bank in search of a lift, and suddenly an insistent thrust from below caused him to exclaim: "A thermal!" We circled and rose, Mr. Slingsby casting down an eye for other soarers, I watching the variometer (though unaware of its workings, except that one direction meant down, the other up). "Are we falling yet?" enquired Mr. Slingsby at intervals, keeping a wary eye below. A machine immediately under us got a boost from the same thermal and shot upwards, growing from a small card toy into alarming proportions. He baulked our lift, much as a boat to windward steals one's breeze. "Where's he got to now?" said Mr. Slingsby presently. I looked behind and all round but could see nobody, only a moth-sized shadow on a green field which I suddenly realised was our own. We still circled up, banked over at a fairly steep angle, and then the variometer stood at zero. We were up 1,100 feet, and had taken about ten minutes to get there.

Here we cruised about with a fine view of the country, though everything was much diminished in size and heights looked flattened out. There was a swish of wind, much as one gets sailing close-hauled in a sizable cutter, but not enough noise to prevent conversation. "This is grand," I said. "Shall I ever be able to do it?" "Oh, yes," said the confident Mr. Slingsby, "there's nothing in it at all; just this," and he moved the stick in his hand very slightly, presently leaving go altogether to look at his watch. I expected a sudden dive, but nothing happened. "She's a steady old bus. The only trouble is these fellows flopping about down below," a summary description of four or five less fortunate bird-men at a lower altitude.

We seemed to hang stationary while the aerodrome, sliding gently to and fro below, enlarged itself to receive us. We were over a wooded gully when I was asked: "Do you mind a side-slip?" which conjured up painful recollections of being taught this gentle art in the middle of a long ski excursion, when there were some awkward banks to negotiate. Here there was no jar to the usual organ, or to the machine. We moved sideways, losing height, and presently turned over the boundary fence to slide to rest in the heather. I was again reminded of ski-ing—the gentle deceleration on the level at the end of a downhill run.

The "Falcon III" at Sutton Bank.

Here indeed were the wings of the morning, whose beauty is in their grace and whose praise is their silence.

MARY H. BARRALET.

A Letter about Certificates

SIR,

In THE SAILPLANE of December, 1935, you published statistics showing how the numbers of "Silver C" certificates are growing. Making a rough estimate, it is easy to see that by the end of this year we may expect the figures for Great Britain to have reached somewhere about the 30 mark, and by the end of 1937 we should have about 100 "Silver C" pilots.

I take it that the "Silver C" has been of great value in keeping up the interest of "C" pilots, giving them something to work for—an urge to do better things.

While I do not imagine that "Silver C" pilots are likely to lose interest in gliding, having achieved the highest award, there is that danger, and, though it is not great, it would be a pity if we were to lose even one of our "Silver C" pilots. One knows how keenly their flights are studied by the aspiring "C's" and "Silver C's."

I suggest that it would be worth while instituting another certificate, higher than the "Silver C," a sort of Master Sailplane Pilot's Certificate, and the qualifications for this should be (*a*) the possession of "A," "B," "C" and "Silver C" certificates, (*b*) a distance flight of at least one hundred miles, and (*c*) a height of at least one mile above the releasing point.

These performances are not too much to expect, in fact I shall be surprised if several pilots do not better them this year.

A further endurance test I regard as quite useless. Duration proves nothing as regards the skill of the pilot, unless it so happens that an unfortunate lull occurs at a vital moment, and there is nothing to support one's machine beyond one's own fervent prayers!

YORKSHIRADLER.

Soaring Saga

By CORUNUS

Illustrations by H. MCCLELLAND

THIS is the tale of George Wellington Moring, who thought he'd take lessons in Gliding and Soaring.

George Wellington was quite a likeable chap; he worked hard on the Stock Exchange, there was quite happy; careering around with the Bulls and the Bears, cheering hoarsely as they pulled out each other's hairs.

> At nights he went scooting
> back home to East Tooting,

his fond parents said *he* would ne'er go galooting.

At week-ends young Moring, in plus fours, as often as not would repair to a quiet game of golf. From what I have said can be quickly agreed that young George was a Briton of True Bulldog Breed.

> There can hardly be need
> to repeat in this screed

that young George was a Briton of True Bulldog Breed.

One morning he sat in the eight forty-three and he opened his paper and happened to see a page by an enthusiastic reporter, how every man—what is more, every man's daughter (especially girls)—was now taking to Gliding, a marvellous pastime, akin to air sliding. The writer impressed it was really quite simple; you went to the top of a hill (just a pimple), you seated yourself in a beauteous machine and just sailed to the foot like a king (or a queen).

At this picture the bosom of Wellington swelled, his prudence he stifled, his conscience he felled. He

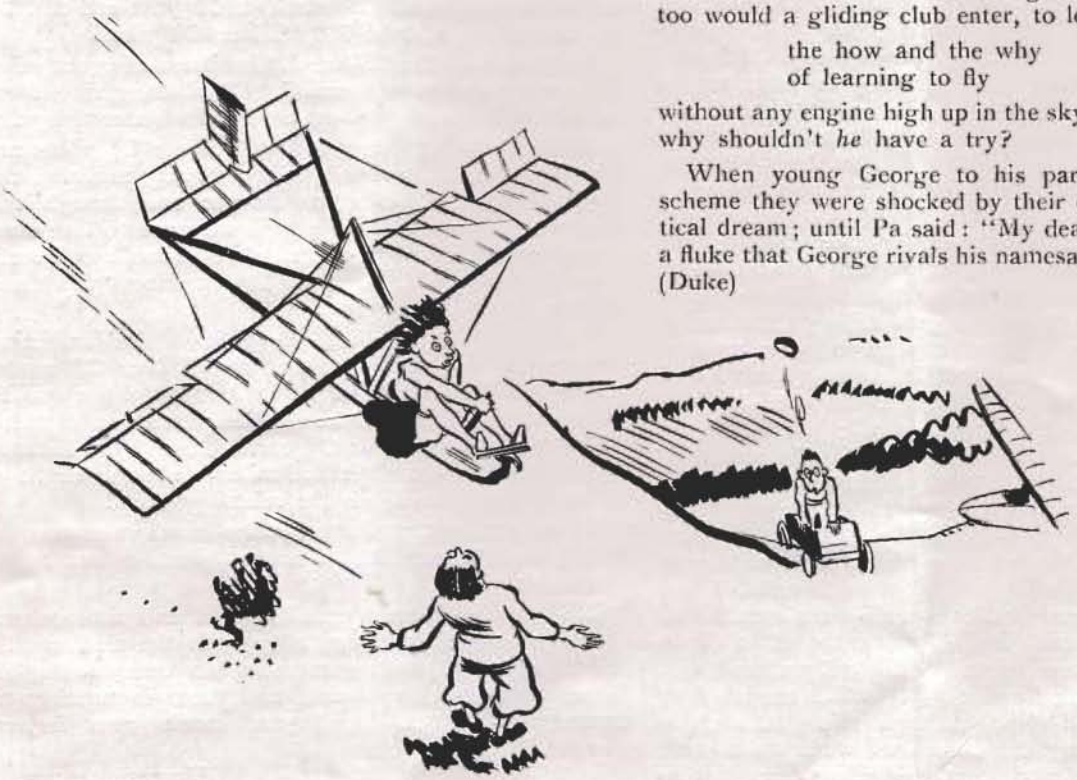
**At night he went scooting
Back home to East Tooting.**

resolved with a countenance rigid and stern that he too would a gliding club enter, to learn

> the how and the why
> of learning to fly

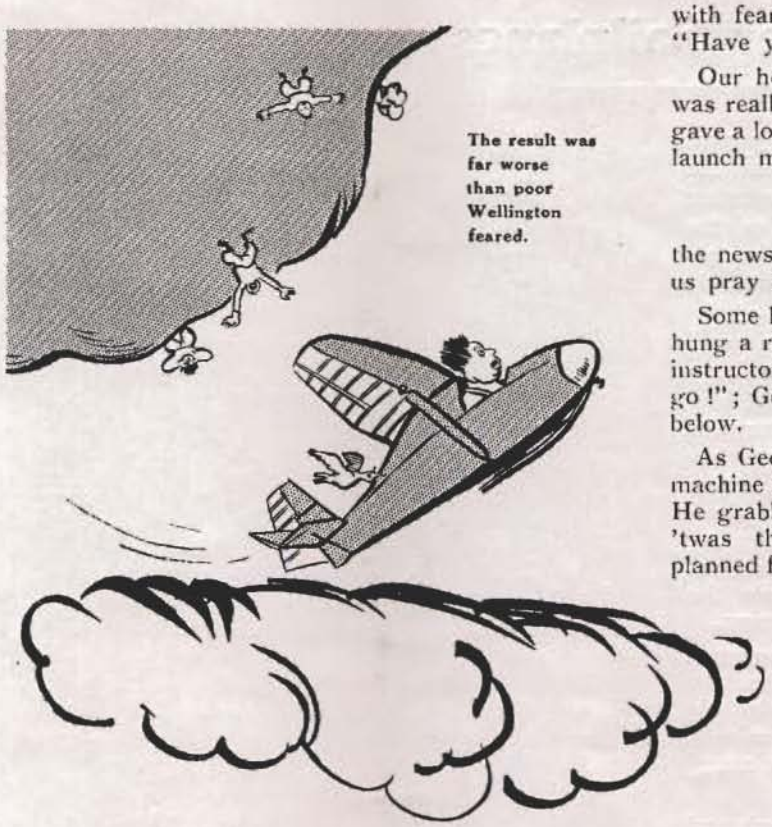
without any engine high up in the sky. Yes, by Jiminy, why shouldn't *he* have a try?

When young George to his parents imparted his scheme they were shocked by their dear son's impractical dream; until Pa said: "My dear, it's perhaps not a fluke that George rivals his namesake, old Wellington (Duke)



...went whistling by on a primary "Dagling."

With fear in her face and controls wildly waggling.



The result was far worse than poor Wellington feared.

in courage and daring
not too much beware-ing—

perhaps in our strictures we'd better be sparing."

So the very next week-end saw Wellington hie to where heroes at Dunstable darken the sky. This spectacle rushed to George Wellington's head; he joined on the spot and dashed out, seeing red. Ignoring a number of primitive craft looking something like gate-posts designed by the daft, he ran to the hill like a hero indeed and started to climb it at maximum speed.

About half-way up he was passed, coming down, by a beauteous maiden with hair all wind-blown, who went whistling by on a primary DAGLING with fear in her face and controls wildly waggling.

Arrived at the top he found numbers of men, Press reporters, inditing with fast-flying pen how Miss Blank had just flown, with quite masterly skill, in one piece from the top to the foot of the hill.

How this beauteous dame
had once more put to shame

all mere men, and her sex once more covered with fame.

Young George was o'erwhelmed with a fierce indignation; his forehead was dewed with a slight perspiration. "If none of *you* chaps will go risking your necks, *I'll* show 'em which is the superior sex,"

he valiantly cried.
Just then he espied

a graceful machine to the ground firmly tied.

The owner I fear to the Club Bar had hied.

So into the cockpit young Wellington got; the instructor approached with his face slightly mottled with fear from the flight of Miss Blank he had seen. "Have you got permission to fly this machine?"

Our hero, rememb'ring he'd just paid his sub, and was really a member of Dunstable Club, nodded twice, gave a look with resolve fairly laden, and said: "Kindly launch me towards yonder maiden."

The poor mutt was thinking
'twas easy as winking;

the newspapers said so, so *he* wasn't shrinking. (Let us pray for the owner, enjoying his drinking.)

Some husky young men then appeared on the scene; hung a rope on the nose of the gleaming machine; the instructor cried "Walk," and then "Run" and "Let go!"; George was up in the air with the world down below.

As George settled down to enjoy his first flight, the machine gave a lurch, which gave him his first fright. He grabbed at the first thing that came to his hand; 'twas the joystick—he thought most conveniently planned for the pilot to hang on, to hold himself steady.

The consequence found him entirely unready.

As he tugged, in a flash the hillside disappeared; so he pushed, and the wing with a whistle upreared.

Down below someone cheered,
It was wild, it was weird;

the instructor next morning had grown a white beard. The result was far worse than poor Wellington feared. For the sky swung beneath and the earth swayed above, as he pushed and he pulled, tried a tug, then a shove. With a howl and a whistle, a swoop and a flash, George returned to the earth with a heart-rending crash.

As George tottered forth from the heap which had been but a few seconds back a slim, bird-like machine, the Captain of Flying dashed up, his face torn with mingled emotions—fear, relief, hate and scorn.

"What the purple blue blazes, the asterisked Hell, did you think you were doing, you knock-kneed gazelle? Did you mean to be clever, you product of sin? Or are you a loony escaped from the bin?

It's clear you've not mastered
The art, for you've plastered

this wretched machine o'er the ground you fat idiot. Come, come, this won't do now, you've wrecked this poor GRUNAU. With soaring, young Moring, you're finally through now."

Poor George in his plight could reply not a word; in silence he vanished, his bright dreams interred of great newspaper headlines proclaiming a Moring as Conquering Hero of Gliding and Soaring.

No never, no never, would headlines aflare announce that a Moring was King of the Air.

This tale has a moral; it's really quite plain. But, in case you don't spot it, poor mutt, I'll explain.

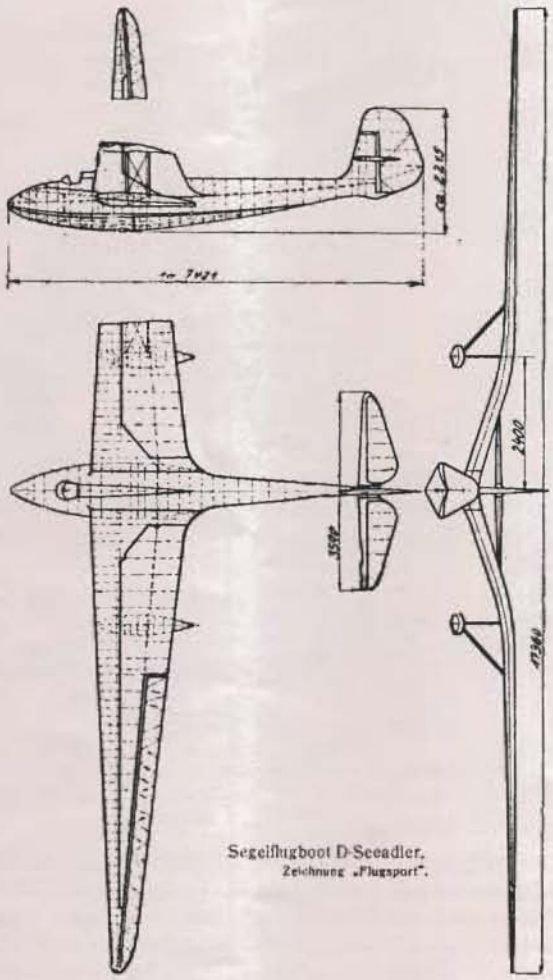
YOUNG MORING GOT INTO THIS TERRIBLE MESS BY BELIEVING TOO MUCH IN THE Popular Press.

Water Sailplanes

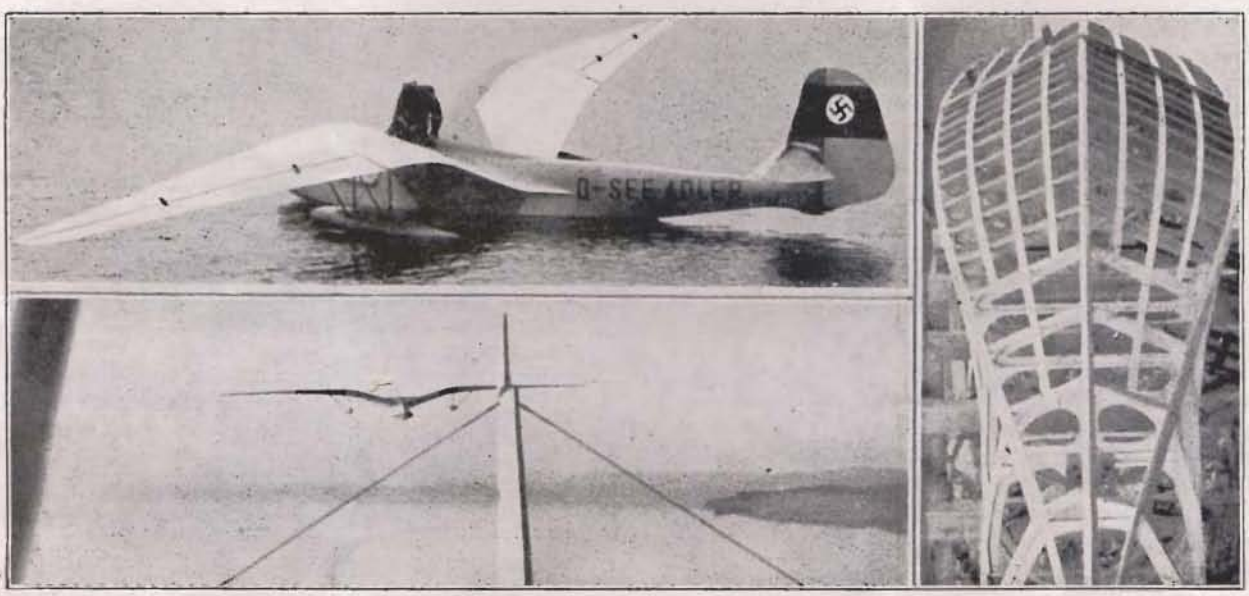
THERE is a great field for research waiting to be investigated by sailplanes designed to use the open sea as their "aerodrome," for Professor Walter Georgii, one of the world's experts on the meteorology of soaring flight, has given it as his opinion that, whenever the temperature of the sea is more than one degree Centigrade above that of the air overlying it, up-currents will form. What is more, the great uniformity of this temperature over large areas of sea, and the latent heat of the sea itself, lead to two important results: first, that the up-currents are *regular* in distribution, and secondly, that they persist throughout the night as well as by day. Over the comparatively calm equatorial regions, where there is not much of a swell to endanger a floating sailplane, the soaring possibilities must be immense, provided there are means available for towing the machine up to the necessary height to start soaring.

The SEEADLER, illustrated herewith, has been designed with these possibilities in mind. Hans Jacobs, the designer, has based the wing design on that of his RHÖNADLER, adding an arching at the root to raise it higher off the water, and a couple of floats for lateral balance.

The machine has been flown by Hanna Reitsch and Erich Wiegmeyer. Fitted with a skid it can, of course, take off from land, but it has also been tried out on inland seas. Attempts to get it to rise off the Chiem Lake, by towing it behind a motor boat, failed, owing chiefly to the friction of the towing cable in the water. On Lake Constance, however, a more powerful motor boat, with the appropriate name of *"Donnerwetter,"* succeeded in getting it off the water, and later a Dornier amphibian, the "Libelle," gave it some aero-tows.



Segelflugboot D-Seeadler.
Zeichnung „Flugsport".



The "Seeadler," a sailplane designed for taking off from and alighting on water. Below: photographed from the seaplane which is towing it. On the right: the under side of the hull before covering.

From "Flugsport"; photos by D.F.S

Adding a Little Engine To It

The "Motor Condor," a sailplane with a small motor which can be fixed on for temporary use by means of four bolts. Peter Riedel, the pilot, is second from the left.

THERE are two principal means by which fixed-wing aircraft can maintain themselves in the air. They can use mechanical power, or they can use the energy of the air in which they fly. Aeroplanes do the first; gliders do the second—and, if they do it successfully, are called sailplanes. A glider can be turned into an aeroplane by adding an engine. An aeroplane can be made into a glider by taking its engine away.

Some bright sparks have had the idea of a machine which can be used either for mechanical flight with the engine running, or for soaring flight with the engine turned off. Such a machine has already been invented: it is known as an aeroplane. Any aeroplane can be made to perform soaring flight with its engine off, provided it can find a strong enough up-current. The lighter aeroplanes could soar quite well if their pilots chose. But they don't choose—or practically never. So why design something for which there is no demand?

Wolf Hirth, one of the world's foremost soaring pilots, has suggested the classification of "little engine" machines into three types. The first is merely the ultra-light aeroplane for people who want to indulge in mechanical flight at the lowest possible cost, but are not interested in soaring. The "Aeronca" and "Flying Flea" are of this type.

The second he describes as the sailplane with permanently installed engine, and instances the "Drone," though we should put it in the first class.

Finally, there is the *"Motorsegler,"* a sailplane with auxiliary engine, whose propeller can be stowed away out of the air stream while soaring is being done. The Carden-Baynes auxiliary is of this type, though he does not mention it. Hirth sees a great future for this type of machine for enabling impecunious young people to go touring by air—over whole continents if they have time to spare. The pilot will use the engine to get off the ground in the morning, and to reach the nearest aerodrome when the thermals die out in the evening. The rest of the day will be spent in soaring flight, travelling more or less—according to the pilot's skill—in the direction of the wind.

The "Motor-Condor," illustrated above, falls into none of these classes—except temporarily. It was built to the order of Peter Riedel, who flew it as a sailplane—without the engine—at last year's Rhön soaring competitions. The chief point about the Köller motor is that it can be fixed on or taken off in a very short time—about 20 minutes—and that it is placed at the centre of gravity, so that it does not alter the trim or increase the turning inertia.

One of the chief uses of the machine is in competition flying. After a cross-country soaring flight, the retrieving team, instead of fetching a trailler, only have to bring along the motor, a launching rope (for helping to get out of awkward fields), and the wheels. At sunrise next day the pilot takes off, flies back under power to the competition site, and is ready, after removal of the motor, to start again in the competitions just as the day's thermals are beginning to form.

Herr Walter Exner, c/o ALA Anzeigne A.G., Berlin W 35, Potsdamer Str. 27a, Germany, who was till recently a member of the London Gliding Club, has sent us the above photograph with particulars of the machine. With the motor its maximum speed is 53 m.p.h. and cruising speed 46 m.p.h., while in calm air it can take off in four yards with catapult launch, in 80 yards without, and climb at four feet per second. He is agent for the Bley works who produce the machine, and informs us that it can be supplied to English purchasers at a price of R.M. 2,715, with speedometer, tank for four hours' flying, and a number of other fittings.

Correspondence

"The Sailplane"

SIR,

I have just become the fortunate possessor of a bound volume of THE SAILPLANE, containing all copies since October, 1933. This must be by far the largest volume of gliding information to be found in the English language, and I am amazed at the scope of the information to be found therein.

Perhaps one of the most interesting articles of all is the one on clouds in the issue of February, 1934, and I would like to suggest for the benefit of the great number of readers who are now unable to obtain this issue, that you bring this article up to date and reprint it, with the illustrations. It is remarkable to read, many months before any British pilots had succeeded in learning how to do thermal flights, how full details and descriptions of the necessary technique were being constantly given.

In my opinion every gliding club in every English-speaking country should acquire this volume for its members.

P. A. WILLS.

[Since February, 1934, we have collected enough information about clouds in relation to soaring flight from books, Air Ministry publications, scientific journals (English and foreign), and personal observations, to fill a book, not to mention several hundred cloud photographs and a "fish-eye" camera for photographing the whole sky at once. But to retail all this material as fast as it accumulates, even in concentrated form, would require a much larger SAILPLANE; this, and many other improvements, will become financially possible as soon as all our readers buy their own copies instead of reading somebody else's. We cannot now make up absolutely complete volumes of THE SAILPLANE from 1933 onwards, since a few of the issues are out of print, but probably most clubs have members who can supply the missing numbers.—ED.]

Motorless—but Lighter than Air

SIR,

May I attempt through the courtesy of your columns to call the attention of all who are interested in silent flight (whether heavier or lighter than air) in the proposed new balloon movement in this country?

Since the war the sport of free ballooning has dwindled in proportion to the growth of aviation in other spheres. But to those who still desire to explore the air in the most comfortable and safest way, with permanent altitude control, the balloon is still the best proposition, and is within the means of the majority of those who take up gliding, which sport has much in common with it, though "heavier-than-air."

Space here does not allow me to try to describe the advantages of this excellent pastime, but it will be sufficient to mention that the suggested balloon club, which would be under the auspices of the Royal Aero Club, would have the support and enthusiasm of many old balloonists, including the Hon. A. F. De Moleyns, who, as editor of *The Airship*, has done a great deal to encourage lighter-than-air policy in this country.

Will all who are interested and would like to see balloon flight put on a par with the sport as practised on the Continent, and who desire further information and particulars, please communicate with the Hon. A. F. De Moleyns, c/o The Royal Aeronautical Society, 7, Albemarle Street, London, W.1; or else with myself.

DONALD BURNETT RAE.

93, Harley Street,
London, W.1.

[As we wrote in THE SAILPLANE nearly three years ago: "There are many meteorological problems which are common to the flying of both sailplanes and airships" (and, we might add, balloons)—"problems that aeroplanes, on the other hand, do not trouble to concern themselves with, owing to the fact that it is so much less trouble to use a throttle than a brain." And it might interest historically-minded readers to know that a "cold front" soaring flight was performed by a balloon long before such a thing was ever attempted in a sailplane; reference to it will be found on page 54 of "My Airships," by the late Santos-Dumont.—ED.]

Sailplane Weights

SIR,

It is exceedingly difficult to obtain accurate information in this country on sailplane characteristics and performance, and it is for this reason that I was very surprised to find in your last issue, under the name of no less a pilot than Mr. P. A. Wills, a table of characteristics, with no indication to show that most of the figures given were guesstimates.*

The following table of weights of machines, which, with the assistance of several members, I myself weighed at Dunstable, may be of interest:—

GRUNAU BABY I.	290 lbs.
GRUNAU BABY II. (Slingsby) ...	305 lbs.
KIRBY KITE	313 lbs.
CAMBRIDGE	328 lbs.

The above weights are accurate to about 7 lbs.

From this it will be seen that the error in the weights given in Mr. Wills's table appears to be anything up to about 50 lbs. Is there reason to suppose that the other figures are more accurate?

LLEWELLYN H. BARKER.

* A guesstimate is an estimate that is mostly guesswork.

Mr. Wills Replies

I am very glad to have the chance to reply to this and several others of a surprisingly large number of queries which my article in the last issue of THE SAILPLANE has evoked.

Mr. Barker's letter emphasises the very scrappy sources of information available concerning sailplane data. The figures in my table were compiled from

miscellaneous sources, including manufacturers' figures and observations and estimates of my own.

One of the first comments I received after publication was from Mr. Slingsby himself saying that the weight of the KIRBY KITE was *not* 270 lbs. as stated, but *248 lbs.* !

For years I owned a SCUD, and happily pulled it about with only one helper, saying that it weighed only 160 lbs. Shortly after I had sold it, Mr. Barker, having nothing better to do on an east-wind day, goes and weighs it and pronounces it at 220 lbs. Now its new owners have to assemble four people to move it about. Can it be that Mr. Barker inherited his scales from an enthusiastic fisherman?

Perhaps we had better call in the N.P.L. But will Mr. Barker weigh also the RHÖNSPERBER and see if his result tallies with the official German figure?

I have even been glanced at reproachfully (although I thought I had covered myself specifically against this in the February SAILPLANE) for giving sinking speeds to within one inch per second. Well then, don't call them inches : call them marks. My contention is, from observation, that the machine in my list with the most marks will be lowest, and that with the least, highest, on a stable day, all other things being equal.

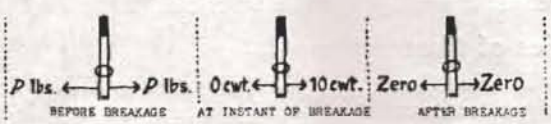
If my table should inspire someone to produce accurate and scientific data for all current sailplanes I shall be extremely happy. Until they do, guesstimation must suffice.

Several people have asked how I would compare the RHÖNSPERBER and HJORDIS. I think the unbiased reply to this embarassing question is that the two machines are scarcely comparable. The SPERBER is in some degree a "special purpose" machine, i.e. a long-distance machine. It is probably capable of distance flights up to 500 miles, so that its owners in this country may perhaps be seen on east-wind days this year practising up their duration swimming at the new Dunstable baths.

Lastly : no, I certainly don't think a wheel control the ideal. For one thing, it makes one nervous of asking friends to try the machine; which is one of the pleasures of a proud owner. A better arrangement may be the "broken stick"—a stick laterally rigid at its base and hinged half-way up. This will probably be fitted on HJORDIS II.

As regards my theory of wing-breakage effect on the stick, does this or does it not result in the stick catching one a blow on the leg? I have been firmly told, by people who certainly know better than I, (*a*) it won't, you mutt; and (*b*) it certainly will.

It seems to me the forces on the stick are :—



That is, the effect would be as if the base of the stick were suddenly struck with a hammer with the force of 10 cwt. (assuming that be the breaking strain of the aileron cable).

The question is : Will that hurt? It probably depends a good deal on which way you are pushing at the instant of breakage.

P. A. WILLS.

The Southdown Club

SIR,

I am directed by the committee of the Southdown Gliding Club, Ltd., whose attention has been directed to a paragraph published on page 37 of the March, 1936, issue of THE SAILPLANE, to request you to permit the publication of this letter in correction of certain mis-statements and implications contained in that paragraph which, in effect, convey the impression that this club came into being only in 1932, and that since that time it has recorded only three gliding certificates.

The committee would observe that they have no access to the R.Ae.C. official returns referred to; but the club's records are compiled from the numbers of official gliding certificate application forms (pink R.Ae.C. forms), completed as the result of officially observed flights by club members, and signed by official club observers for those members.

Moreover this club was not formed in 1932. The original Southdown Club was founded early in the year 1930, and the present secretary was one of the original four founders. From time to time in its history the club has absorbed or amalgamated with one or two other clubs, and it was in 1932 that it was decided to register it under the Friendly Societies Acts with its present title as above given.

By the early part of 1933 the club had gained three unofficial world's records, and was the leading provincial club in total certificates gained, and also in "C" certificates. The actual official certificate records within the club since 1932 are as follows :—Up to 1932, 50 "A," 26 "B," 12 "C"; during 1933, 1 "A," 2 "C"; during 1934, 4 "A," 1 "C"; during 1935, 5 "A," 4 "B," 6 "C." This is a total of 48 certificates since the end of 1931, as against the three reported as of "official returns."

A. YORK BRAMBLE,
Hon. General Secretary.

[No statement has appeared in THE SAILPLANE to the effect that the club has only gained three "officially returned" certificates since 1931. (A list of the official returns is kept in the B.G.A. office, and is no doubt available for inspection.) The alleged "mis-statement" that the club was formed in 1932 was taken from a report sent to THE SAILPLANE by Mr. York Bramble, and published on March 17th, 1933, wherein it is stated that "on March 20th, 1932, it was agreed to form a new club as the Southdown Gliding Club." The club's "Review of 1934," sent to THE SAILPLANE last year by Mr. York Bramble, stated that the club had "taken over the moribund affairs of or absorbed entirely some six southern gliding clubs"—not just one or two. The present club is by no means merely a continuation of the Southdown Club of 1930, since the Surrey Gliding Club, also of that year, has supplied a strong contingent which takes a leading part in the flying side of the present club's activities—witness Captain Stratton, the chief instructor; Mr. Little, chief ground engineer, and others. Nor has the name "Southdown Gliding Club" been continuously in use since 1930.—ED.]

Notes on Winch-Launching

By JOHN L. WORDSWORTH

THE advantages of winch-launching over the bungy or auto-launch are now common knowledge, particularly since last year's competition meeting.

The following notes, based on the experience of the Yorkshire Club, may be of use to those clubs who are thinking of adopting this method.

Construction of Winch

As the Yorkshire Club's winch-car has proved satisfactory in every respect, details of its construction are here given :—

THE CAR itself is a 35 h.p. six-cylinder Studebaker tourer of heavy construction, having a good sturdy clutch of the cone type.

THE DRIVE to the rear wheels has been modified as follows :—

(*a*) The near-side axle drive shaft has been removed;

(*b*) The differential has been made solid, i.e. there is a direct drive from the crown or worm wheel to the offside back wheel.

THE DRUM is of welded construction from ¼ in. steel sheet. The outside diameter of the rim is 1 in. less than the inflated diameter of the tyre, and the rim is 5 ins. deep. The width of the drum is 10 ins.

The back plate is drilled so as to fit over the ordinary wheel-bolts, and a special extended wheel-brace is used for fixing.

THE ROLLER MECHANISM consists of two sets of steel rollers of 3 ins. diameter mounted on the end of a steel girder which is bolted across the front dumb irons of the car. A one-inch hole is drilled in the end of the girder, directly in line with the centre of the winch drum, and the two horizontal rollers are mounted in front of this, one above the other, with a space of ½ in. between them. The two vertical rollers, with a similar distance between them, are mounted directly behind this hole, side by side. All four rollers can be lubricated by grease gun.

In addition a pair of cutter blades are mounted in between the girder and the front (horizontal) rollers. Movement of a lever causes intersection of the two blades across the hole.

THE CABLE is 3-16 in. flexible, with breaking strain of 40 cwts., and is 600 yards in length. It is secured to the drum by passing the end through a hole in the rim from inside and knotting it outside.

The other end is spliced back to give a small loop. After positioning the winch at the beginning of a day's flying this loop is passed between the rollers and cutter-blades and the weak-link, with shock-cord and ring attached, is fastened to this by means of a shackle and bolt.

THE WEAK-LINK consists of a 1 yard length of flexible cable of breaking strain equal to the full loaded weight of the machine to be launched. It has a spliced loop at either end, one being for attachment to the main cable and the other being permanently attached to the shock absorber, which consists of a length of bungy doubled twice to give a four-fold expanding link about a yard long. This is bound and eyeletted at both ends with a ring at one end for hooking on to the machine.

Personnel

Beside the actual winch-driver, the following are necessary :—

A. Shear man.

B. Signaller (near machine).

C. Intermediate signaller (necessary only if machine is out of sight of winch car).

Signals

These are illustrated in Figure 1.

Fig. 1. SIGNALS.

(1) One flag held upright at arm's length above head indicates *Start Winch Engine.*

Same signal given by shear man indicates *Ready!*

(2) One flag, held at arm's length and swept upwards and downwards, indicates *Take up Slack on Cable.*

(3) Both flags, held at arm's length and swept upwards and downwards together, indicate *Cable is Taut—Right Away!*

(4) Both flags held stationary above the head indicate *Stop!*

(5) (Used prior to launch, where machine is out of view of winch driver.) Two flags crossed above the head indicate *Two-seater, or Other Machine Difficult to Get Off Ground, About to be Launched.*

Other Duties of Signallers

Signaller B (near machine) should see that a test of the quick release on the machine is made on the ground by the pilot *before every launch.*

Signaller B should see that signal No. 1 ("Start engine") is given several minutes before the pilot is ready for launching, so that the winch driver may have the engine thoroughly warmed, and should not give signal No. 2 ("Take up slack") until an answering signal from the winch driver has been given by the shear man, indicating that the engine is firing evenly and is ready for the launch. He should be ready to give the "Stop" signal should the cable break or fall off the hook.

Signaller C (Intermediate) merely repeats the signals given by B, but in addition should see that the flying ground is clear of onlookers so that there can be no danger of injury by the falling cable.

Duties of Shear Men

(1) To give the signal "Ready" (see signal No. 1) to the signallers near the machine when the engine has been warmed.

(2) To transmit verbally the signal No. 3 ("Right Away") to the winch driver, who will be busy watching the winch-drum.

(3) To be ready to cut the cable *immediately* on the word "Cut" from the winch driver, but not without his instruction.

It is advisable to have a stout pair of hand wire-cutters in addition to the fixed apparatus on the car.

It cannot be impressed too emphatically that the shear-man *must know his job*, and *must be cool-headed. Never get an onlooker to do this job, even if it means a half-mile walk to get another club member.* (We have had the experience of a shear-man taking the word "Cut" as a signal to run behind the car, and with the shears in his hand too!)

Winch Driving

These instructions may have to be modified slightly to suit different winch-cars, but the following is the general procedure with the Yorkshire Club car :—

The drive on this has been adapted so as to be only on the one back wheel to which the drum is bolted, the other wheel being free. The speedometer, therefore, gives the correct sped of the back wheel, but it should be noted that where the drive to both wheels has been left intact, the speed of the drum-wheel will be twice that shown on the speedometer, owing to the differential being brought into action. Furthermore, the diameter of the drum is only two-thirds of the outside diameter of the tyre, therefore the cable speed is only two-thirds that shown on the speedometer. The ratio of $\frac{\text{diameter of drum}}{\text{diameter of tyre}}$ will have to be calculated for individual winch-cars, so that the actual cable speed may be known from the speedometer reading.

The drum-wheel should be very firmly jacked—we use a strong wooden block in addition to the jack. The other three wheels should be very firmly chocked, both at the front and back.

Launching with this car is done always in *top gear*. Even where the maximum speed required is 15—20 m.p.h. on the speedometer (in high winds), we find it difficult to do this in second gear (of three), but with a 4-speed gearbox it might probably be of advantage to use third gear in such conditions.

Speed is controlled by hand-throttle to avoid anything in the nature of jerking.

Actual Launch

The engine is warmed thoroughly so that there is no "popping back" on revving up quickly (*most important* where slow launch is necessary).

On receiving signal No. 2 ("Take up slack") top gear is engaged and the drum wound slowly, slipping the clutch, until the signal No. 3 ("Right Away") is shouted by the shear-man. Watching the cable until it appears taut is an unreliable method, as it may be caught on a tuft of grass or heather somewhere in midfield.

The speed at which the cable is now wound in depends entirely on the wind speed, except that in launching a heavy machine the engine must be revved up rather more to get initial movement over the ground. The following table, with corrected cable speeds, gives the speed at which we launch in varying wind strengths.

Wind Speed.	*Speedometer Reading.*	*Actual Cable Speed.*
0—5 m.p.h.	50 m.p.h.	33 m.p.h.
10—12 ,,	40 ,,	27 ,,
20 ,,	30—35 ,,	20—22 ,,
30 ,,	20 ,,	14 ,,
35 ,,	15 ,,	10 ,,
Over 35 ,,	as slowly as the engine will fire evenly in top gear.	

It will be seen that the speed necessary can roughly be calculated by the formula :—

Wind speed + actual cable speed = about 40 m.p.h.

These are the speeds at which the launch should be started.

The take-off should be smooth, but acceleration to the necessary speed should be as rapid as possible, and this can only be achieved by *revving up the engine well* before letting in the clutch very carefully; otherwise the engine will stall.

The most difficult launch to give is in a high wind. The engine must be revved up to get the machine off the ground, but great care should be taken that the speed does not immediately become too high when ground friction has ceased.

The winch-driver's attention will be centred first on the winch-drum while the machine is being pulled over the ground, then upon the speedometer as the machine becomes air-borne, and finally, when maximum speed has been reached, upon the machine itself.

The machine being in the air, it will now be seen that as it gains height and the angle to the ground of the winch-cable increases, the speed of the machine will increase and become excessive unless the winch-driver begins to slacken speed progressively. A commencing speed of 50 m.p.h. on the speedometer should therefore be gradually reduced, after the cable has reached an angle of about 30° to the ground, to about 35 m.p.h. at the point where the pilot will usually release, and a commencing speed of 15 m.p.h. in a strong wind should end with the slowest possible tick-over of the engine. (See Figure 2.)

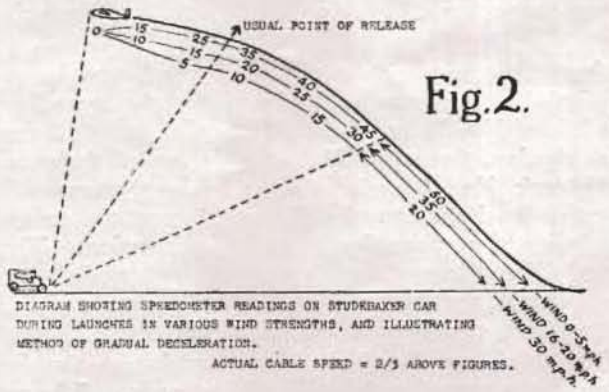


Fig.2.

DIAGRAM SHOWING SPEEDOMETER READINGS ON STUDEBAKER CAR DURING LAUNCHES IN VARIOUS WIND STRENGTHS, AND ILLUSTRATING METHOD OF GRADUAL DECELERATION.

ACTUAL CABLE SPEED = 2/3 ABOVE FIGURES.

If the pilot does not release until almost vertically above the car, the cable speed at this moment should be almost nil, or his speed will be excessive in any wind. This also makes it easier for the shear-man to cut the cable, should this be necessary.

Should it become evident that the machine has gone too far without releasing, subsequent action will be dependent on the type of hook fitted to the machine.

Where an open hook is being used: Stop the drum with the brake, simultaneously putting the gear into neutral. If the cable does not fall off, give the order to cut.

Where a closed hook is being used: Put the gear into neutral and give the order to cut immediately.

We advise the use of an open hook from the point of view of safety.

Finally, when the cable has dropped off the machine after any launch, *don't forget to stop the drum immediately* or the ring will be pulled into the roller mechanism and the cable will be broken.

Sailplane Construction for the Amateur

14—Eye Splicing in Wire Rope

(continued)

By W. BUTTERFIELD

The French or "Liverpool" Method

PREPARE as before, splitting strands and keeping the loose ends to the left, but do not cut the main core out, as in this style of splice the strands will lift away from the main core which is not then large enough to fill the spliced part of the rope; this causes a strand, sometimes two, to sink, but by twisting the short core around the main core as the strands are tucked, it increases in size and forms a bed for all the strands to close upon evenly.

THE SPLICE.—Work the spike as in the previous method, from right to left, and the strands in the opposite direction, always. Insert the spike through the centre of the rope, care being taken not to pierce the main core, and tuck No. 1 under the spike, pulling strands well home.

Next insert spike under the first two strands that No. 1 went under, and tuck No. 2 as with No. 1, insert spike under the first strand that No. 2 went under, and tuck No. 3 as with No. 2.

Now tuck the core through the centre of the wire as No. 1, next tucking Nos. 4, 5 and 6 under one strand respectively, working to the left, as shown in Fig. 9.

Start the next tuck with the lowest strand—the original No. 1—insert the spike under the strand to the left of No. 1, and by a slight twist up, the wire with the lay, the core will be run in out of the way. Now tuck No. 1 under the spike in the opposite direction, and pull strand well home; repeat the operation with the other five strands in rotation. The strands have now been twisted round their own particular strand in the rope, and this completes the second tuck, as shown in Fig. 10.

The third and fourth tucks are made exactly the same as the second tuck, pulling all strands well home and beating round as each tuck is completed.

Before starting the next tuck, take out the lower third of each strand and bend the wires back, now tuck the remainder of the strands as before. This completes the fifth tuck.

Sixth and locking tuck: Halve the strands, bending lower part back and tuck all strands as before, only under two strands, beat well, cut or break off all the ends as shown in Fig. 11.

The reason for double-locking all strands in this style is to prevent the splice being drawn.

Should the load be lifted on a single part of the rope which is apt to spin, there is a danger of the rope becoming unlayed and the ends being pulled out when spliced, as shown in Fig. 12, termed the French or "Liverpool" style.

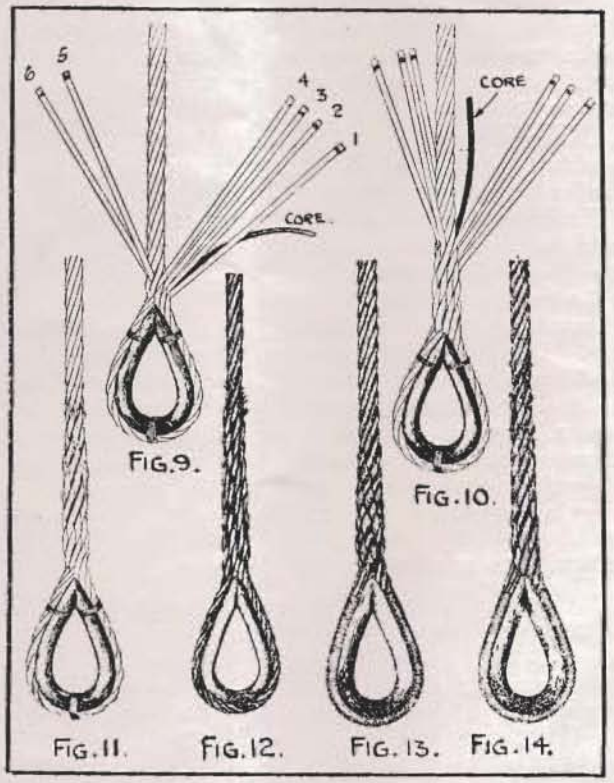
Fig. 13 illustrates an over-and-under or lock splice in Extra Flexible Rope 7 × 37; while Fig. 14 shows the same rope spliced in the "Liverpool" style. Both these splices are made in rope of Ordinary Lay.

Notes to Remember When Splicing

"That's good enough" will not do. Nothing but the best should be put into splicing at all times.

Another splice, a new sling, or a new rope, is cheaper than an accident.

When preparing a wire rope for splicing, it is advisable for the beginner to serve that part of the rope



that forms the eye, otherwise the strands may slip back and bulge at the crown of the thimble; also to whip all strands whether untwisted or not.

The more the wires and strands are disturbed from their original formation the weaker the rope becomes.

When splicing an eye in a wire rope with a fibre core, always remove the main fibre core.

When splicing an eye in a Lang's Lay rope in other than the Liverpool style, the strands should be untwisted.

It is as well to mention that when turning-in a thimble and splicing an eye, better results are obtained by splicing under tension, as the strands of the rope will close hard and tight on the strands being tucked as the spike is withdrawn, the tension being applied *after* the *first tuck* is made.

B.G.A. Affairs

The New Council

AT the first meeting of the 1936 Council of the British Gliding Association Professor D. Brunt, M.A., was unanimuusly re-elected Chairman for the coming year, a choice which will give general satisfaction. Professor Brunt, who holds the professorship of Meteorology at the Imperial College of Science, has more than once expressed himself anxious to help forward any scientific work which will assist the progress and development of soaring flight, and we hope that this year something will be done along these lines, and that the practitioners of advanced soaring will bring themselves to take an interest in such work.

The elections for representatives of Ordinary Members resulted in the accession to the Council of Mr. D. G. Hiscox, Capt. C. H. Latimer-Needham and Mr. A. York Bramble.

The Subsidy Committee for 1936 are: Messrs. H. Petre, J. P. Dewsbery, D. G. Hiscox, A. Goodfellow, N. H. Sharpe and G. A. Little.

The Gliding Subsidy

The first year of the Government subsidy scheme is now concluded, and a total sum of £4,812 has been paid out to the B.G.A. and to the following six clubs:— London, Yorkshire, Midland, Derbyshire and Lancashire, Furness, and Channel. The benefit of these payments hardly made itself felt during 1935, and the results of the coming year will be watched with much interest.

As regards future subsidy payments, the following extract from a letter received by the B.G.A. from the Air Ministry has a bearing on the subject:—

"In this connection I am to refer to the opinion expressed on page 5 of the Draft Scheme submitted with your letter of 27th May, 1935, to the effect that subsidy grants to clubs for 1936-7 should be very substantially influenced by progress made during 1935 as indicated by the Royal Aero Club Gliding Certificates gained by members. I am to state that Lord Swinton attaches substantial importance to this principle, and would be glad to receive an assurance in due course that due weight will be given to it in connection with future allocations of subsidy to gliding clubs."

The Hon. Secretaryship

We regret to report that, owing to growing pressure of business, Mr. F. D. Bradbrooke has found it necessary to resign the Hon. Secretaryship of the B.G.A., which he has carried on so successfully for the past year. There is little doubt that, during his tenure of this office, Mr. Bradbrooke has earned the respect and liking of practically everyone in the gliding movement. He has conducted the business of the Association during one of the most momentous years of its existence with unexampled tact and efficiency, and we should like to express, on behalf of our readers, the sincere hope that he will continue his interest in the movement. He is himself a sailplane pilot, as well as a power pilot of enormous experience, and has expressed his intention to get still further experience of motorless flight in the air, now that so much of his time will not have to be spent in attending to its organisation on the ground.

Mr. Bradbrooke's successor is none other than Commander H. E. Perrin, Secretary of the Royal Aero Club, and the offices of the Association are shortly to be transferred to the Royal Aero Club's premises at 119, Piccadilly, W.1. Commander Perrin is an internationally known person, and the B.G.A., by acquiring him as Hon. Secretary, has attained a status of permanence and importance beyond the wildest dreams of its members a few years ago. Old readers of THE SAILPLANE may remember that, as much as three years ago, a correspondent wrote suggesting that, if the B.G.A. Secretaryship could be taken over by Commander Perrin, the major difficulties of the movement on the political side would be solved. May that estimate prove correct!

Calibration of Barographs

The B.G.A. has come to an arrangement with a well-known firm of instrument makers to obtain calibrations of glider pilots' barographs for a very low figure. The Competitions Committee are likely to require that this year all competitors' barographs should be checked before the competitions commence, and no doubt the majority of pilots will want this to be done at the outset of the summer season.

Instruments should be sent by registered parcel post to the B.G.A. offices. The charge is likely to be in the region of 12s. 6d. for B.G.A. members, 17s. 6d. for non-members. This refers to the small pocket-type barographs in general use. The larger box-type barographs are, of course, too delicate to stand up to the rigours of the post, and should presumably be sent by hand if possible. The cost of calibrating these instruments is likely to be greater.

Empire Air Day

The Hon. Secretary of the B.G.A. has sent out the following circular to clubs:—

"From 2 p.m. until dusk on Saturday, May 23rd, Empire Air Day will be observed throughout England under the auspices of The Air League of the British Empire, assisted by the Royal Air Force, civil air operators, and the British gliding movement.

"The Air League has indicated its hope that gliding clubs will co-operate in interesting the public. Gliding clubs will not usually be able to charge an entrance fee, but the takings of the day at all other aerodromes will go to the Royal Air Force Benevolent Fund. If gliding clubs can help this cause by means of collecting boxes or souvenir pins, naturally this would be appreciated."

The Sutton Bank Site

It is satisfactory to report that, after negotiations lasting nearly nine months, the Ecclesiastical Commissioners have signified their assent to a 21-year lease to the Yorkshire Gliding Club of the Sutton Bank site.

News from the Clubs

Derbyshire and Lancashire Gliding Club

Sunday, March 1st.—The deepest snow yet. Average about nine inches at Camphill and drifts up to however tall you may be. One or two hardy souls got there, had lunch, cursed the weather, and went home again. Others were not so fortunate, and at one time there were six cars on and around the hair-pin leading up to the club.

Saturday, March 7th.—Another dance was held at the Marquis of Granby Hotel. A number of people stayed the night, and this time everyone appeared for breakfast at or near the appointed time.

Sunday, March 8th.—Wind south, 5 to 10 m.p.h. Visibility bad, with lots of very low cloud. Seventeen winch launches were made with the NACELLE, while the PRIMARY had thirty-odd hand launches.

A demonstration was given in the morning of how *small* a launch can be given by the winch. The ends of the hand bunji are tied to the winch cable and the ring attached to the glider in the ordinary way. The winch is then operated at a steady five or six m.p.h. and the glider is given an exact replica of a hand launch, except that the power is supplied by the winch. The demonstration proving successful, some primary launches were given by this method until the winch was required for the other machine. This means that primary instruction can proceed when there is not a full launching crew available.

"B" pilots and some others continued accustoming themselves to the winch in the NACELLE, the order of the day being a climb to about 150 ft. and a gentle "S" turn on the glide down.

Sunday, March 15th.—As usual after a rotten forecast and an unpromising dawn, we had a far better day than anyone had dreamed of. The nett result was two hours' flying and two "C" certificates: Godson in the B.A.C. VII. (flying it solo), and Brown in the NACELLE.

Godson really set out to do a circuit, but he found the conditions over the edge so much better than he had expected that he decided to "have a go." He proceeded to soar very nicely for seven minutes, but unfortunately his last beat found him too low to land on top, so he had a further ride of four minutes or so to the bottom; followed by blessings of the instructors mingled with the curses of the ground staff.

Brown held the NACELLE up in copy-book fashion for precisely five minutes, but was then seized with that passionate longing for *terra firma* that we all know so well. His down-wind landing came off without a hitch, but it is not a practice to be encouraged.

Davies (of the ground staff above mentioned) then went for his "C" with the reservation that he was going to land on top whether or no. This probably cost him his certificate, but he stuck to his decision and made a very nice landing after only two beats.

Garner then set off, with no such reservation to hamper his chances. Alas, that bug-bear of modern times, the Craze for Speed, reared its ugly head and kept whispering to him, especially on turns, and so after a struggle another landing was made at the bottom beside the B.A.C.

The rest of the two hours was made up by Robertson and Smith, who took turns to watch the proceedings from the GOLDEN WREN.

Meanwhile a primary school was working happily on the flat, having a total of thirty launches, all without mishap. An Austin-seven-winch-wire-retrieving-car made its first appearance to-day, having been raised by private subscriptions within the club.

Sunday, March 22nd.—Wind 15 to 20 m.p.h.; east, veering to south.

A telephone message on Saturday night had informed us of a visit from Wills and the HJORDIS, so when the wind was due east on Sunday morning we set off for Mam Tor with the GOLDEN WREN, having left messages at every conceivable place that Wills might call at. He called at one of them and so got to the site without much delay, and both machines were in the air by mid-day.

The wind was already veering and Robertson, who was first off in the GOLDEN WREN, soon cut across to the northern side of the horseshoe, followed by Wills in the HJORDIS. The wind, still veering, allowed the use of Rushup Edge and soon both machines were at 1,500 ft. or so, using a beat of four miles from Lose Hill to Sparrowpit. The season's first thermals were encountered, but they were not very exciting ones—just enough to whet one's appetite for Easter.

The wind was by now too far south for another launch from Mam Tor, so the machines were packed up and taken to Camphill, where the WREN was flown over the South Slope for another three-quarters of an hour; but the best conditions had gone by this time and the HJORDIS was not flown again.

Kaye made a "C" attempt in the NACELLED DAGLING, but it was a forlorn hope as the WREN was struggling for 200 ft. at the time. Certainly he flew a little too far away from the hill, but one's impression was that it was impossible anyway.

Norfolk Gliding Club

Sunday, March 1st.—With a miniature blizzard howling round the hangar there was nothing to do but get on with the construction of the sailplane.

Sunday, March 8th, was mostly spent in scouring the country for sites. A party went to Cley and persuaded the owner of "The Hangs" to let us use the site on Sundays. One gathers there is a certain amount of confusion, in the minds of people in this part of the country, between power planes and gliders, as the chief objection was that of noise!

Sunday, March 15th.—In a fair northerly wind the nacelled DICKSON did hops at "The Hangs." Seven members put in 14 flights, the average duration being 21 secs., and the best 24 secs. We are using about three-quarters of the slope (the gentlest portion), and the best wind position is more easterly than northerly.

The first "incident" since the club started flying was provided by Miss Howes, a new member; a too fierce launch, coupled with excessive control movements, resulted in the machine turning over on its back.

Sunday, March 22nd.—We had the DICKSON at "The Hangs" again to-day in a good southerly wind. The only way to make a long flight in this wind direction is by turning to the left and slightly down wind, taking advantage of the slope, then straightening up to land; but we are not all experienced enough to do this at present. Six members made 24 hops, but the bumps made steady flights very difficult.

Leicestershire Air Sports Club

Sundays, March 1st, 8th, and 15th.—The 1st was damp and dismal, but the PRÜFLING had four flights at Clack Hill.

On the 8th and 15th it was found difficult, owing to dead calm conditions, to get up enough speed by auto-launch for the B.A.C. II. to take off. Four out of nine launches on the 8th resulted in air-borne flight.

Saturday, March 21st.—In a steady wind of 10 m.p.h., W. and H. Adcock and A. Corvell flew the PRÜFLING down Clack Hill in turn.

Sunday, March 22nd.—The wind had moved to S.S.E. and was blowing steadily at about 15 m.p.h. right up our south slope. F/O Headley (instructor) and four others flew off the highest point in the towing field, about 70 feet up. Fifteen flights were made, most of which reached about 20 feet above the start.

After this was over three old friends (who shall be nameless) appeared from Dunstable looking decidedly glum as there had been no flying there, while we had been having our best day yet—in quality, if not quantity. (The quantity should be improved when our winch is again available for retrieving; at present it has to be done by hand.)

L. Jervis and A. Coltman have been appointed assistant instructors.

Jersey Gliding Club

February and March have been two disappointing months. The very light winds have been from the north and east, which we cannot use. We have therefore spent most of the time on repairs, though we have had about 50 launches with the training glider during the period.

The club's SCUD I. is nearly ready, having been painted with Chinese lacquer, which leaves a very smooth finish. The fuselage is jade, with the main plane, rudder and elevators white. It certainly looks very smart, and is ready to be taken out on the first soaring day.

We have had the use of a small dance hall for the winter, kindly loaned by one of our members, Mr. R. McIver, of the Sable D'Or Hotel. This building, 100 ft. by 30 ft., is only 500 yards away from our hangar, so we carried over the ZÖGLING and SCUD for the repairs, which have thus been done in comfort, with a bar very handy. Table tennis facilities are also handy, and on some days have had more attention than the repairs!

London Gliding Club

Saturday, February 29th.—Not much of a day, but the tradition was maintained of not allowing a B.G.A. Annual Meeting to interfere with flying.

Sunday, March 1st.—A light westerly wind was soarable for about two hours during the afternoon. The FALCON I. and Desoutter GRUNAU had two or three flights each, while nacelled and open DAGLINGS descended from the top and primary instruction went on at the bottom. Macdonald earned his "A" certificate, and Tony Evans his "B" with 65 seconds.

The mended BLUE WREN was brought back from Zander & Weyl.

Some precipitation, which was called sleet by the earthbound, but hail by those who encountered it in the air.

Saturday March 7th.—Three people had six primary hops each.

Sunday, March 8th.—Two primary machines were hard at work all day in an east wind. As there is no slope facing exactly east, one lot flew N.E. and the other S.E., both landing in the same "valley," but with opposite side-drift.

The furniture of the club bar now includes a second-hand piano, obtained by private subscription.

Sunday March 15th.—The better the soaring wind, the more scrappy the record of the day's doings in these notes. What with flying, retrieving, launching, photographing, feeding, and gathering news from visitors from the outside world, no more than a few minutes remain for collecting evidence from those who flew off the top, and none for recording the progress of pupils at the bottom. To-day an innovation was tried: Mrs. Collins sat at the top with a watch and recorded everybody's starts and landings. We don't intend to give complete records like this *every* time; but, considering that this was a sort of average club day, with the wind neither in a bad direction nor strong enough to keep everyone up with ease, but just about soarable at times for careful pilots, it would be worth while just for once to give in statistical form what really does happen on such a day. It should be made clear that Mrs. Collins only recorded flights off the *top*, both soaring and gliding, but not primary instruction flights at the bottom.

Pilot.	*Machine.*	*Ownership.*	*Launch.*	*Landing.*
Bartlett	Nac. Dagling	Club	12.58	1. 0
Hiscox	Kirby Kite	Private	1.27	1.33
Keeble	Desoutter Grunau	Club	1.35	1.48
Grant	Falcon I.	Club	2. 0	2.12
Morland	White Wren	Private	2.16	2.20
Smith, C. R.	Nac. Dagling	Club	2.21	2.23
Bergel	Falcon III.	Club	2.32	2.34
Rainey	Grunau Baby II.	Club	2.40	2.49
Gilette	Nac. Dagling	Club	2.47	2.49
Barker	Desoutter Grunau	Club	2.54	3.13
Rattray	Cambridge II.	Private	3. 9	3.14
Vigers	Nac. Dagling	Club	3.12	3.14
Himmelreich	Open Dagling	Club	3.20	3.21
Bucknell	Falcon I.	Club	3.34	3.36
Pasold	Nac. Dagling	Club	3.44	3.46
Robertson	Grunau Baby II.	Club	3.49	4.11
Bergel	Desoutter Grunau	Club	3.51	4. 7
Wills	Falcon III.	Club	3.56	4.10
Furlong	Cambridge II.	Private	4. 0	4.12
Ellis	Nac. Dagling	Club	4. 3	4. 5
Bolton	Nac. Dagling	Club	4. ?	?
Collins, E. H.	Falcon I.	Club	4.13	4.15
Stevens	Nac. Dagling	Club	4.20	4.22
Edmunds	Nac. Dagling	Club	4.25	4.27
Baker	Desoutter Grunau	Club	4.30	4.41
Adcock	Open Dagling	Club	4.37	4.38
Hiscox	Falcon III.	Club	4.45	5. 0
Ruffle	Falcon I.	Club	4.57	5. 0
Evans	Nac. Dagling	Club	5. 3	5. 5
Smith, D. A.	Nac. Dagling	Club	5.18	5.20
Himmelreich	Open Dagling	Club	5.26	5.27
Bucknell	Falcon I.	Club	5.33	5.35
Ivanoff	Falcon III.	Club	5.40	5.42

In addition to the above, primary instruction proceeded most of the day at the bottom of the hill.

As there were evidently two nacelled DAGLINGS at work, the number of machines going off the top was 10, including the two-seater FALCON III. The total flying time, including primary work, is about 3½ hours, or about a tenth of what it would be on a really good soaring day.

David Dent Cup.—This cup, awarded to the member of the London Gliding Club making the most meritorious flight of the year from the club's ground at Dunstable, has this year been awarded to H. C. Bergel for his flight from Dunstable Downs to Hornchurch aerodrome on July 6th, 1935. He was flying the club's GRUNAU BABY I., and the distance covered was 41 miles. By this flight Bergel obtained the first two, and most difficult, legs of his "Silver C"; the remaining test—the five hours' duration flight—still remains to be done, and it is to be hoped he will soon be able to beg, borrow or steal a machine for the necessary time to get this off his chest.

Desoutter Cup.—It has been decided to award this cup, presented by the relatives of the late Louis Desoutter, annually to the member of the club putting up the best performance in a machine of his own construction. The first year's award is made to D. M. Morland and H. L. Richardson, who recently completed, and have flown for a number of hours, the WHITE WREN.

Annual General Meeting.—The date of this meeting, and the customary dinner following it, has been fixed for May 1st.

Yorkshire Gliding Club

March 1st.—The day of great snows. Only three members to get through the drifts to the club house.

March 8th.—Wind S.E. Slingsby brought up a new HOLS which will replace our former HOLS I. The squad who have just been promoted to the GRUNAU promptly put their names down to fly this latest addition to the club fleet, to the great annoyance of those pilots who have been enquiring after the new arrival since Christmas. The new HOLS is painted cream, and is lighter than its predecessor. We understand that HOLS II. is to have a new pair of wings. All that is required now is a 20 m.p.h. west wind, and then everything in the garden will be lovely.

March 15th.—Wind N.W., 10-15 m.p.h., decreasing. A soaring wind duly arrived, and Wordsworth in the FALCON was the first in the air to welcome it. He was soon joined by Slingsby in FALCON III., who had as his passenger Miss Herron-Maxwell (parachutist), who obtained her "C" in Germany, and took a course in aerobatics there.

After half an hour Wordsworth landed and Sharpe took his place in FALCON. As the wind had now dropped considerably and the effective beat had decreased Sharpe waited for his launch until Slingsby turned in to land after 33 minutes in the air. Sharpe's flight lasted for 25 minutes, and he was succeeded by Heath, who flew for 12 minutes and reported that the lift had practically gone.

Sproule had by this time rigged the YELLOW SCUD which had been at Slingsby's factory for overhaul, and after a preliminary hop attempted to soar, but was compelled to land in the bottom.

Holdsworth, who had been busy putting finishing touches to the new HOLS I., now brought her out for a test circuit.

Slingsby resolved to try to soar again and was launched in FALCON III., but after three minutes had to turn in and land. He had as his passenger on this occasion Mr. Snellon, the Chief Instructor of the Netherlands School of Soaring.

The day was completed by FALCON being hopped by Alderson, Blakeston, Jowett, Watson and Miss Horsley.

St. Austell & South Cornwall Gliding Club

Having just purchased the nacelled KEEBLING from Burnett-Rae, the club's equipment now consists of:—

One ground trainer, almost complete, made from designs kindly supplied by the Newcastle Gliding Club.

One PRÜFLING complete with two sets of wings, of 35 and 45 feet span respectively.

One KEEBLING.

One new launching rope, and one large covered trailer.

Rae, with two friends, brought his machine down by road on Saturday, March 14th, and very kindly offered to explain the mysterious ways of a KEEBLING the next day. This he did to the three members who turned up, and in consequence they learned more about dihedrals and incidence, etc., in half an hour than any amount of text-book reading would have given them.

As soon as the KEEBLING was ready the brand-new bungy was whipped out with a feeling of modest pride, and Rae was launched.

It was then the members' turn, and Williams ("Wywurree") was with difficulty inserted into the KEEBLING and given ground slides. Finally, with a stronger launch, he took the air to a height of about three inches, and thus became the club's first flying member!

We shall always be grateful to Rae and his two companions for their extraordinary patience and kindness. We hope to see them again, and then to be able to offer better hospitality.

Other Gliding Clubs

Croydon.—A gliding club is being formed for the Croydon district, and 25 prospective members have been enrolled. The prime movers are Mr. F. Linsley, of Wallington, and Mr. W. Cross, of Beckenham. It is proposed to do auto-towing with primary gliders, and the club is on the lookout for a "second-hand or crashed" primary, preferably of DAGLING type.

Settle.—A gliding club has been inaugurated at a meeting called by Mr. J. Packham, at which 15 people turned up and the club officials were appointed. The club has already a primary glider at its disposal. The annual subscriptions will be £2 2s. for flying and 10s. for non-flying members.

Penrith.—Mr. Frank Kieser has founded a gliding club and a primary machine has been built by club members. It had its first hop early in February, and the result was a broken rudder-bar.

Guernsey.—The Guernsey Gliding Club is now defunct, having held its winding-up meeting. Contrary to expectations, the club proved to be solvent, and the balance in hand is to go towards the building of a "Flying Flea."

Official Notices

Annual General Meeting.

The sixth Annual General Meeting of members of the British Gliding Association was held at the Junior Institute of Engineers, 39, Victoria Street, London, S.W.1, on Saturday, February 29th, 1936. Lord Sempill, president of the association, was in the chair.

Election of Officers.—Lord Sempill, at the unanimously expressed wish of the meeting, consented to remain president of the association. The vice-presidents were also re-elected.

The president read a letter of resignation from the hon. secretary, and formally thanked him for the services he had rendered to the association in a period of difficulty.

Mr. A. I. Logette was unanimously re-elected hon. solicitor, and Mr. C. A. Bloor, chartered accountant, as auditor.

Hon. Secretary's Report.—In the course of this report which was read by the hon. secretary, it was stated that the work of the Technical Committee had fallen almost entirely upon Mr. W. O. Manning. Some 40 Certificates of Airworthiness were issued, a very large proportion being for new aircraft.

By arrangement with the Air League, who have organised a "Pou" inspection service similar to that of the B.G.A. for gliders, the two bodies of part-time inspectors are now mutually available.

The association was called into conference by the Director-General of Civil Aviation with respect to certain clauses in the new Air Navigation Bill. These clauses were designed to give gliding a legal status and the protection of the Act. The lack of such protection has already caused serious setbacks in at least one case, that of the Midland Gliding Club, and would have been quite disastrous but for the generosity of Mr. C. E. Hardwick in the matter of damages amounting to over £1,000. The necessity of limited liability is also emphasised by this incident.

Relations with the International Commission for the Study of Motorless Flight (the Istus) remain good, if rather vague. Two years ago the B.G.A. was obliged to relinquish membership owing to its high cost; nevertheless four Silver "C" Certificates and badges were granted to British pilots by the Istus during the past year. (At the previous council meeting a letter from the Istus *re* the possibility of re-affiliation was read, but it was decided to wait until the Istus should declare its subscription rate for the current year; it is understood that this will be done at the meeting in Budapest to be held in May.)

There were some 80 inquiries about forming a gliding club; the advice was usually given to visit the nearest gliding club to obtain first-hand information.

Finance and General Purposes Committee.—The report of this committee, which was read, stated that when the committee took over in May last year the B.G.A. was insolvent to the tune of approximately £100; now, however, there is a credit balance.

The quarterly allowance of £100 by the trustees of the Government Subsidy has alone made this possible. This allowance is paid in consideration of the association's administration of claims upon the subsidy from the gliding clubs and for their presentation when in accordance with the principles and conditions of the scheme adopted by the Government. In other words, if the association, in the opinion of the trustees, failed properly to administer and present these claims, the allowance could, and presumably would, be stopped. So long as this allowance is received, it would appear that, with other receipts of the association, slender but surplus means are now available for additional services to the clubs, such as assisting in the negotiation of leases, arranging limitation of liability, cheaper and more frequent airworthiness examinations, donations to prize funds, etc.

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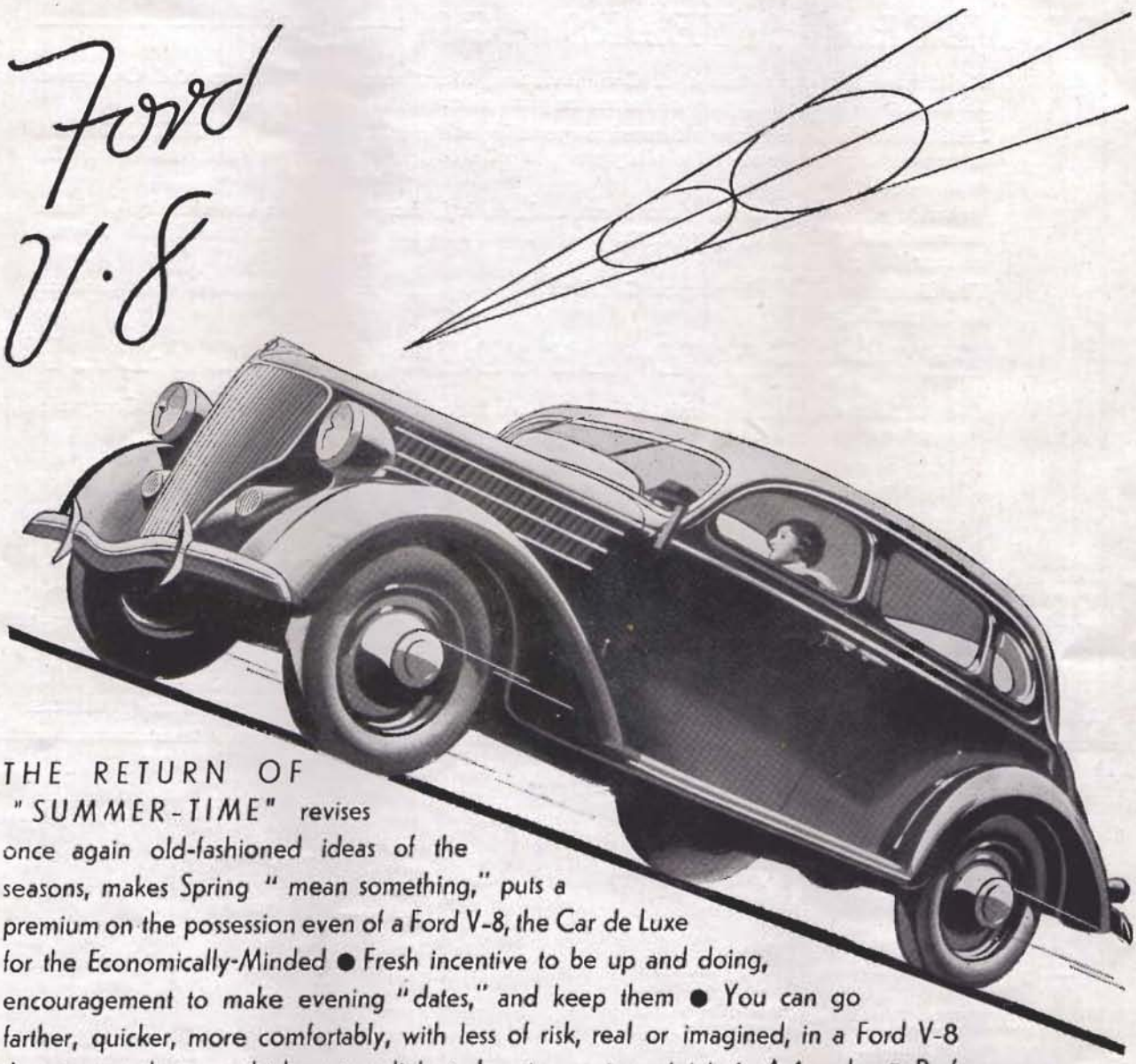

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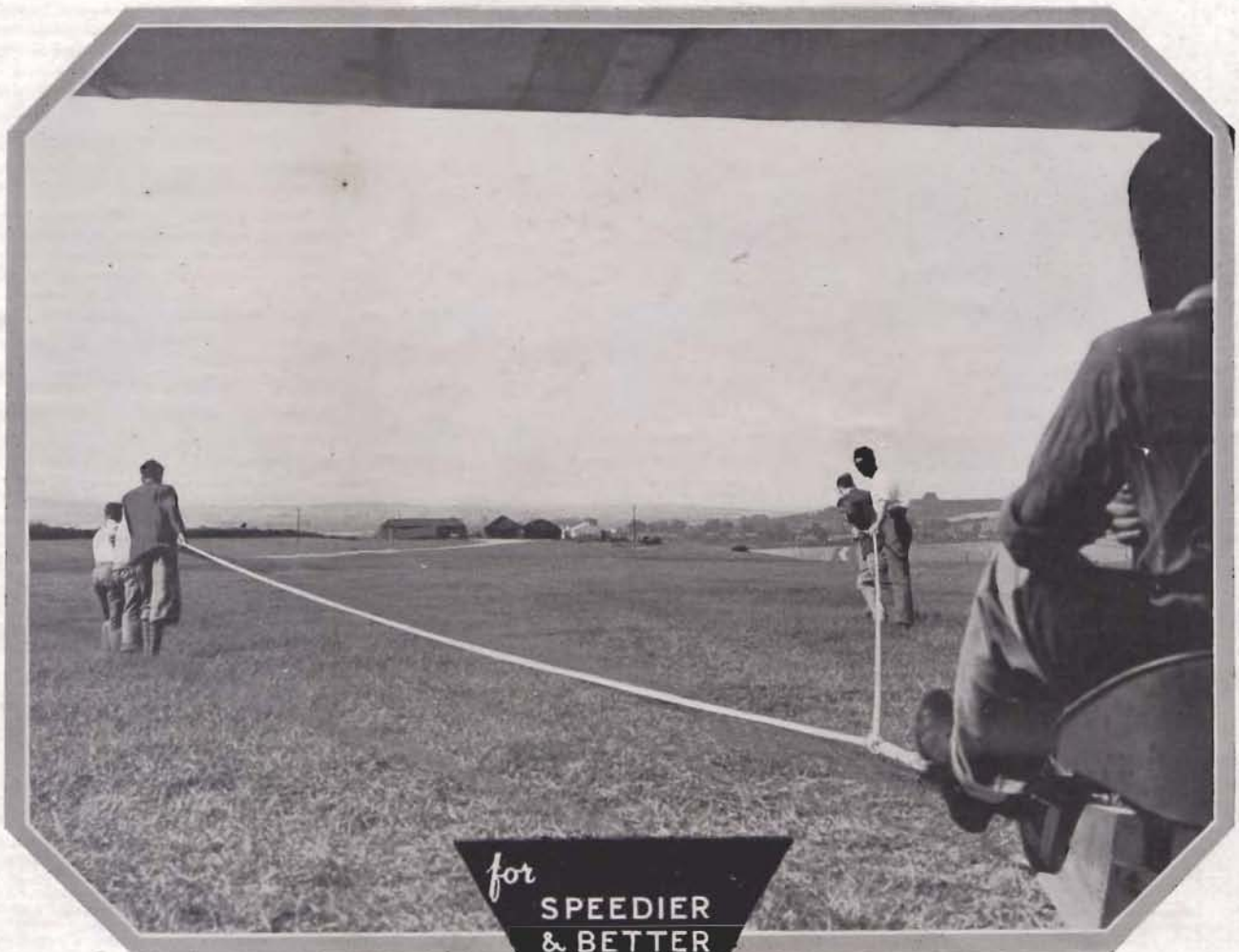

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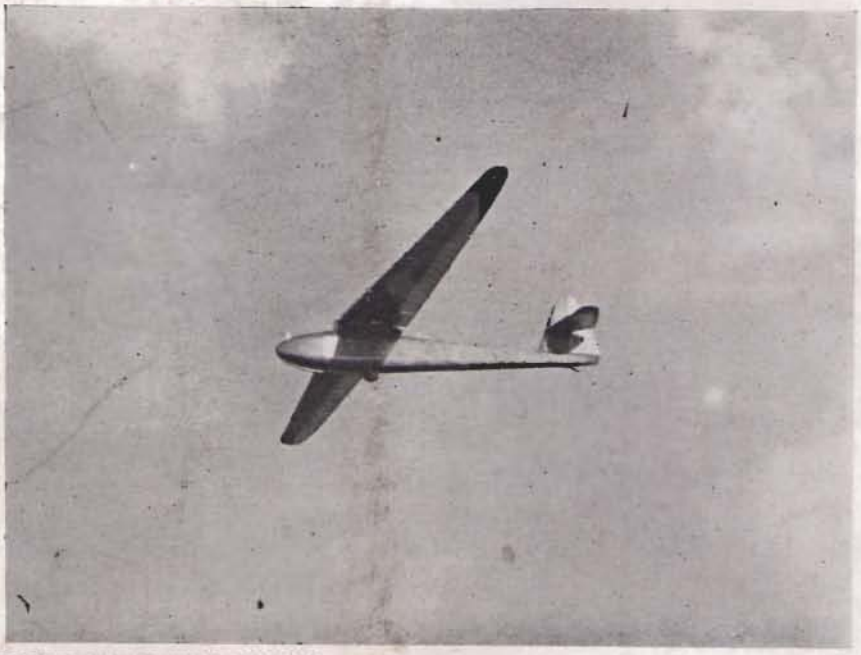

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