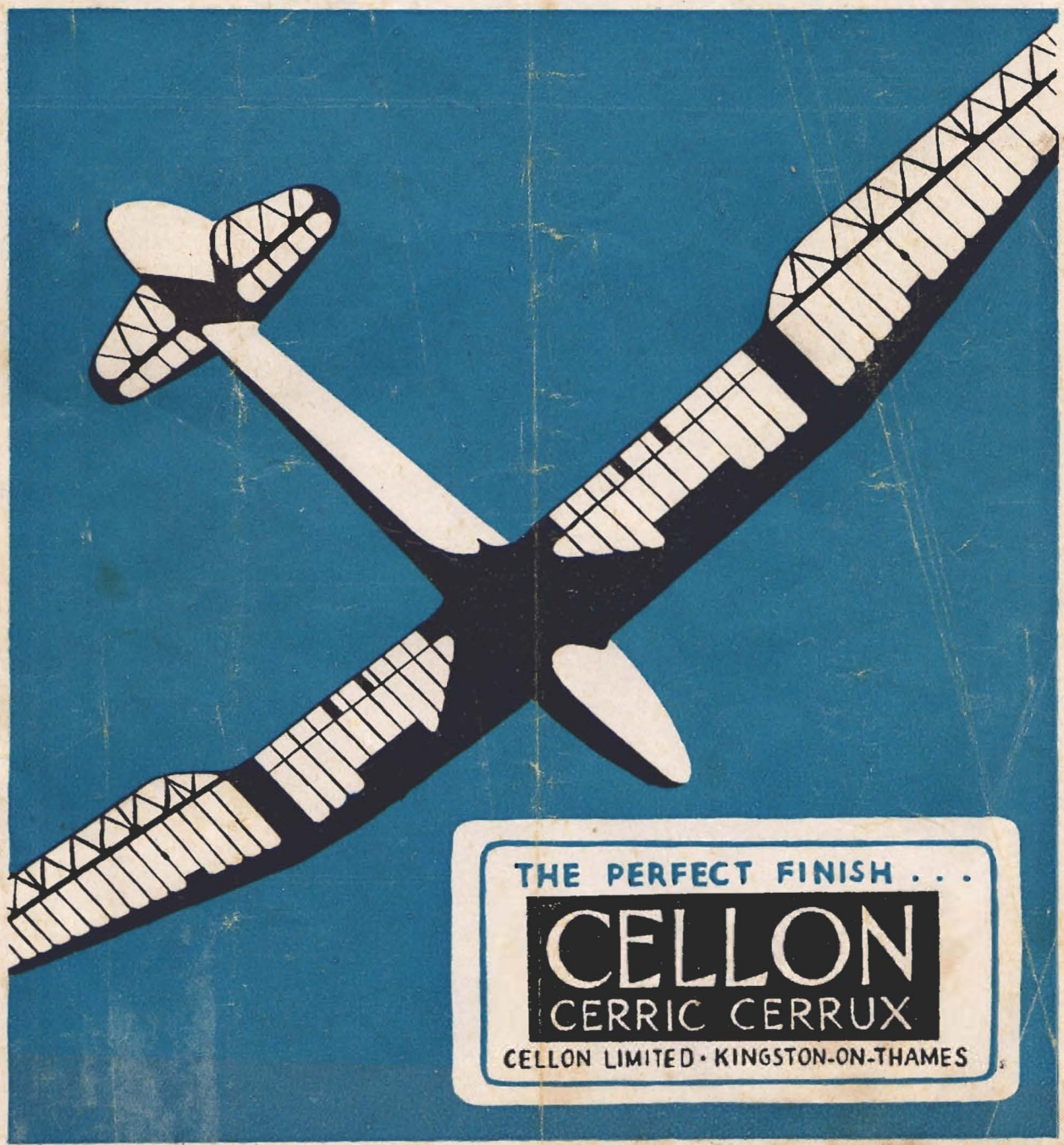
SAILPLANE AND GLIDER

NOVEMBER
1944
Vol. XII. No. 10.

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Thanet House,
231, Strand, W.C.2.

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The First Journal devoted to Soaring and Gliding

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ALAN E. SLATER, Associate Editor

Editorial Offices:
THANET HOUSE, 231 STRAND, W.C.2
Phone: CEN. 7081

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SIGNS AND PORTENTS

THE long hoped for revival of Gliding and Sailflying in this country is now definitely " in the air." Although it is true that at the time of writing the terms of reference of the new Minister of Civil Aviation have not yet been announced and may not yet even be determined, at least there is a state of flux which may result in the flowing tide coming our way. Some doubts exists apparently whether the new Minister is to have his powers limited to Air Transport only or whether they are to cover the whole field of Civil Aviation, which will include private flying of all kinds, and that includes Gliding as well as power flying.

We know what we wish for. We would like nothing better than to see the control of Gliding and Soaring taken right out of the hands of the Air Ministry, and never allowed to get back there again. That is not to say that we do not think that the Royal Air Force should not become Sailplane-minded—we do—for the sake of the future of our country, which is " in the air " more than that of any nation.

This is what we would like the new Civil Air Minister to do. First, remove the ban on Soaring. Second, arrange that all A.T.C. Gliding instruction is given by Civilian Instructors at Civilian Gliding Clubs or by their instructors if on R.A.F. airfields. This would result in the rapid formation of Gliding Clubs up and down the country, and would give them the fairest form of Subsidy—payment by results.

It would also result in Gliding being made available to all, for it would therefore be possible to use the nearest and most convenient R.A.F. Airfields to large centres of population, and not call for long and frequently wearisome journeys to places where only bunjy lifts and hill sites can get one into the air.

Next we would want him to make available the material and labour our Glider manufacturers need in order to go out into the world and get orders for British Sailplanes. The more gliders they are able to produce and sell abroad the cheaper they will be at home. This permission might be granted at once. Compared with the total war requirements, what we need is infinitesimal, and could affect the conduct of the war in not the slightest particular—always provided, of course, that if anything urgent were needed, all else should be laid aside until that demand is met.

If after this the Civil Air Minister felt he had grace to spare, what about setting our co-belligerent friends now occupying the greater part of the Dunstable site, to making a glider hoist to the top of the hill, before finally clearing up the whole site, repainting and repairing the Clubhouse, as a thank-offering for their excellent treatment whilst prisoners of war ?

There have been many rumours of what this or that designer or manufacturer is doing or intends to do when the war is over. The Chilton Aircraft Company is the first to make its plans public. After the " Cavalier," of which we published plans last month, there is the " Olympia," of which details appear on another page. Now we hear, though unofficially, that Slingsby's are to make a number of " Kites " and " Grunaus " for the first after the war models. These two are proved and popular types which are sure to have many buyers. But we wish someone would order another two-seater "Gull." We need many two-seaters, even though it is said that the A.T.C. are about to order some seventy of the latest Slingsby side-by-side machines. That number is not enough. We want at least 100 Gliding Clubs in Great Britain in the first year after the war, and each with at least two two-seaters.

Meanwhile what is Scott up to ? And what about Baynes, whose " Scud III " construction will be seen pictured in our next issue ? It was a stout workmanlike job, and as the table on pages 12 and 13 shows, was not much overshadowed by its former famous contemporaries.

And last, but not least, about ourselves. After nearly a year of trying, we have at last succeeded in convincing the Powers that be that we are entitled to paper, and a small increase has been granted us. Now we can go out after an increased circulation. Will every reader please get another reader to order regularly, and will every subscriber get at least one more subscriber ? Will every business firm which has an interest in Gliding please support us by advertising, as so many have this past year ? Will A.T.C. Gliding Instructors stir up interest in their pupils and see that their repairers take even a small space regularly ? It will be good for them, and good for us.

British Soaring Contests—4

THE B.G.A. COMPETITIONS, 1934.

SUTTON BANK

THE Competitions of this year marked a very great step forward in the British Gliding Movement, being the first contests to be held on a properly equipped site, of which the tenure was held by Gliding people. Before this year the competitions had suffered both from the publicity and financial angle by having to rely on the goodwill of others ; although what would have happened in the early days if this goodwill had not been forthcoming, it is difficult to imagine. If, however, people are being good-natured and open-handed their feelings must be carefully considered, and this means that the public, with their cash and interest, but also with their big feet and probable litter-leaving propensities must be kept firmly away. This stage had now come to an end, to the great relief of both the generous landlender and the gliding people themselves.

Sutton Bank, now the home of the enthusiastic Yorkshire Club, turned out to be a happy choice for the 1934 Competitions, as it has a South slope, and the wind blew mostly from this direction during the nine days.

TWO CLASSES

Also, for the first time, entrants were divided into two classes. Those with sailplanes with a span of 46 ft. and over, and those with a lesser span. Previously, the entrants had not been sufficient, or the general standard high enough, to warrant more than a general entry. The prizes this year were to be given for Distance, Altitude, Duration, and Out-and-Return Flights.

The meeting was very successful, inasmuch as both the Altitude and Duration records were smashed and 106 hours' flying time were put in by 17 sailplanes, of which 15 were competitors. Three of these machines had been brought all the way from Ireland, and one from Weymouth.

Enthusiasm ran high, and among the hardest workers were the ground staffs, among whom were Cat. Latimer Needham and Mr. Howard Flanders, while the Yorkshire wives were neither seen nor heard, but looked after the comfort both inside and out, of the competitors (and others) with even more than the usual Yorkshire hospitality.

VULTURES—SLINGSBY AND BAYNES

Also very much on the scene were those two efficient and amiable vultures—Slingsby and Baynes, who swept away minor crashery even before the pilot had realised what had hit him, and returned it good as new in a miraculously short time.

The first day, Saturday, September 1st, brought nothing spectacular, and the day was used by pilots to get acquainted with the site ; Liddel unfortunately got acquainted with a tree but not much harm was done. The second day was not much of an improvement, for the majority of the pilots, or their machines, but the great Collins in Rhonadler twice reached cloud base at 4,000 feet in lonely state, and amused those below with aerobatic descents.

On the Monday, the daily prize was offered for a flight to Osmotherly Church and back. The weather was only fairly good for such an attempt, as the wind was S.W. and strong, although there was a certain amount of thermal activity. Several pilots tried for this prize, and found that just getting whisked away down wind was too easy. Wills gave up the unequal struggle to get back and rushed even further down wind, which obtained him a distance prize. Collins, however, working with immense patience and skill, managed the return journey at times with only a few feet to spare.

On this day MacClement unfortunately wrote off one of the Wrens, luckily with only slight injuries.

THUNDER IN THE NORTH

Day Four was a big day. Laver started in the Dorsling (the Dorset Prufling) to beat the British Duration Record, but after slogging along the ridge for five hours he was let down by the wind. Later, however, big cumulus were seen approaching, and thunder heard to the north. Many pilots hastily got their machines ready and were launched. To start with the wind was too light, and several machines were forced to land again before the storm arrived. This was perhaps as well, as it gave more elbow room to those still struggling to remain in the very restricted area of rising air. As the lift roughened but improved, Buxton, Collins, and Dewsbery were able to spread themselves, and Buxton, in Scud II, vanished into a ragged wisp of cloud at 700 feet. Collins followed his example into a shelf-like part of the main cloud, and Dewsbery, in the Wren, wandered around and finally joined Collins.

SCUD II

Meanwhile Buxton was being rushed blindly upwards at 10 feet per second. He put the nose down to 50 m.p.h., and suddenly saw a road wildly gyrating. After straightening up he wandered about and finally decided at another nibble at the cloud. He never saw daylight again until he had broken the British height record, and reached 7,970 feet.* The Scud II was not fitted with blind flying instruments, so Buxton flew a little on the fast side, with his head screwed round to watch the rudder, and in this way managed to keep everything under control while climbing between 5—20 feet per second. This increased to 40 feet per second after an unsuccessful attempt to escape from the cloud monster. Finally he burst out into a brilliant sky of dazzling cloud tops and sunshine, and at once flew northwards to try for a distance prize as well as the altitude one.

While this was going on, Dewsbery was quietly turning his cloud travels to good account and reached the coast 30¾ miles away. Collins stayed with the storm cloud but did not make much headway as he worked against the strong S.W. wind.

On the Wednesday, and Thursday (days five and six), the air was

* Uncorrected figure, confirmed was higher.



J. LAVER flying the Dorset Club's "Dorsling" at 1934 Contests at Sutton Bank. *Photo: A. E. Slater*

gentle and anticyclonic; little flying was done and there was plenty of time to work over and learn any lessons from the storm flights of the previous day.

Friday brought a gentle soaring wind, and the daily prize was for aggregate duration, but this did not amount to much.

BRITISH DURATION RECORD

On Saturday, Laver, after being defeated by the wind during the earlier part of the week, gallantly attempted to beat the British duration Record again, and this time succeeded. He was up at 6 a.m., rigged and in the air by 7.39 with a few sandwiches and tomatoes. The air was southerly and rough and he was air-sick a few times. About 10 a.m. the air became smoother with some thermals; and while circling to pass the time he got as much as five miles down wind, the difficult return journey giving him several grey hairs.

About mid-day several other sailplanes were up, and at one time eight machines were soaring, almost the greatest number which had so far been seen in the air together up to this time in England.

Meanwhile pilots were trying for the daily prize, which was for a flight round Oswaldkirk church and back. It was won by Buxton, while Collins won a special prize for a height of 3,600 feet.

LAVER LANDS—THEN SUPPER

About six o'clock Competition Flying had stopped, and everyone settled down to watch the closing stages of Laver's flight. The wind was slackening, and he was still struggling along just above the ridge. When the flight had lasted 12 hours the time was shouted to him, but still the little Dorsling trudged backwards and forwards along the beat, sometimes even sinking below the top. As darkness fell, Laver finally came into land, after which the competitors were entertained to a huge supper provided by the Yorkshire Club, which excelled even its usual generosity.

On Sunday the Competitions officially ended, although several pilots tried for the daily prize which was for flights between the White Horse and Whitestone Cliff. The Tern achieved five trips and was thought to have won, when the Golden Wren turned up from its wanderings with a claim of seven.

Finally, and with much reluctance, everyone packed up to go home, while a few of the local pilots aerobatted to amuse them.

What then were the lessons to be learnt from the 1934 Competitions, and what were the results achieved?

BENEFITS OF ORGANISATION

Firstly, the advantages of the equipped site proved to be immense; gliding people are by nature nomads used to making do with what is available, but so much more energy can be devoted by the pilots to the actual competition flying if accommodation, meals, repair facilities, and all the paraphernalia required by such a meeting are available on the spot, and if spectators can be properly controlled, so that they cannot wander about the middle of the landing ground when some harrassed pilot is trying to land in difficult circumstances. It is much easier, too, for the organisers to run such a meeting if they have an equipped base to plan and work from.

Another lesson to be learnt from these competitions (and it was learnt) was that minor crashery could be avoided with more care and practice in all-round flying.

BLIND FLYING INSTRUMENTS

Of the results achieved, perhaps the most important was Buxton's thunderstorm flight. Until 1934 no serious cloud flying had been attempted here, although its mastery was known to be essential if great flights were to be achieved. The lesson learnt from this rather hectic flight was the necessity for blind flying instruments to be fitted as standard.

The second outstanding result was Laver's duration flight of 12 hours 21 minutes, especially after his previous unsuccessful attempt. This record has, of course, been since beaten so many times that duration flying is now looked upon rather as a variation to pole squatting. Laver's flight, however, was made in a relatively inefficient sailplane with an open cockpit, and at a height of only a few hundred feet on a short and at times turbulent beat. It was also made at a time when British Gliding needed all the support and good publicity that it could get.

In every way, I think it can be said, the 1934 Competitions helped British Gliding on its way to the position of achievement that it now holds.

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Pioneers of British Gliding—7.

MAJOR H. A. PETRE

WHEN the present British gliding movement began in 1930, to be associated with it was to see the aeronautical history books come alive. People who, twenty years earlier, had helped to make the aeroplane a success were again attracted by the prospect of seeing a new technical advance through its experimental stage. At Downs Farm, on the London Gliding Club's first training site, one could pass Howard-Flanders his tea, ask Handley Page for the cake, make room for Marcus Manton at the table, and then listen to stirring reminiscences of the early days of Aviation.

WINGS WERE ELEVATORS

Henry A. Petre, who obtained his " A " gliding certificate (No. 59) in the Autumn of 1930 and converted it to a " C " soaring certificate on March 4, 1931, appears in the history books as " Peter the Monk," by which name he was distinguished from his brother Edward, known as " Peter the Painter." These two, in conjunction with Mr.Howard-Flanders, exhibited an aeroplane at the Olympia Show of 1910. It was a monoplane with a fixed tail plane and movable main plane, and, taking Sir Hiram Maxim's advice, they had placed the propeller right at the back though the engine was at the front. Needless to say, the outsize propeller shaft gave them a headache; but it is interesting that the use of the whole wing as an elevator was adopted successfully in the Harth-Messerschmitt glider which set up a world's soaring record of 21 minutes in 1921.

Major Petre obtained his Aviator's Certificate on September 12, 1911, flying a Hanriot monoplane at Brooklands; it was No. 128, granted by the Royal Aero Club. He has been on that Club's Committee for many years, and is its representative on the Council of the British Gliding Association.

TAUGHT AUSTRALIA TO FLY

In 1912 the Australian Government decided to establish a School of Military Aviation. Its first instructors, H. A. Petre and E. Harrison, sailed from England in December of that year to take up their posts; hence Major Petre's



Major H. A. PETRE

reputation as " the man who taught Australia to fly."

He took up the profession of solicitor after returning to England, but kept his hand in at the flying game by owning an aeroplane. So his value to the London Gliding Club has been a dual one. His legal advice and administrative talent guided the club through the most difficult period of its history, which included Major Petre's spell of Chairmanship from 1932 to 1935. During these years the club membership underwent an unprecedented increase, cross-country flying began, the club acquired its own land through the generosity of Mr. Espin Hardwick and Lord Wakefield, it raised enough financial guarantees to start building its modern clubhouse and hangar, and fought and won its battle for a national administrative body truly representative of the people who actually did the flying.

And among these people was Major Petre himself, one of the few pilots who could be trusted to handle the club's first high-prformance machine, the tricky " Professor," with absolute safety.

BRITISH DURATION RECORD

It was in this sailplane that he made his contribution to British soaring history. The world's duration record of 3 hours 21 minutes set up by Maneyrol in 1922 at Firle Beacon, though exceeded abroad, remained unbeaten in England for nearly nine years. Then, on the afternoon of May 24, 1931, Major Petre took off from Dunstable Downs in the " Professor " into a strong south-west wind blowing obliquely on to the hill. It soon backed towards south, so that the pilot had to spend the rest of his time over a very short beat at the " Bowl," doing perpetual figure-of-eights except when passing showers increased the wind speed to that of the sailplane and enabled him to hover, or when " bright intervals " warmed up the fields on his right and enabled him to wander out into thermal lift. At last, after 3 hours, 28 minutes and 5 seconds, he landed, having made the longest soaring flight over British soil.

Two years after, upon the death of somebody of the same rank and surname, an evening paper gave the deceased credit for having founded the Australian Flying Corps, become a Squadron Commander in the R.A.F. in 1918, and set up a British gliding record in 1931. However, the rumour was " greatly exaggerated," for a few days later our Major Petre was observed riding in a bus, looking quire solid and in excellent health. Long may he remain so !

A. E. S.

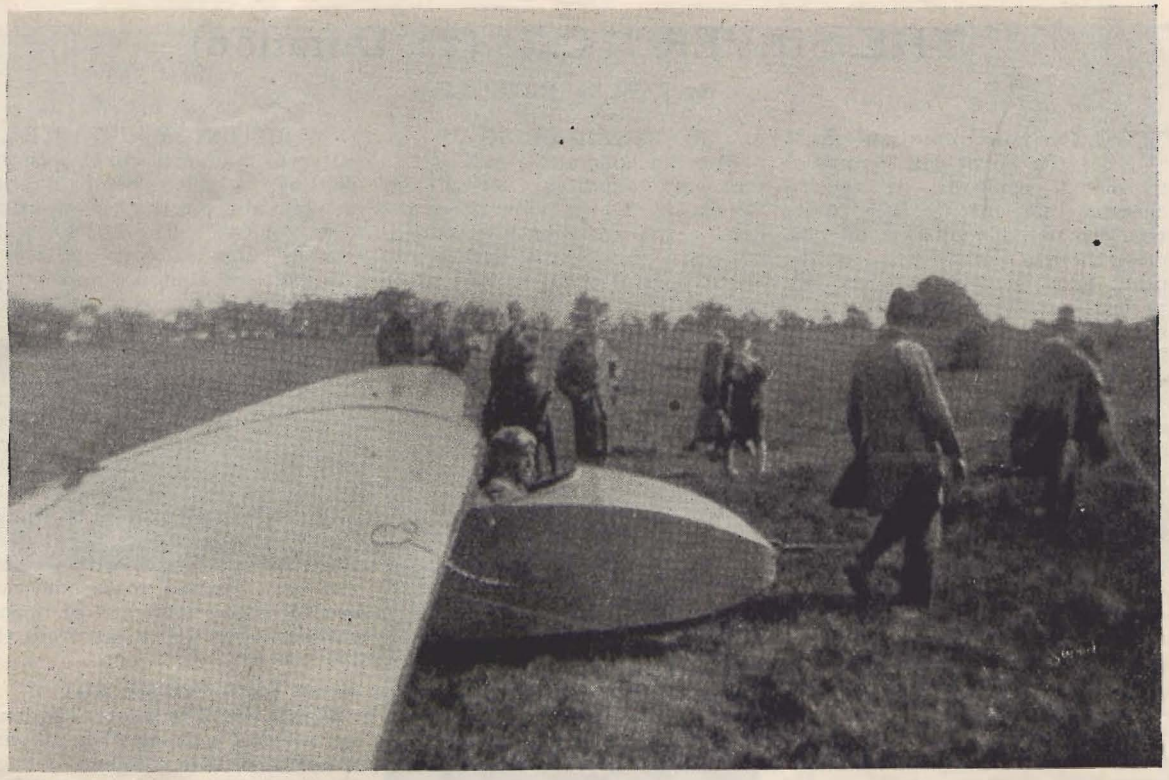
THE LIBRARY OF CONGRESS, WASHINGTON, D.C.

The publishers are pleased to announce that they have received a perpetual subscription from the Library of Congress, Washington, D.C., U.S.A. This was entirely unsolicited, and the Staff are highly gratified.

As far as we know, SAILPLANE makes its appearance in the House of Lords, when a well-known gliding Peer takes it in, but it is not seen in the House of Commons, and certainly not in the Library.

LT.-COMMANDER B. A. G. MEADS

Members of the Lancs. and Derby Gliding Club will be sorry to hear that Lt.-Commander Meads recently stayed in a " Master " when it hit the sea in the Solent, and suffered cuts, bruises and concussion. He is now largely recovered and has since been recuperating. Incidentally we hear rumours that the Navy are to take up Gliding for the Fleet Air Arm. As usual, the Navy, who were the first to go in for bombing Germany in the last war, will be first again.



Major H. A. Petre about to start from Dunstable Downs on his record duration flight of 3 hours 28 mins. on May 24th, 1931. *Photo : A. E. Slater.*

CECIL RICE'S PROPOSALS

WE are glad to be able to chronicle that Cecil Rice's proposals printed in the last issue of SAILPLANE, have borne some fruit. In Leicester an Aviation Centre has already been begun, which will comprise the Power Flying Clubs, the Gliding Clubs and the Aero-Modellers. Cecil Rice tells us that he is busy now trying to organise an indoor Model Competition and Exhibition for the winter evenings. We are indebted to Mr. Rice for letting us see a selection of letters received by him which we hope to publish in our next issue.

A.K. writes : " Isn't it time that Club Secretaries began preparing for business ? We hear that the Yorkshire Club has 300 live members on its books and £6,000 in the Bank."

We shall be happy to publicise any signs of reviving Club activity, and to help in any way we can.

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EYRE & SPOTTISWOODE

THE SILVER "C." (2 : Duration)

By J. W. S. PRINGLE.

THE five-hour duration flight for the Silver "C" appears to many people to be an unnecessary nuisance. It is quite true that on some hill sites, on some days, there is nothing to it; on the other hand, if conditions are not perfect—and in this country it is extraordinary how rarely they are—it can be a very interesting affair, and may demand quite a different type of weather knowledge to that needed to achieve the "distance" and "altitude." My own flight is a good example, and it is one of the most interesting I have ever had.

At the Annual Competitions at Dunstable in July 1938, the Cambridge Club entered its Kirby Kite for the inter-club trophy, which it won. Most of the points were gained for duration flying; there was a good soaring wind on many of the days, but only at the end of the contests were conditions really good for distance flying. This made it a real competition. The sailplanes were kept in their trailers by the rabbit warren below the clubhouse, and had to be rigged each day. If the wind was right we kept a close eye on the other teams to see that they did not steal a march on us. Rigging and de-rigging were reduced to a fine art, and we were usually among the first off in the morning.

MY TURN

On July 12th it was my turn, but conditions were not bright. A light south-east wind was blowing into the bowl, and nobody was very keen to have a shot at it. The clouds were low, not more than 300 feet above the hill, with alternating rain and drizzle. However, a front was due, and after breakfast the wind did seem to have veered a little, and the clouds were a bit more broken; so we rigged and I was shot off. I don't think there were more than one or two others up, but even so there was not much room. The maximum we got was 100 feet above the hill, and that was such an effort that I used it up shooting-up a crowd on the top. We settled down to a steady round—a long turn in the bowl, edge back to the slope, and then slowly losing height all the way up to the gully and back.

SOMETHING GOING UP

After an hour and a-half of this the wind definitely veered and freshened. Down below there was great activity rigging and launching. In the west a darker and lower mass of cloud seemed to be coming along, and soon there were the faintly ragged edges which



Photo: A. E. Slater.

J. W. S. PRINGLE.

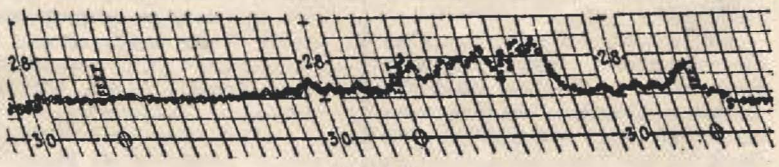
show something is going up. After two hours we had a steady 200 feet and could begin to explore the lift, going along to the Zoo twice to try the whole slope. The point of the hill between the power wires and the Zoo is the furthest out, so we finally decided to stay there and wait. Sure enough, in a very few minutes the front began to arrive, and soon we were up at over 1,000 feet, well out over the valley towards Ivinghoe.

A BIT UNCOMFORTABLE

It was a queer front, with no real line, and not a lot of rain, but just bits and pieces of cloud at all sorts of levels. The lift, for what it was, extended over the whole area between Ivinghoe and Whipsnade, and as there wasn't much wind we could go much further afield than I had ever done before. I didn't see anyone else during this hour of the flight, and felt safe to fly through several small clouds to try out the turn-and-bank indicator. Incidentally I had lunch, and re-arranged the cockpit a bit, as it was getting uncomfortable. The human system is not well suited to spending five hours in a cold and cramped space, and you have to make the most of opportunities when well away from the hill.

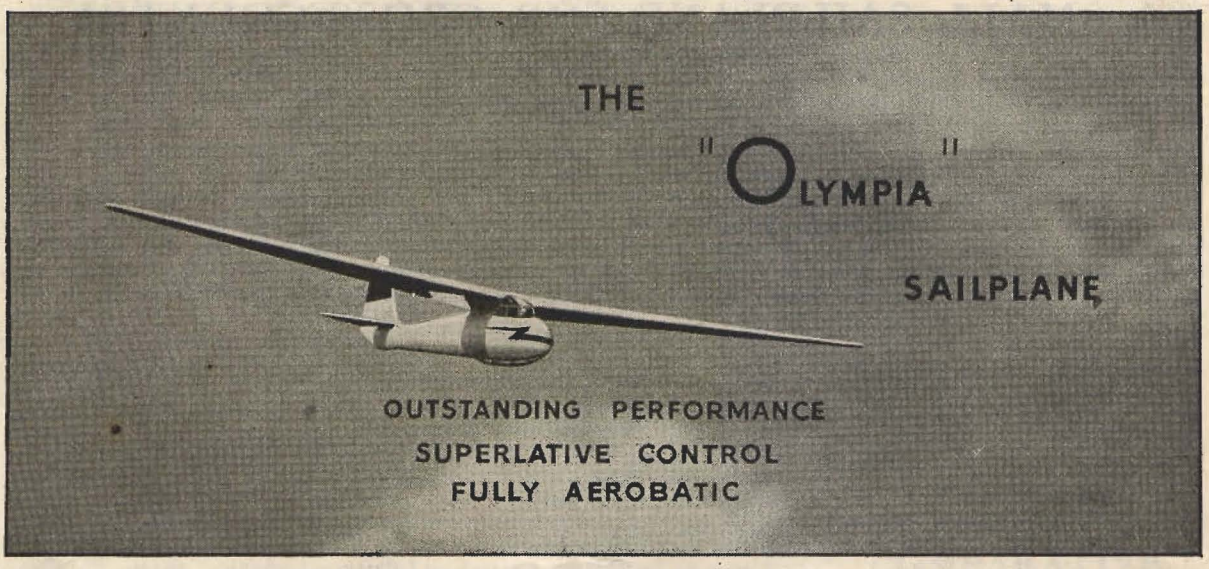
THIS IS THE ART

Finally the lift went; suddenly and without warning when we were somewhere near Dagnall village. This end of the hill peters out into a very gentle slope which did not give much help, but we got back to the Zoo safely and settled down once more to hill-scraping. There was no rain now, but still an overcast sky and only just enough wind to keep up. I decided we had better get back to the home slope before it died out altogether; people landing in the bison enclosure were not popular, and I remembered something in the Silver "C" rules about landing back at the starting point. It seemed a piece of cake! All went well till we came to the place where the road goes up the hill, but here the slope faces south-west for a hundred yards, and, of course!—after the front the wind had gone round to north-west. We were 30 feet below the top before I realised what was happening and raced back to



12.vii.38.

"Five hours" started by hill-scraping in S.W. wind then hill scrape in N. wind.



Orders can now be acccepted for post-war delivery of this world-famous sailplane in addition to other machines in our comprehensive range of types. The "Olympia," sometime known as the "Meise," was the winning machine in the Olympic games International design competition.

In addition fully detailed sets of drawings, specially prepared for those who wish to build their own Olympia, will shortly be available at £14.0.0.

CHILTON AIRCRAFT, HUNGERFORD, BERKSHIRE, ENGLAND.

the Zoo, where, thank goodness, the lift was still on. Half-an-hour to go, and somehow to get back.

SUN TO THE RESCUE

Each time we got to 200 feet I could see the power wires over the brow of the hill. Twice I think we could have got round the bend, but the wires were the trouble. We had to have enough height left to clear the second part of the obstacle without going too far away from the hill. The third time I was going to risk it, as the wind was clearly dying; then, unexpectedly, the sun came to the rescue. It must have decided that it ought to shine after a front; at any rate it broke through for long enough to produce one solitary bubble on which we went up to 500 feet and then made a dash for the wires. The wind was nearly northerly by now and very weak, and the five-hour mark had passed, but we hung on for ten minutes below the top of the power wires slopes just because it was rather fun. We were the last to land by quite a margin, I think.

BAROGRAPH A NECESSITY

One final word about barographs. Everyone ought to carry one of these on every flight. Not because it is necessary for the Silver "C" except for altitude, but because it gives such a wonderful record of every moment and incident of the flight. If the printer does his stuff, you can see on this chart the first bit of extra lift where we shot up the crowd, the better life over the Zoo, the front (including one panic dash back to the hill which I did not mention), the flight back from Dagnall, the first shot at getting back, the second and third shots, the thermal, and the dive for the wires. It is all there; that little piece of paper is better than any film or record that could ever be made.

FLYING INTO A HURRICANE

THE discovery by three United States Army flyers of important and hitherto unknown facts about flying into hurricanes is announced by the U.S. Office of War Information. The discovery was made during a hurricane which swirled up the eastern coastal regions of the United States early this month. The Army flyers took a twin-engined light Army bomber head-on into the hurricane. They found that, contrary to general opinion, the hurricane had ascending air-currents at its inner edge and descending current at its outer perimeter. This is the first direct proof obtained of wind directions in the various parts of a hurricane.

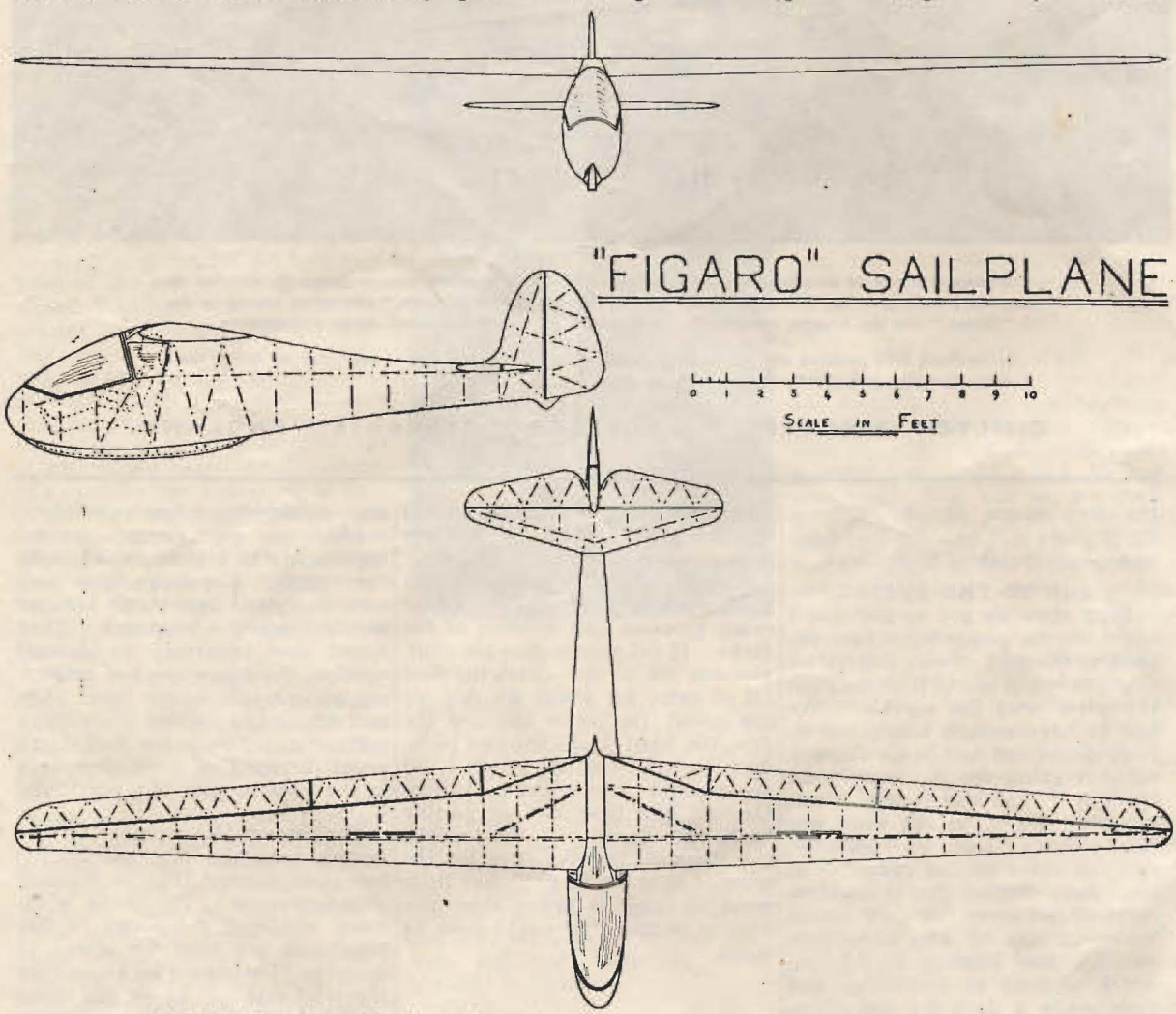
The airmen also reported terrific vertical velocities but "markedly" less cross current than in summer thunderstorms. The plane withstood winds of a velocity of 200 kilometres per hour for about 45 minutes. Dsecribing his experience the pilot said: "As we got closer to the centre of the hurricane there was an uniform rising current of about 682 metres a minute. There were now three motions—a forward movement of the plane at 480 kilometres an hour, a sideways motion of 160 kilometres an hour from the wind and an upward thrust from new current." The sensation was described as "just like going up in an elevator."

A SMALL SAILPLANE FOR CROSS-COUNTRY FLYING.

By ICARUS.

WITH the return of peace becoming more evident every month there must be many who are looking forward to soaring activities in the not too remote future. In addition to the pre-war band of enthusiasts there will be a number of glider pilots from the Airborne Forces who wish to take up the sport.

Exactly what they are going to do about acquiring machines is a little doubtful, as the number of high performance sailplanes available will be very small, the Kirby Cadets of the Air Training Corps will be retained by that body and are hardly high performance types. The manufacturers too, will take some time before they can get in production, particularly as it is



Tabulated results of estimated performances are as follows:—

Span in feet.	*Max. L/D.*	*Sinking speed at Max. L/D.*	* *Min sinking speed.*
32	20.75 at 41.5 m.p.h.	2.93 f.p.s.	2.82 f.p.s. at 38 m.p.h.
34	21.92 ,, 40 ,,	2.68 ,,	2.62 ,, ,, 36.5 ,,
36	22 ,, 39 ,,	26. ,,	2.5 ,, ,, 35 ,,
38	22.6 ,, 38.5 ,,	2.5 ,,	2.375 ,, ,, 34.5 ,,

* These minimum sinkings speeds make no allowance for the slight improvement which may be expected from plain flaps as fitted to the final design.

difficult for them to indulge in practical full scale development while materials are restricted.

A possibility exists that some enterprising persons may wish to build their own machines, either as individual efforts or as a syndicate. This is not a venture to be embarked upon lightly, as the construction is apt to take longer than anticipated when equipment is, as is most cases, rather limited. At the moment one enterprising manufacturer has plans for building " one-off " machines to customers' requirements, and it may prove, in the long run, to be less expensive than it might appear at first.

IMPORTANCE OF STRESSING

Providing that the amateur builder takes steps to get the important parts of the structure checked for strength while they are still on paper, adheres carefully to the drawings and gets the strength checked if modifications are found necessary, it should not be difficult to obtain a certificate of airworthiness. It may be superfluous to add that all materials should be of good quality material, preferably to aircraft B.S. or D.T.D. specification, as all drawings of structurally important parts should clearly denote the material and its quality.

With the foregoing paragraph in mind the writer has attempted to formulate his own personal choice for post-war soaring. The accompanying drawing shows the general layout of FIGARO.

While the pros and cons of small machines have been discussed at length in the past, a preference has been expressed for the smallest possible machine commensurate with reasonable cross-country performance on the following grounds :

Ease of handling on the ground.
Small hangar space required.
Small and light trailer can be made, permitting machine to be towed by medium power car.
Less materials used than on large machines.
Less expensive to build.
Possibly, but not necessarily quicker to build.

DISTANCE FOR SIZE

Having decided on a small type the next problem is how small ? As cross-country flying is the ultimate objective to be gained, one approach is to estimate the minimum size which will give the maximum mileage per hour's flying. In this case estimated performances were made on four machines with spans varying from 32 to 38 feet, of constant aspect ratio (15) and with appropriate structural weight and parasite drag coefficients. A standard weight for pilot and parachute in each type gives relevant wing loadings.

CRUISING TIME

As the best rate of climb in thermals of any vertical velocity will be given by flying at a speed corresponding to minimum sinking speed and maximum distance will result from flying at a speed corresponding to max. L/D, the four machines were assessed on this basis. Time to climb to a given height in thermals of 4, 5 and 6 f.p.s. velocity at minimum sinking speed and time to descend in still air at best L/D were calculated and gave descending time (or more accurately, cruising time) as a percentage of total time.

Naturally the larger machines, 36 and 36 feet span, gave superior rates of climb and a higher percentage of their time in the air, could be devoted to cruising. However, due to their lower wing loading their cruising speed was not so high as the smaller machines of 32 and 34 feet span.

Working on a basis of one hour's total flying time, the cruising speed was multiplied by the cosine of the best gliding angle (to give true ground speed in still air) and again multiplied by the percentage cruising time. This gives a near approximation of the distance which each machine would cover in one hour, assuming that climbing was carried out by circling over one spot. Plotting of these distances, in miles, against wing span in feet for three different values of climbing, *i.e.* in thermals of 4, 5 and 6 f.p.s., enabled an optium span to be assessed by drawing a line from the origin tangential to the graph curves.

CONCLUSIONS

Conclusions drawn from this were that in a thermal of 4 f.p.s. vertical velocity maximum distance for minimum span was given by a machine of 34 feet span. As the thermal velocity increased the span could be smaller. The effect of wind, so far ignored, seems to indicate that the smaller machines are more favourably affected when flying into the wind and *vice-versa.*

A span of 34 feet was therefore chosen for FIGARO and more complete data is given below :—

Span	34 ft.
O.A. Length	17.8 ft.
Height (tail down)	3.95 ft.
Wing Area	77 sq. ft.
Horizontal tail area	12 sq. ft.
Vertical tail area	7.5 sq. ft.
Aileron area (total)	14.5 sq. ft
Root Chord	40"
Tip Chord	15"
Taper Ratio	2.67 : 1
Aspect Ratio	15 : 1
Weight empty	133 lb.
Wing loading	3.8 lb. sq. ft.
Stalling Speed	31.6 m.p.h.

(*Continued on Page* 17)

COMPARATIVE DATA ON SOME PRE-WAR SAILPLANES

THE data sheet on pages 10-11 gives certain points of information on a representative range of secondary machines, high-performance types and two-seaters from most countries. Although a great number of different types have been built and flown the list is restricted to machines on which fairly accurate information is available.

Steps have been taken to check up, wherever possible, on the accuracy of published figures by cross reference in other publications.

One column of the list shows structure weight expressed as a value in pounds per square foot of wing area. While this can be taken as a rough guide to the structural efficiency of each machine it should be borne in mind that high aspect ratios tend to increase this value. In addition certain of the older machines were built to conform with stressing requirements less severe than those in force in 1938 and 1939.

In the remarks column it will be seen that reference is occasionally made to an angular twist in the wing. Nearly all sailplane wings are twisted, the incidence at the tip generally being reduced to prevent undesirable characteristics at low speeds ; where figures are quoted these are makers' figures.

	MACHINE	COUNTRY OF ORIGIN	TYPE OF WING	Span ft.	Length ft.	Aspect Ratio	Empty Weight lb.	Loaded Weight lb.
SECONDARIES	H-17	AUSTRIA	SINGLE STRUT	31.83	15.17	10.2	143	341
	GRÜNAU BABY	GERMANY	" "	42.65	18.05	11.6	220.5	370
	WOLF	"	" "	45.0	20.0	14.0	290	450
	ASIAGO	ITALY	" "	44.9	21.3	14.8	264	462
	BOWLUS UTILITY	U. S. A.	V STRUTS	36.0	18.0	8.0	270	440
	CADET	"	2 "	37.5	18.75	8.7	230	410
	FRANKLIN P.S.2.	"	" "	36.0	22.0	7.2	220	400
	FLYING ANVIL	"	V "	36.0	22.0	8.5	350	550
HIGH-PERFORMANCE	SCUD II	ENGLAND	PARASOL	40.0	17.0	16.0	150	350
	KITE	"	SINGLE STRUT; GULL	46.0	19.5	13.4	260	460
	KESTREL	"	" "	40.0	20.0	11.0	245	415
	HJORDIS	"	CANTILEVER	51.0	21.6	21.0	310	480
	WINDSPIEL	GERMANY	"	39.4	19.6	12.6	119	299
	MINIMOA	"	" ; GULL	55.75	23.2	16.0	441	656
	RHÖNSPERBER	"	" "	50.4	20.4	15.6	340	550
	RHÖNBUSSARD	"	"	47.0	19.1	14.0	300	475
	CONDOR I	"	V STRUTS	57.0	25.5	15.0	430	607
	DARMSTADT D-30	"	CANTILEVER	66.3	21.7	33.0	438	608
	HORTEN III	"	"	61.0	16.6	9.6	475	695
	BERLIN B-6	"	"	52.8	20.0	17.6	385	595
	MEISE	"	"	49.3	22.0	15.0	353	563
	ALCIONE B.S.28.	ITALY	"	47.6	21.5	15.0	352	540
	PINGUINO G.P.1.	"	" ; GULL	50.17	21.33	15.4	374	550
	P.W.S.101	POLAND	" "	62.33	23.9	19.1	485	670
	G.N.7.	RUSSIA	"	52.0	19.5	23.7	583	792
	A.B.C.	U. S. A.	2 STRUTS	48.5	19.0	13.2	300	470
	SUNSPOT	"	V ; GULL	46.0	18.5	11.5	325	550
	ROSS STEPHENS R.S.I.	"	CANTILEVER	46.0	20.5	17.0	280	470
TWO-SEATERS	FALCON III	ENGLAND	V STRUTS	58.0	22.0	11.8	440	800
	GÖPPINGEN 4	GERMANY	CANTILEVER	48.5	22.1	14.0	396	736
	JENSEN	"	" ; GULL	62.25	29.5	15.7	484	880
	E.3.	"	"	69.9	30.7	22.7	440	792
	STAKHANOVETZ	RUSSIA	"	66.6	26.7	18.9	616	968
	UNIVERSAL	U. S. A.	V STRUTS	42.0	23.0	8.8	290	650
	TRANSPORTER	"	" "	52.3	26.6	11.4	435	725
	SCHWEIZER	"	SINGLE STRUT	52.0	26.0	12.6	450	855

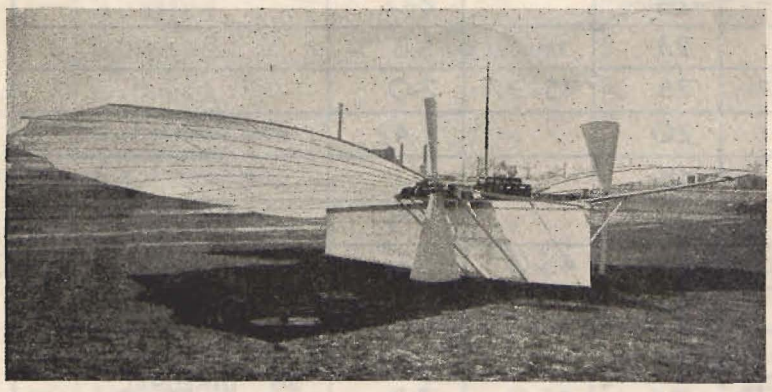
Wing Loading lb.sq.ft.	Span Loading lb. ft.	Wing Area sq. ft.	Structure Weight lb.sq.ft.	AEROFOIL ROOT	TIP	Best L/D	Cruising Speed m.p.h.	Minimum Sinking Speed f.p.s.	REMARKS
3.44	10.7	99	1.45	G535	M6	16	33.5	2.92	
2.37	8.7	156.1	1.43	" /REFLEX/	SYM	17	30.2	2.6	3° WING TWIST
2.78	10.0	162	1.79	"	"	17		3.1	FULLY AEROBATIC
3.38	10.3	136.7	1.93	"	M6	20		2.6	DIHEDRAL
2.75	12.2	160	1.69			17		2.8	
2.53	10.9	162	1.42			15		3.5	
[illegible]2	11.1	180	1.22			15		2.5	
[illegible]2	15.3	140	2.50	2416	2412	17	51.0	4.0	3° WING TWIST
[illegible]0	8.75	100	1.50	G652		23		2.2	
2.94	10.0	156	1.92	G535		22	32.0	2.5	
2.77	10.4	150	1.64			18		2.9	
3.88	9.41	124	2.50	G652		24		2.0	
2.44	7.6	122.7	.971	G535		23		1.8	
3.20	11.8	205	2.15	"		26	45.0	2.0	
3.35	10.2	164	2.07	"		20		2.42	
3.14	10.1	151	1.99	"		18		2.3	
2.85	10.65	213	2.02			26		2.0	
4.72	9.18	129	3.40			36	45.0	1.6	METAL SPARS
1.79	11.4	388	1.25			32		1.5	TAILLESS
3.78	11.3	158	2.44	23012 MODIFIED		33			DIHEDRAL
3.48	11.42	161	2.19	G549	G676	25	45.0	2.2	2.5° DIHEDRAL 7° WING TWIST
3.59	11.35	150.5	2.34	G449/23012/0012		22		2.46	DIHEDRAL
3.38	10.95	163	2.30	G535	23012	25.3		2.26	
3.28	10.75	204.5	2.37			26	41.0	2.0	FULLY AEROBATIC
[illegible]95	13.3	114	5.10	G549		27	65.0	3.0	
[illegible]78	9.7	175	1.71	6212	2412	18		2.8	
[illegible]05	11.9	180	1.80			16	37.0	3.0	
3.76	10.2	125	2.24	24 SERIES		23	48.0	2.5	3½° WING TWIST
2.80	13.8	285	1.55			17		3.1	SWEEPBACK
4.38	15.15	168	2.36	G535		18.4		3.3	5° DIHEDRAL
3.57	14.15	247	1.96			28	45.0	2.3	
3.68	11.35	215	2.05	2319	2312	25	45.0	2.12	3½° WING TWIST
4.12	14.5	235	2.62			25.5	47.0	2.1	DIHEDRAL SWEEPFORWARD
3.19	15.5	204	1.42			17		3.2	
3.02	13.9	240	1.81			20		2.5	
4.00	16.5	214	2.10	4412		23.5	44.0	2.5	ALL METAL

WHO *DID* FLY FIRST?

We publish this article in the interests of truth and accuracy. The Editor will comment in our next issue.

ON AUGUST 14, 1901, in Bridgeport, Connecticut, U.S.A., a German, named Gustav Weisskopf, succeeded in making the first power-sustained flights in an aircraft which he had both designed and built. Comparatively little was known of the work of this aviation pioneer in America.

It was only accidentally in 1933 that Stella Randolph, whilst making a study of early American periodical literature, chanced upon some notices giving details of these early flights. This discovery led her to make further investigations. After three years of research, Stella Randolph succeeded in collecting a considerable amount of evidence which throws new light on Weisskopf's pioneer work. The results of her searching inquiries are described in a book entitled " The Lost Flights of Gustave Whitehead " (published by Places Inc., Barr Building, Washington, D.C.), which she published in 1937.



Whitehead Plane No. 21. Note 2 air screws driven from one motor.

Gustav Weisskopf was born on January 11, 1874, in Leutershausen, Middle Franconia, and not as given in this book on January 1, 1874, in Höchst am Main.

TISSUE PAPER PARACHUTES

Even in his earliest youth Gustav Weisskopf experimented with tissue paper parachutes, trapped birds in order to study their habits of flight and, whilst still only thirteen years of age, experienced his first crash when he attempted a glider flight from the roof of his grandparents' house. When Weisskopf got wind of Lilienthal's work, he went to Berlin to volunteer his services. Soon he took to travelling, first to Holland, then to Brazil, where he worked as a sailor for six years, and finally in 1895 entered the U.S.A., where he ultimately settled. In Boston he was commissioned by a publisher of a journal to build a glider of the Lilienthal type, which, however, proved unsuccessful in flight. Later Weisskopf moved to Buffalo after staying for a time in New York, and there met Luisa Tuba, whom he married in 1897.

STEAM POWER ENGINE

At about this time Gustav Weisskopf decided to drop his German name and assumed its English equivalent — Gustave Whitehead. He then moved to Johnstown, Pennsylvania, and from there to Pittsburgh. Determined to continue his experiments in power-driven flight, he designed a steam engine and boiler which were to serve as the power-unit of his aircraft. With this machine he succeeded at the end of April 1899 in flying a distance of 700 m., but crashed into a three-storied house and was severely injured.

In Bridgeport Weisskopf built a wide variety of gliders and power-driven aircraft, he himself designing the necessary engines. These early engines were supposed to have run on carbide (acetylene).

ONE AND A HALF MILE FLIGHT

On August 14, 1901, Weisskopf flew a distance of 800 m., carrying out on the same day three further flights, the best of which covered a distance of 2,500 m. The maximum height attained during these flights was said to be 60 m. Weisskopf, however, was dissatisfied with these successes and set about designing a new petrol engine. Using the material of the old aircraft, he constructed a new model which took the air on January 15, 1902, covering a distance of 3,500 m. Further flights made with this machine were said to have extended the total distance covered to 11½ km.

VISITED BY WRIGHT BROS. IN 1902

Shortly afterwards the Wright brothers were said to have visited Weisskopf.

It will be remembered in this connection that the Wright brothers made their first powered flights on December 17, 1903.

No doubt it may well be on account of Weisskopf's German origins, that his achievements have been almost entirely overlooked in the U.S.A.

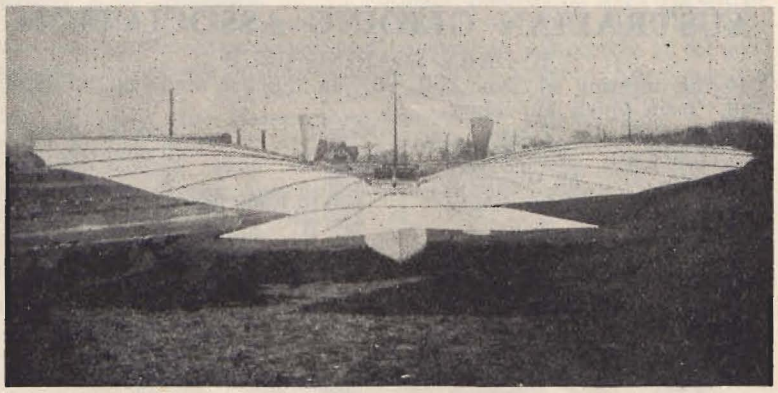
Weisskopf died of heart failure at the age of 53.

AMERICAN PROOF

Notwithstanding the detailed accounts that such important journals as the *American Inventor*, *Aeronautical World* and the *Scientific American* had published about Weisskopf's flying activities, the world has chosen to forget his contribution to the history of aviation. Thanks, however, to the article in the *New York Herald* of August 19, 1901, and to Stella Randolph's book, Weisskopf's work is not altogether lost to us.

In this connection it is interesting to note *that there were also other early experimenters* who shortly before the historic powered flights of the Wright brothers were likewise engaged in solving the problems of engined flight. However, speculations as to who was

first in the field is less important then that one should obtain a clearly defined picture of the early historic developments in powered flight. It would be difficult to assess the evidential value of the material so painstakingly collected by Stella Randolph since errors tend only too easily to creep into the details as reported by uninitiated laymen. The organisation of authorised observers, as would attend such activities to-day, was not the established custom of Weisskopf's times. By far the best evidence is furnished by the photograph. Even the Wright brothers were given little credence for their statements about their successful flights until they were obliged to substantiate their claims by disclosing their aircraft to the public.



Rear View of Same. Note Absence of Rudder.

PHOTOGRAPHIC EVIDENCE

Of interest and importance, therefore, is the photographic evidence which Stella Randolph has collected. These pictures clearly show how far Weisskopf had already anticipated the principles underlying the design of motored aircraft. The accompanying photographs taken from Stella Randolph's book show Weisskopf's plane No. 21. Note the four-cylinder engine which through reduction gearing operated the two two-bladed propellers of comparatively large diameter. The span of plane No. 21 has been estimated at 33 ft., and, taking the cord at 6 ft., the wing area would approximately amount to 200 sq. ft. With a light plane of this type there seems no reason to doubt that it was able to leave the ground.

DAYS THAT ARE GONE



SUBSCRIPTIONS

The circulation of *Sailplane and Glider* is limited by its paper quota. This is the reason for the reduction in size, and the thinner and therefore lighter paper. The publishers can dispose of far more copies than can be printed. To be sure of your copy, therefore, it is necessary to take out an Annual Subscription of 13/- post free for twelve numbers. Publication date is the 25th of the month dated the succeeding month. Cheques, Money Orders, etc., payable to *Sailplane and Glider*, and crossed.

AUSTRALIAN GLIDING ASSOCIATION.

SYDNEY SOARING CLUB

Flying meeting at Box Hill, 23/7/44. Flights made in " Slingsby Gull " from winch launchings.

Take Off.	*Name.*	*Height.*	*Time in Air.*
11.30 a.m.	H. Ryan	1,000 ft.	9 minutes.
11.45 ,,	M. Waghorn	1,000 ,,	4 ,,
12.04 p.m.	S. Newbigin	900 to 1,300 ft.	26 ,,
12.42 ,,	L. Schultz	600 ft.	12 ,,
1.06 ,,	H. Ryan	2,100 ,,	43 ,,
2.01 ,,	M. Waghorn	800 ,,	5 ,,
2.13 ,,	S. Newbigin	600 ,,	4 ,,
2.33½,,	L. Schultz	600 ,,	4 ,,
2.51 ,,	H. Ryan	600 ,,	4 ,,
3.5 ,,	M. Waghorn	650 ,,	5 ,,
3.32½,,	S. Newbigin	800 ,,	5½ ,,
3.37 ,,	L. Schultz	800 ,,	5 ,,
3.55 ,,	H. Ryan	900 ,,	6 ,,
4.8 ,,	M. Waghorn	800 ,,	4½ ,,
4.20 ,,	S. Newbigin	800 ,,	6 ,,
4.36 ,,	L. Schultz	600 ,,	4 ,,

NEW SOUTH WALES

A.W.A. GLIDING AND SOARING CLUB

In a letter dated 16/7/44, Mr. Gil Miles advises of the formation of this club. He states that a " Zogling " primary glider and trailer have been purchased. Work is in progess on recovering the primary at a big garage at 190, Croydon Road, N. garage at 190, Croydon Road, Croydon, N.S.W. It is expected to take about 2 to 3 months to make the machine airworthy. Flying membership is being limited to 20 members (from A.W.A. only).

The Office Bearers are :—*President*, Mr. Parkinson (Works Manager) ; *Vice-President*, Mr. L. McCann (Machine Shop) ; *Hon. Secretary*, E. Baker (Aero Instruments) ; *Hon. Treasurer*, L. Fitzsimmons (Aero Instruments) ; *Chief Instructor*, Mr. Harry Ryan (Aero Instruments) ; *Assistant Instructor* Mr. Gil Miles (Test Room).

VICTORIA

THE GLIDING CLUB OF VICTORIA

On 23/7/44 the new No. 3 winch was tried out with satisfactory results. On this occasion a new flying ground at Fawkner was used and 4 flights were made with the " Merlin " two-seater. Flying was then abandoned owing to the exceptionally high wind. On one flight the " Merlin " went backwards for over 100 yards after releasing the towline.

On 5/8/44 four flights were made with the " Merlin," and on the last flight the winch driver failed to stop the drum, resulting in the steel ring on the end of the towing wire being wound into the automatic spreader, resulting in a full stop to all the works and wrecking the chain drive to the spreader. This was repaired overnight and on Sunday (6/8/44) flying was resumed.

The Club's " Grunau Baby II " was given its first flights since recovering and overhaul, and was flown by Roberts, K. Davies and Bartram in light wind conditions. Bartram reached 500 feet on a downwind launch and flew around for 15 minutes, reaching 950 feet at one stage. In addition 18 flights were made in the " Merlin " for a total of 48¾ minutes in the air. F./Sgt. Ransford, of Pinjar Soaring Club, W.A., and two other R.A.A.F. members from W.A., had flights in the " Merlin." Acknowledgment is made of their donation of 25/- towards A.G.A. expenses.

"GRUNAU BABY II" FOR SALE

F./O. Arthur Farmer advises that his " Grunau " and trailer, full set of jigs and prints, are for sale for £200 cash. The machine is in first-class condition — has flown about 30 hours and has an excellent performance. The W.A. records for duration (5 hours 7 mins.) and height (8,500 feet) were made by the owner in the machine.

His address is : 415935, F./O. A. B. Farmer, C.F.S., R.A.A.F. Parkes, N.S.W. Home address is now : 28, Subiaco Road, Subiaco, Western Australia.

THE GLIDING CLUB OF VICTORIA

MEMBERS IN DEFENCE SERVICE AND ELSEWHERE

Frank Alexander is now out of the A.I.F. after a long term in Northern Australia.

Norm. Boase is on a sheep station : " Raby " Warren, N.S.W

Keith Brawn was in Tobruk, Palestine and Syria, and later in New Guinea. His photo was in the *Sun*, 2/12/43, with another member of the A.I.F., depicted as—" unshaven and veterans of the Catelberg attack."

Jack Bruce, of Ringwood, is now in the R.A.A.F. Address not known.



THE OLD STAGER.

" Doc " Heydon, age 65. Box Hill, Easter, 1944.

Howard Dalton is back in Tasmania. Address: Box 50, Ulverstone, Tas.

Jack Edmonds is in the R.A.A.F. as a draughtsman, stationed at Ascot Vale.

Eric Ehrenberg was in A.I.F. from May 1940 to March 1944. He served in Middle East (Tobruk, 11/4/41 to 27/8/41), and New Guinea, May 1942 to October 1943. He transferred to R.A.A.F., March 1944, and address is now: 449510, A.C.II, Ehrenberg, E. J., D Squadron, Flight D.2, 4, I.T.S., R.A.A.F. Victor Harbour, S.A.

Alan Fraser is in R.A.A.F., and after much experience on Ansons, Flying Boats, etc., is now stationed at Ballarat. Address is: F./Sgt. D. A. Fraser, No. 1 W.A.G.S., R.A.A.F., Ballarat.

Bill Galbally is in R.A. Navy. He saw much active service on the "Westralia." Address is now: Writer W. F. Galbally, R.A.N., Rushcutters Bay Naval Depot, Sydney.

Group Captain **W. R. Garrett** is now C.O. R.A.A.F. Station, Narromine, N.S.W.

F./Lieut. **Fred Gascoigne,** D.F.C., R.A.A.F., Sunderland Flying Boat Navigator, was recently home on leave after nearly three years' active service. Address is: No. 40 Squadron, R.A.A.F.

Bruce Hearn is in R.A.A.F., now flying Wirraways at Deniliquin. He had 75 hours up when he left Benalla in April 1944. Address: 438392 L. A. C. Hearn, 47 Course, No. 7, S.F.T.S., R.A.A.F. Deniliquin.

Jack Hearn is also at Deniliquin and is at present a flying instructor on Wirraways. Address: F./O. J. D. Hearn, S.F.T.S., R.A.A.F., Deniliquin.

Keith Hearn is now in Canada. His address (per airgraph letter received 8/7/44) as: 438312, L.A.C. K. E. Hearn, Auspost, Ottawa, Canada.

Jack Henderson, transferred from A.I.F. to R.A.A.F. in January 1944. Address is: 431848, L.A.C. Henderson J. Overseas postal address: 466, C./-R.A.A.F., Base P.O., Melbourne.

Robert Hepworth. 39670, L.A.C. R. H. Hepworth, Sec. 14, R.A.A.F., Laverton.

George Johnson in a letter 23/3/44 advises his address: V.X. 85093, Lieut. Johnson, G. E. H.Q., 19th Aust. L. of C. Area Signals, A.I.F. Australia.

Ian Kinross has had much flying experience on active service and has been mentioned in despatches ("Age," 17/6/44). Address: F./O. Ian Kinross, Air Force Mess, R.A.A.F., Laverton.

Wally Knight, after a long term at Maryborough, Queensland, is now at Laverton. Address: 205849 Sgt. W. Knight, c/o Sergeant's Mess, R.A.A.F., Laverton.

Wing Cdr. **Josh McDonald** was killed in aircraft accident 7th December, 1941. He took off in a Hudson from the island of Laha, and the machine unexplainedly exploded at the height of about 400 feet. He joined the R.A.A.F. at Point Cook in January 1935 and obtained his wings in the following December. In 1937 he was sent to Cranwell, England, for special training and returned to Australia in March 1940. He was stationed at Darwin from July 1941 with No. 13 Squadron. He was Deputy-Director of Training with Air Vice-Marshal Jones, Director.

Eric McGeehan is again back at Darwin after a short period at Laverton and Ballarat. His address is: P.O. E. R. McGeehan (224), Group 611, R.A.A.F., Darwin, N.T.

Cyril Moore was reported missing 5/7/43. He was wireless air gunner on a Stirling bomber which failed to return from operations in the Friesian Islands area. "Argus" list 20/3/44, he was posted "previously missing now presumed dead."

Eric Moran is now C.P.O. on the H.M.A.S. "Shropshire." His address is: C.P.O. E. Moran, c/o H.M.A.S. "Shropshire," c/o G.P.O.

John Murray, in a letter received 31/7/44, states his new address: V.165616, Sapper J. Murray, 7th Aust. Army Troops, R.A.E., Morphett Creek, Northern Territory. At his previous vocation he was fortunate enough to get sone flying with Harry Moss, previously of Melbourne.

John O'Rourke is now in the R.A.A.F. Address is: 450010 A.C.2 O'Rourke, J. L., Aerodrome Defence Wing, Squadron 4, R.A.A.F., Shepparton.

Norm. Plomb, R.A.A.F., Laverton.

John Quinn is in the R.A.A.F. Address not known.

Ian Robinson was posted "missing air operations" (16/2/44, "Age"). He was lost over Berlin in a Lancaster Bomber on 24th December, 1943. A P.O.W. card has been received by his mother as follows: —"Don't worry. Am doing fine and am unhurt. Food O.K. No permanent address yet." In a further letter dated 17/4/44:—"All the best to the lads—it's good soaring country here." His address is: P.O. I. W. Robinson, Aust. P.O.W., 269797; Stalagluft 3, Germany.

Jim Robinson, A.I.F. Address is: V.X. 66345, Tpr. Robinson, J. M., "B" Squadron, 2/4 Aust. Am'd Bde., A.I.F., Australia.

Jack Saffron is in the R.A.A.F. Address unknown.

Kevin Sedgman. R.A.A.F., Deniliquin. Exact address unknown.

Geoff. Taylor was reported lost in a Lancaster Bomber over Berlin ("Sun," 27/10/43). Later reported P.O.W. (24/11/43). In a P.O.W. letter dated 2/2/44 he states:—"Bored, no flying—is well—is writing a play for camp theatre and writing for camp newspaper." Address is: Aust. 5414 F./Sgt. Taylor, G., P.O.W. 259915, Stalag 4.B., *via* Luft. 3, Germany.

Roy Walker was killed in an R.A.A.F. aircraft training accident in Southern N.S.W. ("Age," 19/3/43).

Ernie Weller advises new address 27/3/44: W.O.I. Weller, E. E. V. 79113, 9th Aust. Adv. Base, W. Shops, A.E.M.E., Charters Towers, North Queensland.

Jack Whitlock, in R.A.A.F., address not known.

Les. Williams (letter 2/4/44) advises address: V.X. 117474, S./Sgt. Williams, L. R., 113 Aust. Bde. Ord. F.D., Park, A.I.F., Aust.

Carr Withall was reported missing in the Battle of Britain. He was Squadron Leader of the Nizam of Hyderabad's Fighter Squadron which took part in three air battles off the naval area of Portsmouth on August 12th, 1940, and from the last one at night he failed to return.

FLYING OPERATIONS. Owing to the wet condition of the Mordialloc Flying Ground, activities have been transferred temporarily to Fawkner where a new ground is being tried out. The new No. 3 winch is being used and the two-seater "Merlin." Flying is to be carried out every fortnight (week-end, 6th August, 1944, *et seq.*).

AUSTRALIAN NEWS

By MERVYN WAGHORN

SO many readers of the SAILPLANE are unable to indulge in their favourite sport that I feel they would be interested to hear from one ex-member of the London Gliding Club who has been lucky enough to find himself, not only in a country where gliding is possible, but in the midst of friends who are keen sailplane pilots.

I arrived in this country to find myself associated with Martin Warner and Steve Newbigin, both of whom may be known to readers of the SAILPLANE for their exploits in the " Slingsby Gull," and it was not long before I had met Doctor Heydon, owner of the " Gull," Harry Ryan and Len Schultz, who is holder of the Australian height and distance records.

In spite of wartime difficulties the Gliding Movement in Australia is fairly healthy. Although a little private motoring is permitted, petrol rationing is very severe, so that flying usually takes place only when sufficient of that precious commodity has been saved up.

ENORMOUS DISTANCES

Mr. Duckworth, of Melbourne, Honorary Secretary of the Australian Gliding Association, gathers information about Gliding activities from the whole country and distributes a periodical report to all who are interested. This excellent work keeps each group informed about the activities of other groups, and is helping to co-ordinate the Gliding Movement throughout the country. Reaching unity of purpose may be one of the biggest difficulties in this country later on, owing to the enormous distances that are involved.

During the war gliding activities have been reduced in Sydney to individual efforts by small groups of people. There is no thoroughly active Gliding Club in Sydney at the moment, although there are several either temporarily suspended or in the process of being re-formed.

LACK OF HILL SITES

Another problem is the dearth of hill soaring sites. The closest one is about 80 miles away at Kiama. This has resulted in most of the gliding, including training, being carried out by means of wicnh launches or auto-tow from flat country.

I have been fortunate enough to have flown three of the machines which are privately owned in this part of the country. The first was a secondary two-seater design and built by Sgt. J. L. Munn, R.A.A.F. It is named " The Falcon." It is a fairly sturdy strut-braced tandem two-seater fitted with a single wheel for landing and represents an extremely stout effort on the part of its designer and builder who is now stationed in Darwin.

AUSTRALIAN " KITE "

The second was a machine designed and built by Martin Warner, and is known as " Kite II." His first design—" Kite I "—which is very similar, is still flying in South Australia. The Kite is a remarkably good design, and I propose to send you a detailed description as soon as I have time to prepare it. It is a fully cantilever machine with a triangular boom tail. The weight is very low and its performance and feel remind me very much of the " Desoutter Grunau " at Dunstable, except that the elevators and rudder are lighter.

I managed to do a thermal flight of 40 minutes from a winch launch in this machine on Boxing Day of last year. This was my first soaring flight for several years and I got an immense " kick " out of it.

The third machine is the " Slingsby Gull," which is owned by Doctor Heydon and flown by a small group of people whom I mentioned earlier in this letter, all of whom have been mentioned in the SAILPLANE from time to time.

POWER PILOT AGAIN

When I arrived here the " Gull " was broken, and it has taken nine months of spare time to repair it. The machine had been landed on a post by a power pilot and the port wing spar had been broken in two just outboard of the bend in the wing. After being repaired it was first flown at Easter time this year, and we have since flown on several more week-ends. I enclose with this letter, three photographs taken during the gliding week-end at Easter, and hope to send you similar photographs of Martin Warner and Len Schultz later.

This flying has all been from winch launches from the flat, at a place called Box Hill about 30 miles from Sydney. We manage at this place, to use over 4,000 feet of cable and in a slight breeze, the average height reached on a winch launch is over 1,000 feet.



MERVYN WAGHORN.
Box Hill (Nr. Sydney, N.S.W.), Easter, 1944.

WHAT! NO HAROLD PERRIN?

I was surprised to find that there is at present no body authorised to issue Gliding Certificates in Australia. I am sure this is a handicap to the movement, and we have taken some steps towards rectifying it. We have discovered that a Committee known as the Associated Aero Clubs of Australia are the local representatives of the Royal Aero Club of the British Empire, and we have approached this Committee, through Mr. Duckworth, to ask if the necessary arrangements can be made. I understand that the Committee has discussed the matter, and a letter has been forwarded to England. Possibly this matter can be expedited. I would be very grateful if you could bring it to the attention of Mr. Ashwell-Cooke.

May I extend to you and all my friends of the Gliding Club, greetings from Australia, and the hope that in the near future we shall be gliding again at Dunstable.

CROSS COUNTRY FLYING

(*Continued from Page* 9).

Performance is as given in the tabulated figures for the four machines reviewed.

WING SECTIONS

In order to improve the cruising characteristics of the machine the wing sections chosen vary somewhat from conventional practice; the root section is 23015, varying to 23013.8 at the inboard end of the Aileron (the " 13.8 " suffix indicating the thickness of the section as a percentage of the chord). The section then modifies to N-71 at the tip in order to give reasonable anti-tip stalling characteristics. Twist on the wing has not been fully ascertained but should be in the region of 3°.

As small machines have been known to have unsatisfactory handling qualities in flight, particularly with regard to longitudinal stability, a long tail lever-arm has been adopted. This corresponds to a line of development indicated by some of the more recent German types. A fin and tailplane are also utilised as blind-flying in clouds indicate a need for the very best stability characteristics.

Due to the low weight of the machine empty, a single wheel undercarriage has been omitted, the skid being sprung on three rubber blocks. Plain flaps are incorporated which extend as far as the Aileron in two sections; the inner section hinges so that the root of the wing is not affected when the flaps are lowered and this, it is anticipated, will tend to improve the airflow over the tailplane. In normal flying these flaps will be raised or lowered by a few degrees in order to slightly modify the wing section; when landing they will be lowered 30 to 45 degrees.

DIVE BRAKES

Dive brakes of DVL pattern are incorporated in the wings and can be actuated by a lever in the cockpit to control the approach when landing in small fields, apart from their normal function of limiting the diving speed should the machine fall out of control when cloud flying.

The windscreen is to be a one-piece moulding in transparent plastic, the small degree of double curvature required permitting the bending to be carried out on very elementary moulds. In view of the strength requirements for windscreens when diving it may be necessary to fit extra members, in which case they will be made of the same material as the windscreen.

Instruments will include an electric turn and bank indicator, A.S.I., altimeter, compass, watch and possibly two variometers mounted on each side of the cockpit so that they can be readily seen whether the machine is doing left or right-hand turns when climbing. Due to the wide space forward of the pilot it is proposed to carry appropriate maps suitably backed so they can be slipped between the top longerons and suitably oriented for straight flying.

PLY COVERED

Construction will be of conventional type, a plywood monocoque fuselage on light bulkheads. The wing is ply covered back to the mainspar and the torsion member at the root. The fin and tailplane will be ply covered, the fin being built integral with the fuselage.

As it is impossible at the moment to carry out any construction it is hoped that a flying model 68 inches span will be built in order to check up on the general flight characteristics, including the application of flaps.

Letters to the Editor

Goodwell House,
Brancepeth,
Co. Durham.
Oct. 12th, 1944.

DEAR SIR,

Mrs. Platt's description of Argentine gliding are of great interest, but I cannot accept the implication in your Editorial comment that we must necessarily emulate these methods. You ask, for instance, how many Silver " C " holders can do aerobatics on the scale described. But how many want to? How many, that is, in their capacity as soaring pilots? As all-round airmen, they may quite justifiably consider aerobatics an essential part of their education; so, for that matter, is the ability to fly a helicopter. But let us move over to where the all-round airmen can't hear; now what have loops and stall-turns to do with soaring? I write only as a humble " C " pilot, but I submit that they have nothing at all to do with it. It just happens that sailplanes can be made to perform certain aerobatics, and if any pilot likes to amuse himself in this way, he will certainly derive some benefit, but the ability to do so is no part of soaring technique, and therefore should not appear in the requirements for soaring certificates.

Where a government subsidises gliding for military reasons, the case is naturally different; who pays the piper calls the tune. But it is to be hoped that soaring enthusiasts in this country will insist on the movement retaining the degree of independence that befits a sporting fraternity, even at some cost.

Yours faithfully,
W. E. HICK.

Editorial Comment

MR. HICK'S letter raises a point of some importance —but only to the individual. Before the august presence of " C " certificate No. 89, the humbler holder of " B " 2009 must bow his head. But he wonders whether, if what those daring cloud pilots who hold the Golden " C " certificate tell him is true—that you never know what may happen to you in a cloud—he would not feel more confident in himself and his machine knowing that together they had carried out every aerobatic known. Arguing by analogy, the holder of " B " 2009 once did a parachute jump—and has never had any fears about baling out since.

Does not the same thing apply to aerobatics?

But let us hear what others think about this, please.

911573 Cpl. Fripp,
S.H.Q. R.A.F., Skeabrae,
Kirkwall, Orkney Isles.
Oct. 7th, 1944.

DEAR SIR,

Thank you for your very kind offer to mention, in the SAILPLANE, about the "Grunau Baby" wing section drawings that I require to make my set of Grunau plans complete. It's pretty lonely up here and to while away my leisure hours I'm making all the parts from material which I've had sent up from home. I have built most of the bulkheads, the rudder and have just completed all the metal fittings. I hope to start on the wing ribs now, although my pre-war supply of spruce will soon become exhausted I fear.

The last time I saw some thermal soaring was in July, when I visited Dudley Hiscox at his gliding school, and watched him keeping in trim, catching thermals off the winch, in the Rhonbussard. Now, however, I'm rather off the map, as far as gliding is concerned, and the only soaring I ever see is done by the seagulls which abound on these islands. Thermal soaring on these islands would be ideal, owing to the ground conditions, and often clouds can be seen forming above the hills at a really terrific speed.

Let us hope that the present spot of bother will soon be over and the time not far distant when the SAILPLANE can record the club news and record attempts of the British gliding movement.

Yours sincerely, KEN. J. FRIPP.

CPL. FRIPP'S LETTER

Perhaps some of our readers can and will oblige Corporal Fripp with the loan of the wing section drawings he requires.

LEICESTER AVIATION CENTRE

Report by Gliding Sub-Committee (Chairman, Mr. J. C. Rice) to General Committee.

THE first meeting of the Gliding Sub-Committee was held on October 16th. The gliding programme was discussed and it was unanimously accepted that a gliding club must be formed, the name to be Leicestershire Gliding Club. It was resolved that approach be made to all interested parties to ascertain what members could be obtained for the new gliding club, that a prospectus be drawn up laying out the aims of the club, and that a series of lectures on gliding subjects be arranged after the prospective members have been contacted.

Note was made that the Flying Sub-committee intended to provide aero-towing facilities for gliders and that the gliding and power flying ground should be within easy reach of each other. It was considered desirable from this angle that if the power machines were at Ratcliffe and/or Rearsby, the best place for the gliding operations would be at Rearsby. Sir Lindsay Everard promised that provision would be made for gliding facilities at Rearsby as soon as circumstances permitted.

The Chairman arranged to contact the Leicester Association of Engineers for permission for the members of the L.A.C. to attend a lecture on "Aeronautical Development" by Dr. Roxbee-Cox.

Interest was also displayed in the idea of giving publicity to gliding matters at any demonstration of indoor flying that might soon be arranged by the Aero-modelling Sub-committee.

THE OLYMPIA SAILPLANE

IN 1935 the Olympic Games for the first time included soaring contests among the events, the competitions being won by Germany with a team of three using the "Grunau Baby."

It was anticipated that a greater number of countries would compete in this field at the next Games, which were to have been held in 1940, each nation building their own machines to the same standard design.

An international committee was appointed to formulate the initial specification and final judging of a competition to choose the standard machine for the 1940 contest. An informative article on the work of this committee by B. S. Shenstone, the British representative, was printed in the March 1944 issue of AERONAUTICS. The specification design was based on a space limitation of 15 metres.

The design competition was won by the "Meise" Sailplane, later re-christened the "Olympia," which thereby proved itself the outstanding machine of its class. Although the outbreak of hostilities prevented the Olympic Games being held, but for the war Great Britain would probably have entered a team of these machines in the contest.

Little has been heard of the "Olympia" Sailplane since the outbreak of war, but Chilton Aircraft, of Hungerford, Berkshire, now announce that they will be manufacturing this machine after the war, and the first one has been ordered by Mr. Dudley Hiscox for a syndicate of well-known soaring pilots. In addition to supplying complete "Olympias," Chilton Aircraft will shortly make available complete sets of English drawings for those who wish to build their own sailplane to this design.

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Wing Commander G. H. Keat



WING Commander George Keat has been posted to command a Station in the Near East, under Transport Command, and has already left for his new appointment.

For three years as D.A.T.C. 2 he has guided the fortunes of the A.T.C., almost from its inception, at Princes House. With over 25 years' flying experience, some of it as an Air Line pilot, he might be said to have flying in his blood. Despite the difficulties of such opposition as was bound to arise when a revolutionary proposal like the A.T.C. taking to gliding was put forward, "George" battled manfully for the Cadets, and the success of A.T.C. Gliding, although he would be the first to acknowledge that it fell far short of what he had wished, is in a large measure due to his doggedness

"George" has one outstanding characteristic, as one who has served with him can testify, and that is that he is always out to help his colleagues and those under him to the limit of his power. Of him it may be said that his judgment, like that of other men, might be questioned, but never his goodwill. He went East with the good wishes of a host of friends in the A.T.C., and the hope that his new appointment will not keep him away too long. We shall miss his cheery face in Kingsway. V. B.

ROYAL AERO CLUB GLIDING CERTIFICATES

THE following Gliding Certificates have been issued by The Royal Aero Club during the past month:

	"A" *Certificates* (98)	*Gliding School*	*Date taken*
1964	Kenneth Hamshaw Hughes	N.E. 26 E.G.S., Greatham	8. 8.44
1965	Martin Scaye	203 E.G.S., Newtownards	12. 7.44
1966	Donald Bruce Hamilton	Ditto	30. 7.44
1967	Leslie Thomas King	M.48 E.G.S., Bretford	23. 7.44
1968	John Michael Kidd	M.44 E.G.S., Bretford	17. 8.44
1969	Kenneth Edward Swalwell	N.E. 26 E.G.S., Greatham	16. 7.44
1970	Laurence George Hothersall	M.45 E.G.S., Meir	28. 7.44
1971	Frank Pepper	Ditto	28. 7.44
1972	Paul Lidgett Bunting	M.44 E.G.S., Bretford	17. 8.44
1973	Michael Stuart Barber	Ditto	17. 8.44
1974	Roger Scott Mason	C.123 E.G.S., Bray	20. 8.44
1975	Stanley Harrison Moore	N.E. 23 E.G.S., Yeadon	18. 9.43
1976	John Dudley Ruffle	C.121 E.G.S., Halton	27. 8.44
1977	William John Hodgkins	203 E.G.S., Newtownards	19. 8.44
1978	Frank Ollerenshaw Harber	Royal Air Force	20. 8.44
1979	Donald Campbell-Treanor	S.4 E.G.S., Abbotsinch	14. 7.44
1980	Desmond J. McCartney	Ditto	7.11.43
1981	John d'Arcy Conway	Ditto	14. 7.44
1982	George Graham Crawford	203 E.G.S., Newtownards	29. 7.44
1983	Vernon Joseph Huse	C.128 E.G.S., Theale	18. 6.44
1984	Derek James Miles	C.121 E.G.S., Halton	28. 7.44
1985	Andrew Harris	203 E.G.S., Newtownards	19. 8.44
1986	Ronald Ernest Utiger	M.44 E.G.S., Bretford	17. 8.44
1987	Jack Marshall Cooke	184 E.G.S., Woodford	27. 8.44
1988	John Edward Dinnage	S.E. 161 E.G.S., Brighton	13. 8.44
1989	John Herbert Carden	Ditto	13. 8.44
1990	Sydney Mark Tidy	Ditto	7. 8.44
1991	Gordon Derek Tester	Ditto	6. 8.44
1992	Gordon Henry Daniels	Ditto	15. 7.44
1993	Percy Robert Solder	L.146 E.G.S., Shenfield	8. 8.44
1994	David John Cooper	167 E.G.S., Woking	20. 8.44
1995	Clifford William Collins	M.44 E.G.S., Rearsby	30. 7.44
1996	Raymond Rupert Wheeler	C.121 E.G.S., Halton	27. 8.44
1997	Leonard George Jackson	L.141 E.G.S., Kidbrooke	28. 8.44
1998	Peter John Bullivant	W.65 E.G.S., Cardiff	26. 8.44
1999	John Dakin Nelson	184 E.G.S., Woodford	27. 8.44
2000	Edward Ernest Geall	C.122 E.G.S., Harrow	31.10.43
2001	Albert John Chadd	L.141 E.G.S., Kidbrooke	27. 8.44
2002	William Henry Savage	203 E.G.S., Newtownards	19. 8.44
2003	Harry James Harris	M.48 E.G.S., Bretford	23. 7.44
2004	Howard Coleman Shepherd	C.123 E.G.S., Bray	5. 8.44
2005	Donald Edwin Howell	Ditto	27. 8.44
2006	John Thompson Patterson	203 E.G.S., Newtownards	29. 7.44
2007	Augustus Reginald Whittaker	M.44 E.G.S., Bretford	18. 8.44
2008	Michael Frederick Haughton	Ditto	18. 8.44
2009	Vernon Egerton Rowland Blunt	C.126 E.G.S., Booker	19. 8.44
2010	Reginald Albert Pitman	S.W. 81 E.G.S., Yeovil	19. 7.44
2011	Martin Donald	S.W. 81 E.G.S., Yeovil	18. 6.44
2012	John Digby Hearn-Collinson	Ditto	18. 6.44
2013	Reginald James Browne	203 E.G.S., Newtownards	29. 7.44
2014	Reginald Victor Poulter	C.125, E.G.S., Denham	23. 7.44
2015	Kenneth Howard Ashton	S.E. 161 E.G.S., Brighton	7. 5.44
2016	Peter Richards Stevens	Ditto	6. 8.44
2017	Peter William Brett Semmens	C.123 E.G.S., Bray	7. 8.44
2018	Robert Arthur Thomas	Ditto	16. 7.44
2019	Ronald Victor Brown	Ditto	5. 8.44
2020	Alan Newman	N.E. 26 E.G.S., Greatham	3. 9.44
2021	Peter Allan Lander	M.44 E.G.S., Bretford	17. 8.44
2022	Graham Ira Twigg	M.47 Derby and Lancs.	9. 9.44
2023	Donald William Roy Bond	Ditto	10. 9.44
2024	Anthony Michael Pilch	M.48 E.G.S., Bretford	25. 8.44
2025	John William Jackson	C.121 E.G.S., Halton	27. 8.44
2026	John Bryan Jefferson	M.47 Derby and Lancs.	10. 9.44
2027	Victor Noel Pinchbeck	M.44 E.G.S., Bretford	18. 8.44
2028	Roy Greenhalgh	N.W. 184 E.G.S., Woodford	2. 9.44
2029	Anthony Derick Chidlow	M.45 E.G.S., Meir	30. 7.44
2030	Raymond John Michie	Ditto	30. 7.44
2031	Winford Hugh Protheroe Price	W.65 E.G.S., Cardiff	12. 9.44
2032	Ralph Frederick Fisher	M.47 Derby and Lancs.	10. 9.44
2033	Thomas Wilkinson Smith	187 E.G.S., Stretton	10. 9.44
2034	Arthur Peter Lamb	M.48 E.G.S., Bretford	25. 8.44
2035	Lawrence Victor Chandra Roy	E.107 E.G.S., Lincoln	10. 9.44
2036	Desmond James Everard Burdett	M.44, E.G.S., Rearsby	30. 7.44
2037	George Geoffrey James Goodey	C.123 E.G.S., Bray	27. 8.44
2038	Geoffrey Kenneth Allan Bradshaw	Ditto	6. 8.44
2039	Leslie William Frank Akers	Ditto	27. 8.44
2040	Derek John Stevens	S.E. 161 E.G.S., Brighton	16. 7.44
2041	Russell Frederick Crick	C.123 E.G.S., Bray	5. 8.44
2042	Thomas Arthur Rees	Ditto	27. 8.44
2043	Norman Alfred Brogden	M.48, E.G.S., Bretford	10. 9.44
2044	Haryr Wright	N.W. 184 E.G.S., Woodford	4. 9.44
2045	Frank Cecil Batley	M.48 E.G.S., Bretford	3. 9.44
2046	John William Michael Boulstridge Bailey	Ditto	25. 8.44
2047	Kenneth Hillary Walton Turner	M.44 E.G.S., Bretford	18. 9.44
2048	Bryan John Howe	M.48 E.G.S., Bretford	10. 9.44
2049	Derek Harry Salmon	Ditto	10. 9.44
2050	Donal Kenneth Gordon Ross	M.44 E.G.S., Rearsby	27. 8.44
2051	Roy Mountford	M.45 E.G.S., Meir	30. 7.44
2052	William Douglas Griffith Read	L.141 E.G.S., Kidbrooke	16. 9.44
2053	Dennis Randle	M.44 E.G.S., Rearsby	30.7.44

(*Continued on page* 20)

GLIDING CERTIFICATES—*continued.*

		Gliding School	*Date taken*
"*A*"	*Certificates* (52)		
2054	Ernest John Suckling	M.48 E.G.S., Bretford	10. 9.44
2055	Ivan Edwin Welch	M.44 E.G.S., Rearsby	10. 9.44
2056	Kenneth Frank Moore	L.141 E.G.S., Kidbrooke	16. 9.44
2057	Herbert Gordon Taylor	M.48 E.G.S., Bretford	10. 9.44
2058	Leslie Trevor Lemon	M.44 E.G.S., Rearsby	10. 9.44
2059	Alfred Trevor Wright	M.45 E.G.S., Meir	29. 7.44
2060	John Brooke	Ditto	21. 5.44
2061	Stanley Frederick Hammersley	Ditto	28. 7.44
"*B*"	*Certificates* (12)		
1965	Martin Seaye	203 E.G.S., Newtownards	13. 7.44
1966	Donald Bruce Hamilton	Ditto	6. 8.44
1978	Frank Ollerenshaw Harber	Royal Air Force	23. 8.44
1983	Vernon Joseph Huse	C.128 E.G.S., Theale	16. 7.44
1992	Gordon Henry Daniels	SE. 161 E.G.S., Brighton	16. 7.44
1993	Percy Robert Solder	L.146 E.G.S., Shenfield	9. 8.44
2009	Vernon Egerton Rowland Blunt	C.126 E.G.S., Booker	26. 8.44
2013	Reginald James Browne	203 E.G.S., Newtownards	5. 8.44
1861	John White	S.W.81 E.G.S., Yeovil	3. 9.44
2014	Reginald Victor Poulter	C.123 E.G.S., Denham	26. 8.44
2015	Kenneth Howard Ashton	S.E. 161 E.G.S., Brighton	7. 5.44
2045	Frank Cecil Batley	M.48 E.G.S., Bretford	10. 9.44

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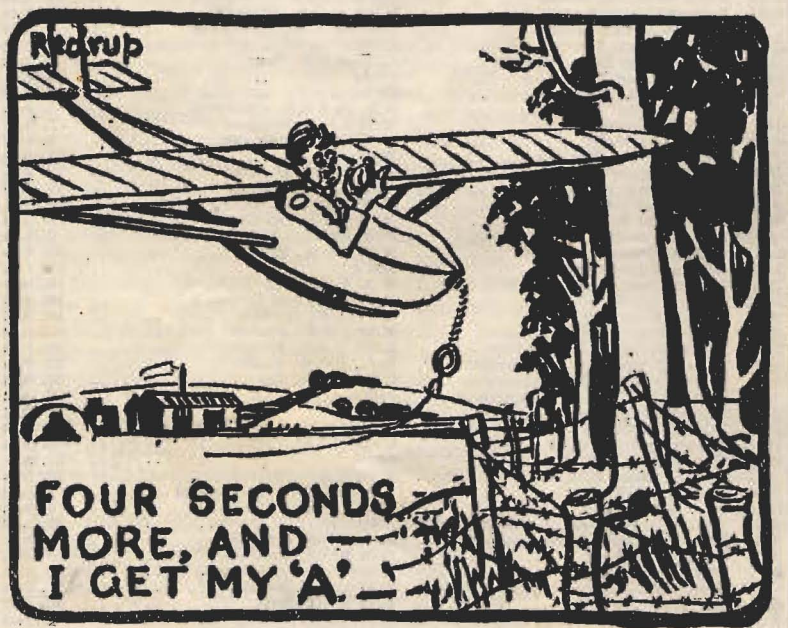
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Special Christmas Cards

It was not found possible, under prevailing controls, to supply the special Gliding Card for E.G.S. after all. If, however, any A.T.C. Cadet Unit or E.G.S. is interested in having its own standard card overprinted with the name of the unit in gross lots, they may be obtained from Messrs. Peacock, 101, High Street, Watford. The price, including 100 per cent. purchase tax and envelope, is £3 a gross, or 5d. each. Those interested are requested to order quickly so that disappointment due to postal delays may be made less likely.



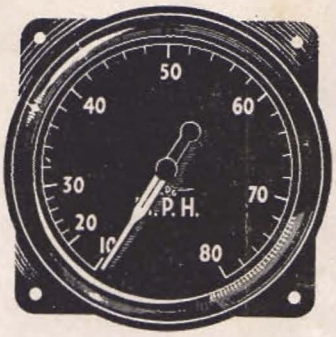
NOTICE

OUR readers will have observed the absence from this issue of any contribution from the flowing pen of Mrs. Platt. This is because she was recalled to the Argentine at short notice, and before she was able to redeem her promise to tell us more of Argentine methods. We were unable because of war-time restrictions, to see her performance as a Sailplane pilot, but there are very few women holders of the Silver "C" licence in the world, and if she ever took part in the Sailplane Displays with nine or twelve Sailplanes playing "follow-my-leader" through loops to spins, stall turns to tail slides, of which we have photographs in SAILPLANE Office, and we believe she did, we shall take her merit for granted even if her articles had not revealed an intimate acquaintance with the Soaring world.

It may also be remembered that we began an elementary series of Articles on Gliding by Major Sitek, and after the first no more arrived. This was because Major Sitek went to war with the Czech Independent Brigade. He, too, promised to finish the series as soon as possible, and after the war we may hope to have some first-rate Continental news from him, including, dare we hope, something from the Russians.

Incidentally, a book by Major Sitek and the Editor, "The Flying Soldier" has at last been published by the Alliance Press (7/6). Labour and paper difficulties prevented the book appearing before, although the MSS. was in the hands of the publishers a year ago. The book, which is about the training of Glider Pilots and the use and equipment of Airborne Forces, cannot, of course, be up-to-date, with descriptions of the Airborne landings in Normandy and at Arnhem, but it describes in some detail the basic factors on which these operations were founded.

As some indication of the seriousness with which it was viewed by the War Office, it may be mentioned that it was some ten weeks being censored, an operation which normally takes a few days, and even then was not released until after the Normany landings were safely accomplished.



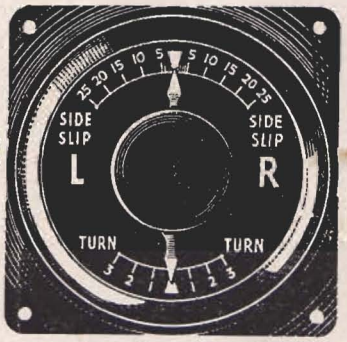
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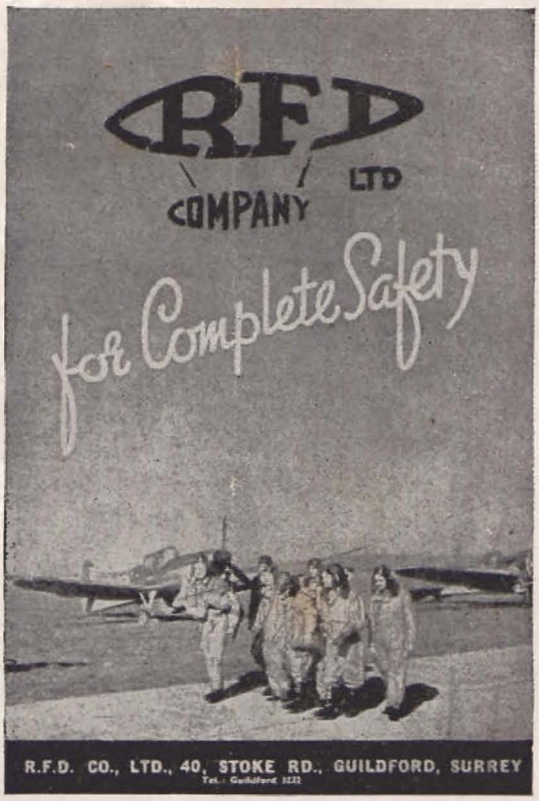
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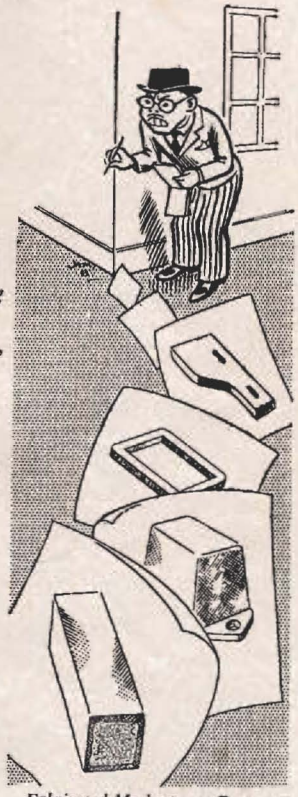
YOYO THE SPY FINDS MECHOSPONGE

Hon. Report

Number One

"Please, recall effacing servant Yoyo's previous report; how abhorrent Hubbards of Luton defeat mighty Sire's intent to cripple British war industry by acquiring odious British rubber plantations. As advised, Hubbards immediately make scientific treatment of felt which provide the next best thing to rubber for Aircraft, Marine and Engineering requirements —MECHOFELT.

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LET'S RECOLLECT

One of a series of reminiscences from British Aviation history which will appear from time to time in SAILPLANE & GLIDER and, it is hoped, prove interesting to readers.



A landmark in the history of travel : Passengers disembarking from a D.H.16 (360 h.p. Rolls-Royce 'Eagle' engine) on arrival at Hounslow aerodrome on the inauguration day of the London—Paris service.

LONDON TO PARIS!

On August 25, 1919, the first British commercial air service — and the world's first daily international air service—started from London to Paris. On that day a D.H.4a of Air Transport and Travel Ltd. left Hounslow at 09.10 hrs. and arrived at Le Bourget at 11.40 hrs. It left for London again at 12.40 hrs. and landed at Hounslow at 14.45 hrs. A D.H.16 of the same company also made a return flight on that opening day. Besides passengers, some newspapers with several brace of grouse, a consignment of leather and some jars of Devonshire cream were carried on that first public air service.

In 1919 the fare to Paris was £21. Twenty years later in the Summer of 1939 the flight from Croydon to Le Bourget could be made at almost any hour of the day in 75 minutes at a cost of £4 . 10.

There is no public passenger service to Paris to-day and the goods delivered to Continental destinations are more substantial than they were in 1919. But when travellers and merchandise are again carried on those and longer routes the British Aviation Insurance Company will be ready to provide insurance protection for aircraft, crews, passengers and freight. In the meantime, B.A.I.C. Staff will willingly place their accumulated experience at the disposal of responsible officers of organisations interested in the post-war applications of aviation.

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