# Sailplane and Glider

The First Journal devoted to Soaring and Gliding



MARCH 1948

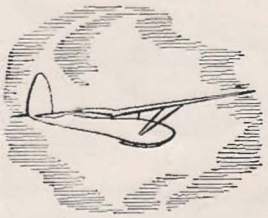
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THE FIRST JOURNAL DEVOTED TO SOARING AND GLIDING

MARCH 1948 ★ Vol XVI No 3

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Front Cover: *Club Planeadores Albatros Buenos Aires sheltering from the heat whilst preparing to fly. Sent by Leo Follmann.*

# In Memoriam

FEBRUARY 17th was a bitter cold day, with the thermometer about freezing point and the wind cutting like a knife as we stood in the courtyard of the Golders Green Crematorium looking at the many beautiful wreaths which were awaiting the cortege. Expressions of admiration, sympathy and loss from the Ministries, of farewell from friends, and a simple laurel wreath from one sent with a name high in the halls of fame of Aviation—a tribute to the achievements of Robert Kronfeld, A.F.C., whose funeral rites we were now attending.

We bared our heads as the coffin, covered with the Union Jack and masses of flowers came to the chapel and after a pause we filed into the simple chapel and waited whilst the organ played the "Enigma Variation No. 1", "O Rest in the Lord" and Bach's "Mortify us by Thy Grace". The simple service, a tribute by the padre to him to whom we had come to pay our last respects, and movingly the farewell prayer "Go forth upon thy journey Robert Kronfeld" and it was over. The winter sun shone through the windows on to the heaped flowers covering the Union Jack as they quietly and slowly moved from our sight. Robert Kronfeld had passed from our sight and the ken of man for ever, but he left with us his great pioneer achievements and for some of these his name will live down the ages.

---

It is with deep and sincere regret that we announce the death on February 17th of Hubert Offen Davies, one-time Secretary of the London Gliding Club, Secretary of the Soaring Club of Great Britain, one-time publisher of *Sailplane* and, since 1943, Chairman of the Glider Press Ltd.

The world is used to the spectacle of great names who, by their calling are men of wide influence. But there are others who whilst holding no great preferment, still have an effect on the lives of others which is deeper because it is more personal. Of these was H. O. Davies. It was said of him in an address at his funeral, which was attended by a large number of people, and which took place at the Church of which he was a Deacon, that half a million people are alive to-day who had felt the impact of his kindly, cheerful, truly Christian spirit.

In the Gliding world, at a time when help of the right kind was hard to find, he was Secretary of the London Club, in the early 30's. When the B.G.A., for lack of funds had to give up publishing *Sailplane* he took it under his wing and was financially responsible for it until 1940. When newcomers took an interest in it he remained with advice, encouragement and financial aid, the constant friend of what, under his guidance, has now become the world's leading Soaring magazine.

Both practically and spiritually, we shall feel his absence very keenly. He was always kind and helpful, always looking at the better side, always faithful and true. Of none was he ever known to say an unkind word. Of most he praised the virtues, to all he was encouraging. In latter months increasing heart weakness must have told him the end was near. Yet up to the last he was actively trying to do what he could to overcome the financial and other difficulties which appear constantly to surround *Sailplane*. Much of his spirit was spent in the service of the British Gliding Movement.

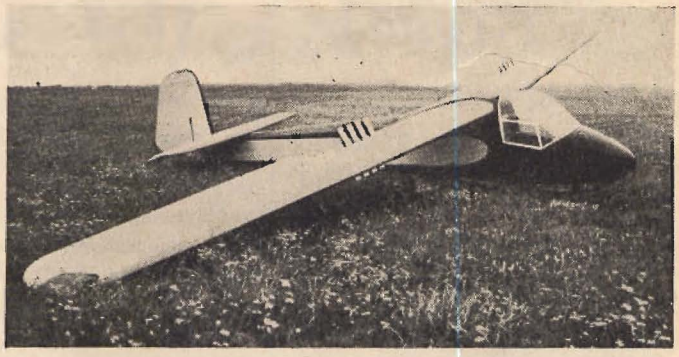
The beautiful words of John Bunyan about Mr. Valiant-for-Truth have been used of the passing of more famous men than Hubert Davies, but of none have they been used more worthily.

"So he passed over and all the trumpets sounded for him on the other side."

**MILAN HOREJSI, B.Sc.**

*details the*

# NEW CZECH SAILPLANE



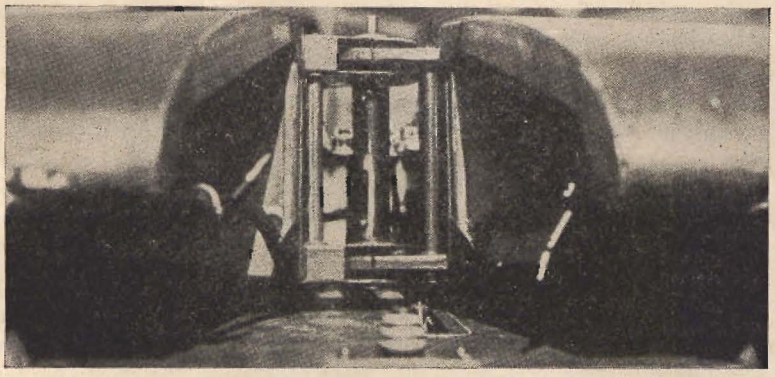
*The VLP, "Sroubek Ferdik" with 'comb'-shape airbrakes out.*

THE VLP-1 "Sroubek Ferdik," first sailplane to be built by the Aeronautical Group of students of the Mechanical Faculty in Prague, has recently passed all its test flights.

The aircraft, an original design of the Group, was built in their workshop where members of British Gliding Clubs who visited Czechoslovakia in 1946 had an opportunity of seeing it under construction. For this reason, the following report will be of interest to those who saw it in the embryo stage, and, I hope, to all other readers of SAILPLANE.

Of the advanced trainer type, this machine is intended for instruction before the "change-over" from elementary gliders to high-performance sailplanes.

The principle that a pilot learns "soaring" on an advanced type, and learns how to "fly" on primaries is clearly reflected in the performance of the prototype VLP-1, and influenced the whole design. For production reasons all parts are characterized by a maximum of simplicity.



*Spar-fittings joined together. Note tube with vertical pins and head of spindle above.*

The span is comparatively small—an unusual feature in the trainer type category, but an important consideration in this machine, having regard to the limited size of the Group's workshop, the desire to minimise weight and to produce an aircraft which would be easily transported. Therefore, the best gliding angle—1 in 22 of VLP-1 is acceptable; the more so when the standard value for this type makes up to 1 in 24 with span 46-50 ft.

Wooden construction is used throughout the whole airframe. The main plane of straight taper is a cantilever and consists of two halves divided symetrically about the fuselage. The wing is of the single-spar type and the flanges are of laminated pinewood 13/64". At the spar roots the pinewood laminations are lengthened with thin laminated beech to take the fittings which are rivetted.

The flanges are boxed in with beech plywood shear webs. The torsion nose is made of birch diagonal plywood in the usual manner and the torsion load is transmitted by means of the rear auxiliary spar in the fuselage. The ribs consist of two parts: the nose portion and the trailing edge. The former is a triangular element of lime-wood sheets; the latter of pine ledges.

The ailerons are of the simplest design and are suspended on three hinges, with internal control. They are fabric covered, as is the part of the wing behind the spar.

An unusual type of airbrakes, namely "comb"-shape, is employed. This type was chosen for the purpose of testing their efficiency.

Both halves of the wing are joined at the centre-line of the fuselage by two hollow vertical pins which expand in a tube, and are operated by spindle and wrench. Wing loads are transmitted to fuselage through two shear fittings on each side. Both parts of the wing are separately inserted into the fuselage-fittings and then attached together by the expansion of both pins with a wrench. The aileron and airbrake controls are simultaneously and automatically engaged.

The fuselage consists of pinewood frames and booms and is birch-plywood covered. The round section in the nose near the cockpit passes behind the wing in a quadrangular shape where both side-walls are rather oblique. The upper wall is convex, the lower wall is broken in an obtuse angle. Special emphasis has been given to the spaciousness of the pilot's cockpit and to good visibility from the cabin. The cover is made from several parts of Plexiglas, but it will be replaced by Perspex in future machines.

The landing arrangement consists of a skid backed by two rubber buffer and a spring spur.

The tailplane is plywood covered and attached at three points to the fuselage. The angle of setting is variable on the ground. The elevator which is fabric covered, has a trimming tab operated with Bowden-cable. The fin is built into the fuselage and bears the fabric covered rudder.

Ailerons from the central automatic coupling are operated by a cable, airbrakes by torsion tube. The rudder and elevator are operated by cable.

The pilot's seat is constructed to take a back parachute. Instruments are mounted on a shockproof panel, and include altimeter, A.S.I., variometer, compass and turn indicator. Airbrake and elevator tab controls are conveniently located on the left of the pilot's hand.

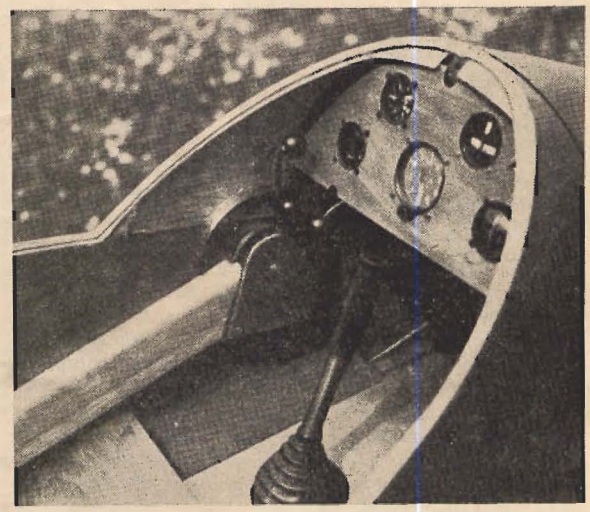
The flying properties are quite satisfactory and the calculated performances have been attained. The machine is very stable, particularly in stalling where is no tendency to spin. The manoeuvrability is very good, and the machine begins to turn in small circles immediately after moving the controls. The machine is still controllable in flight on its back, although it is not fully aerobatic in regard to its load factor, which is 8. The fluttering of the tailplane begins at 28 m.p.h. But trouble has been experienced with the new type of airbrakes. They proved less efficient in comparison with DFS airbrake and provision will be made to improve their efficiency.

*Data* :

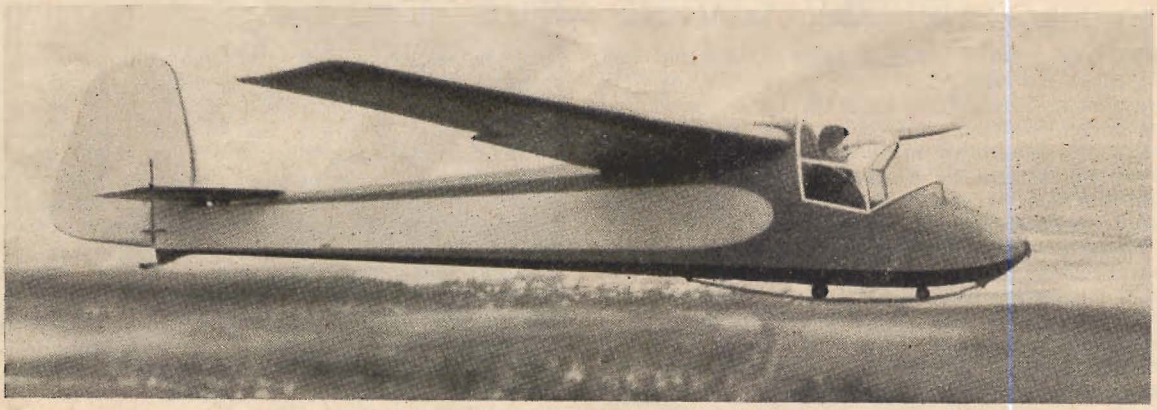
| | |
|---|---|
| Span | 40·7 ft. |
| Length | 21·3 ft. |
| Height | 5·2 ft. |
| Wing area | 139 sq. ft. |
| Weight empty | 328 lbs. |
| Weight loaded | 508 lbs. |
| Wing loading | 1,55 lbs. sq. ft. |
| Aspect ratio | 12 |
| Taper ratio | 1,62 |
| Section at the root | NACA 4415 |
| Section at the tip | NACA 4412 |

*Performance* :

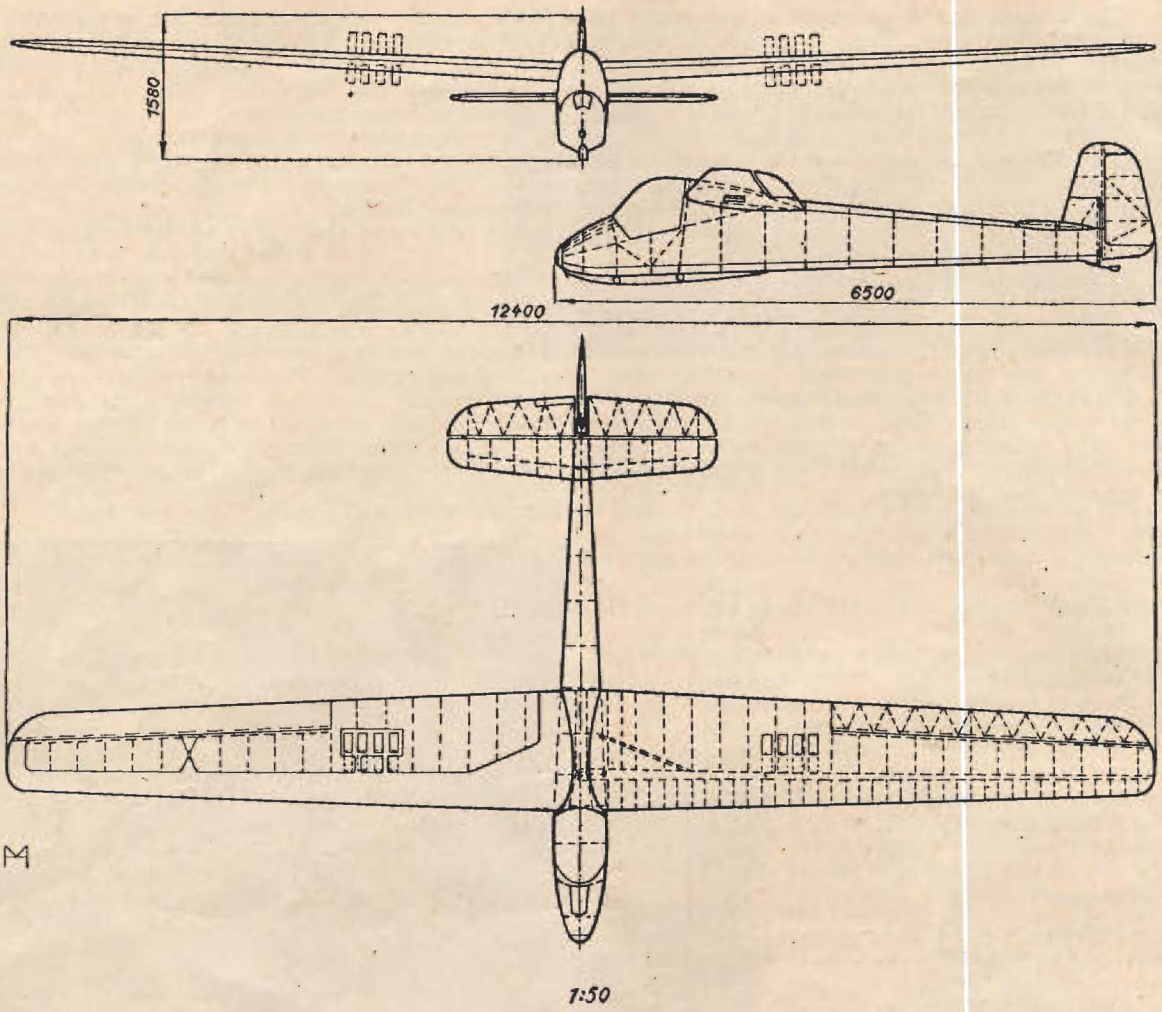
| | |
|---|---|
| Best gliding angle | 1 : 22 |
| Forward speed | 46·2 m.p.h. |
| Sinking speed | 3·08 ft./sec. |
| Best sinking speed | 2·92 ft./sec. |
| Forward speed | 38·7 m.p.h. |
| Gliding angle | 1 : 19,5 |
| Maximum permissible speed | 125 m.p.h. |
| Permissible speed in aero-tow | 70 m.p.h. |



*Pilot's cockpit. Left to right : airbrake control lever, elevator tab lever and tow release handle.*



*The VLP-1 in aero-tow.*




*G.A. Drawing of the V.L.P.-1*

# SURREY GLIDING CLUB YEAR BOOK

THIS is a very pleasing little production and does the enterprise of the Surrey Gliding Club much credit. The print is clear, the lay-out good, and the cover excellent. Of the articles, the most interesting are Aerotow to Switzerland (a masterpiece of understatement by Ann Douglas), Charles Wingfield on the Wichita Falls Competitions, and an account of the Swiss competition by G. W. Wall.

These three are indeed of such world-wide interest that it seems a pity to confine them to such a relatively small circulation as a Year Book. In view of the fact that the Olympic Games are to be held in Switzerland this year Wall's article is almost a " must " for any competitor, especially those with no experience of mountain flying. Even slope-soaring seems to have been of only moderate assistance in judging the best uplift areas, and those poor people who have never tried anything but pure thermal or cloud soaring over vast plains will obviously be hopelessly outclassed by the local inhabitants. (Although in the 1947 competitions a Swedish competitor managed to come fifth.)

Also in this Year Book are drawings and specifications of three machines—the " Wanderlust," designed and built by Brown and Radburn, prototype flown on March 1st, 1947 ; the " Crabpot," Kendall's winning two-seater in the B.G.A. competition ; and a new Swiss high-performance sailplane, the " WLM," which did well in the 1947 Competitions at Samedan and is now undergoing final tests. There is also a very clear table detailing type, nationality, and specifications of most of the sailplanes flying to-day and the famous ones of the past.

V. P.

# GLIDING IN FRANCE

By
GUY BORGÉ

## F/LT. ELIZABETH BOSELLI BREAKS ALTITUDE RECORD

ON December 22nd, 1947, Miss Elizabeth Boselli climbed to an altitude of 17,434 feet, higher than any other woman has yet flown in a sailplane. I take this opportunity to tell the story behind the splendid achievement of this new champion.

Before the war Mademoiselle Boselli was a qualified power pilot, holding a " B " licence. In 1945, after the Liberation, she enlisted in the French Air Force, attained the rank of Sub-Lieutenant, learnt aerobatics with the " Patrouille de Tours," and flew several war planes, including the " Douglas A.24 " and the single-seater fighter " Dewoitine 520." She was demobilised in July, 1946, after having completed 450 hours' flying, and decided to soar.

She took a course in July, 1947, at the Challes Centre, where her progress amazed the instructors : on the 4th July she took her " B " Certificate ; her " C " on the 10th July, in a " Castel 301 " ; and two days later her duration in the same machine.

She then set off for Sameden to be present at the International Soaring Contest, after returning to Challes for further experience. On the 12th August she attained the Altitude in a " Castel 310."



*Boselli*

On August 19th, we flew together over the third part of the slope, a " Castel 310 " and a " Grunau " respectively. At last I picked a thermal and started for a last trip before returning to Lyons. Meantime Elizabeth had left the slopes, climbed to 8,350 feet and crossed 50 miles of mountainous country. She landed at La Roche sur Foron, a point never reached before.

She nearly broke a record by completing 80 hours of Soaring, and earning the (" B," " C," Silver " C " badges within a month of her *ab initio* training. Her Silver " C " number is 242 on the French list.

On the 20th October she got her Transport Pilot Licence, and 8 days later the Soaring Instructor Licence.

The course at Challes increased Miss Boselli's love of soaring, and she asked for another course ; this time at the Saint Auban National Centre. She arrived there on the 11th November, and began to study slopes, clouds and winds, with the idea of Wave-Soaring. She heard stories of frozen pilots, of records broken without barographs, and so on.

On one occasion she reached 8,300 feet ; then 9,000 feet in a " Grunau " on December 21st.

The following day she broke the record, and here, in her own words is the story of her outstanding flight :—

" In the morning a gusty wind was blowing from the North-West, with a speed of 35 m.p.h. at ground level, and 55 miles in the upper air. Conditions seemed right, and numerous pilots started in aerotow, but several of them could find no lift, and came back. One however, found some up currents above the airfields and gained height ; other pupils were later towed to this region.

" At 1.50 p.m. I took off in a " Nord 2,000 Olympia " with a record barograph, amidst a violent turbulence. I found it difficult to follow the Fieseler Storch. I cast off at 1.58 p.m., above 7 or 8 pilots trying for their " C " badge. I was at 3,600 feet. There was no lift, so I came down to 2,300 feet. Stationary clouds began forming and flying up wind towards them, I climbed with ever increasing speed to 6,600 feet. An important drift brought me into some down draughts of 17 feet/second, and I had to dive at 70 m.p.h. to recover the up-currents.

" Only at 3,300 feet was I able to find lift of 3 feet/second. The ' Olympia ' stayed fixed in front of the Lure Mountain, and my altimeter turned steadily in the right direction : 6,600 ; 10,000 ; then 17,434 feet above the sea-level, where the lift petered out. At this height the temperature was between 13 F and 22 F, the oxygen rare.

(*continued on page* 10.)

# POLISH GLIDING

By
WITOLD CHARLES STARZEWSKI

THE Editor of *Sailplane and Glider* has invited me to write an article on gliding in Poland, about our work in this connection and about our views and our plans for the future. I am delighted to have the opportunity to do so, because it will help to strengthen the friendly bonds of comradeship which have become proverbial with airmen, and with gliding-pilots in particular. Last not least, an exchange of technical experiences will raise the level of the achievements.

The British gliding-sport becomes more and more respected in this country, because it is a factor which will soon have an important part to play in the gliding-sport of the world. Your remarkable achievements, the tremendous growth of popularity in Gliding among British youth and in the Dominions are, we think, the essentials for the successful progress which we sincerely wish you.

Before the world Poland was one of the " powers " in gliding and was more and more threatening Germany's leading position in this sport. And although I do not want to bore readers with too much detail, I feel bound to quote a few facts.

First attempts at motorless flight were undertaken in the nineties (contemporarily with Liliethal) by Ing. Tański who flew gliders of his own construction. The first gliding contest took place in 1923. It was followed some years later by a splendid and entirely independent development in our country. We had designs of our own, and out of the total number of 1,400 gliders which we had in 1939 only two were of foreign manufacture, and these were purchased for the sake of comparison.

Our set of types was highly differentiated from training gliders to high performance sailplanes. This fact had its bearing upon the methods of our training, differing from the standard accepted by other countries. We had a considerable number of designs and numerous experimental and production centres.

The following are but a few of the thirty well-proved and accepted types :

" Salamandra " (the Salamander), Constructor : Czerwiński ; intermediate glider of very pleasant flying-qualities, now built in the U.S.A. under the name of " Robin Glider."

" Komar " (the Gnat), Constructor : Kocjan ; although a little old-fashioned to-day in its aerodynamical bases, it is an excellent type for weak thermic conditions owing to its exceedingly low falling-rate (less than 2 feet in a second) and its very light construction, resulting in small wing-loading and very slow minimal speed. Turns in the " Komar " could be made at the speed of 36 km/h (20 miles) ; the importance of this in narrow up-currents needs no particular stressing. Quite a number of these machines was made for export or built from licence abroad. One of them won this year a contest in Yugoslavia.

In the group of high-performance gliders I mention first of all the " Orlik " (the Eaglet), Constructor : Kocjan ; built for the elimination of the standard " Olympic " glider in Rome. It proved better than the " Meise," but was not accepted because of Germany's influence in the jury.

" PWS 101," Constructor : W. Czerwiński ; was destined for the international contest at Rhon in 1937 where it had the longest cross-land flight and the best height-record. In 1938 this type took the Polish record in cross-country flight (578 km.). This can be looked upon as approaching the highest possible limit in Central Europe. As in England no so-called " hangar-door flights," are possible here, because there are no lift-thermals such as usually occur in countries with continental climate, e.g. Eastern Europe, the Tropics, or the U S.A. In those countries flights at distances which seem fantastic in our conditions can easily be achieved. The span of this type was 19 m., the aspect ratio 19, its total weight 354 kg., wing-loading 21,6, L:D 27, best sinking-speed 0,56.

The type " PWS 102 " was built in 1939. It is an improvement on the former type, and possesses a more elaborate design and construction. Its

(*Continued on next page*)




*An "Olympia" which was NOT towed back.*




**QUIZ NO. 2.**
**INSTRUMENTS AND METEOROLOGY.**

1. Roughly how many degrees does the thermometer drop for every thousand feet that a pilot ascends? *Answer*—3½° Fahrenheit.
2. What is the difference between air speed and ground speed? *Answer*—Air speed is the speed of the aircraft relative to the air, ground speed the velocity with which the aircraft covers the distance between point A and point B on the map.
3. What is an altimeter? *Answer*—An instrument that measures the altitude of an aircraft above the place at which the instrument was last set to zero. N.B. An altimeter does not give you your height above sea level unless it was first set at sea level, therefore should be regarded with caution during bad visibility.
4. Describe the following cloud formations and say which you would prefer from a soaring viewpoint: cumulus, nimbus, cumulonimbus, cirrus, stratus. *Answer*—Cumulus are the rounded "cotton-wool" clouds, nimbus the dark, heavy, rain-bearing clouds, cumulonimbus a combination of the two, more especially associated with thunder and violent thermal conditions (and better avoided); cirrus are the feathery thin streaks, and stratus, horizonal sheets of cloud. The soaring pilot's joy is cumulus, which denotes the presence of both up and down currents—strong up when forming, strong down when dissolving.
5. Should you be accidentally drawn into thick cloud and wish to escape, what is your quickest way out? *Answer*—Put your machine into a spin. Other alternatives are to sideslip steeply, or to use your flaps and put on speed, making for the side where there appears to be most light.
6. Why do airfields in the mountains need to be larger than those at sea-level? *Answer*—Mountain air is more rarefied, so that aeroplanes need to take longer runs to gather enough speed for the take-off.
7. What is an anemometer? *Answer*—An instrument to measure wind velocity. It is a revolving arrangement of horizontally placed cups, usually found on the roof of any airport.
8. What is the angle of drift? *Answer*—It is the horizontal angle between the longitudinal axis of an aircraft and its path relative to the ground.
9. What is the gliding angle? *Answer*—The angle between the flight path during a glide and a horizontal axis fixed relative to the air.
10. What is an artificial horizon? *Answer*—It is a device that indicates the attitude of an aircraft with respect to the true horizon. The most efficient incorporate a gyroscope.

**QUIZ NO. 3.**
**MAINLY METEOROLOGICAL.**

1. What are:
   (a) Altocumulus?
   (b) altostratus?
2. What is a barograph?
3. What is the Beaufort Scale?
4. What is meant by the term:
   (a) blind flying?
   (b) ceiling?
5. What is the centre of pressure of an airfoil?
6. What is a cold front?
7. What is convection?
8. What is magnetic deviation?
9. What is the dry adiabatic lapse rate?
10. What is "false cirrus"? **Answers on page 10**

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**POLISH GLIDING**—*Continued from previous page*

dimensions are almost the same. The gliding-angle, actually recorded in flight was 31. Its best rate of sinking was 0,58 m., at the speed of 51 km./h. (with flaps for circling). It had a very careful and minute construction and a device which assured a quick and easy method of dismantling and rigging.

Both these constructions were equipped with air-brakes; were very responsive to the controls and had excellent "visibility" from the cockpit.

In the class of gliders provided with engine, Poland holds three international records. We possessed several types of such gliders, among them the "ITS-8" and the "Bak" (the Bumble Bee), both provided with an engine of 18 H.P. The "Bak" took three international records (one height-record of 4,900 m.) which have not been beaten to this day.

In 1938 about 700 cross-country flights of a total distance of about 45,000 km. were made, including 10 flights above 300 km.

At the outbreak of the war we had more than 10,000 pilots of the category "C" and 226—"D," including a considerable number of women. One of these, Wanda Modlibowska, still holds the world record of flight-time: 24 hrs. 14 mins.

About 300 foreigners—among them 15 Englishmen underwent their training in Poland. They often established the records of their countries.

War brought crushing devastation to our gliding-sport. Only two of our gliders remained after the disaster (their limit of age had been passed long ago). Almost all the hangars and accommodations were destroyed.

# ROBERT KRONFELD

THE death of Robert Kronfeld has broken one of the links with the Gliding pioneers in almost the same relative sense as the death a few days earlier of Wilbur Wright, though Robert was still a comparatively young man. While Wilbur Wright was first to fly heavier-than-air craft successfully, and to show that their control in the air was within reach of man's capabilities, Kronfeld showed that gliding, or rather soaring, was attainable in conditions which had, till demonstrated by him, been deemed impossible. The technique which he elaborated and its relevent study of cloud and weather, has enabled gliders to be flown literally hundreds of miles and to climb thousands of feet—to the layman a feat of almost black magic.

Before the war, he came to England as a refugee from Nazi persecution when the murder of Dr. Dolfuss, whom he knew well, had forewarned all who wished to hear that Austria was to be suborned to Hitler and freedom of political thought was no longer to be tolerated.

He was probably then known best to most of us as the moving spirit of the Oxford University Gliding Club and he certainly caused the rival University to look to their gliding laurels. Cambridge were earlier in the field and had such keen and capable young men as Davis (both Laurie and Peter), Davie, Slazenger, Gardiner, and their generation, who set a standard for British gliding which bade fair to catch up the ground lost in this field of peaceful endeavour to Germany. A year or two more might have seen tremendous results for Oxford but the war intervened.

Kronfeld volunteered immediately and was accepted as a link trainer instructor, in which capacity he served the Royal Air Force for some months until the Central Landing School at Ringway became the focal point of the Airborne Forces in 1940. This collection of glider pilots who hardly needed the successful example of the German use of troop carrying gliders as a spur, set themselves the task of convincing conservative and much harassed Higher Authority, that this was indeed a weapon of war and not the plaything of a few rather light-headed cranks. In this we were enormously aided by such far sighted men as Louis Strange, Nigel Norman and later " Stiffey " (Now Air Vice Marshal) Harvey.

To these efforts Robert Kronfeld brought the accumulated experience of years, for he was an acknowledged authority on all forms of gliding, and possessed a thoroughness and perseverance which was typical of the Central European. He arrived at Ringway with a clear ' plan ' in certain directions and quietly but determinedly set to work in the face of any and all opposition.

The first " plan " was how to enable gliders to be towed in cloud, at night without lights, and in fact in any condition of visibility in which the towing aircraft could operate. No one believed it possible except Robert and a few others but we raised some petrol gauges (electric) from the car scrap heap and a few odd bits of metal from a similar source, some torch batteries, a blind flying hood, and an old Klemm " Swallow." In this he set himself to do 100 hours blind flying on his " instruments "—the two petrol gauges—with a safety pilot behind who kept himself awake after a time by gently insinuating the aircraft into cloud to see whether Robert coped !

This done, the propeller was removed from the " Swallow," a towing hook put in its place and the " Avro 504 N.," then sharing the honour of towing the total available glider strength of the British Forces with a " Tiger Moth " and the R.A.F. " Whitley," was flown all over the Manchester sky with Robert under the hood in the " Swallow."

Thus was born the " Angle of Dangle," which it was later irreverently named by the Army, rather, I fear, to Robert's secret disapproval.

In due course, the formation of Airborne Forces Experimental Establishment gave Kronfeld the scope and opportunity he looked for and he expanded his activities and worked like a man possessed, as indeed he was.

In his lighter moments he was an amusing companion and very fond of music, but his family were where his heart was and he was off home on every possible opportunity. On return he invariably had some new ideas and a mass of papers, for he could not undertake any task lightly and made innumerable calculations which tried, sometimes, the patience of those with whom he worked ; but he was painstakingly thorough in everything he undertook and cared neither for criticism nor interference to the end that he proved his point. Quiet and slow of speech, at least in English, he possessed inflexible determination in attempting what he had decided to do and faced all the attendant risks with assurance.

He was intensely and rightly proud of his award of the Air Force Cross. This was in 1943 after extremely valuable work at Sherburn-in-Elmet and he subsequently went to Beaulieu where he must have had the great satisfaction of knowing that from the days of " bits and pieces " at Ringway had sprung the Airborne Force which carried whole divisions and their equipment to the Continent, finally to break the power of those who had practically stripped him of every possession. The part he played in this achievement, I believe he felt was symbolised in the well deserved award.

Since the war, he had immersed himself in the problems of the flying wing and was engaged on this line of research when he was killed. I think he felt the world had become a dark and forbidding place since the days when as a young man he tested his theories in front of thunderstorms and faced the ridicule which at first attended his attempts at thermal soaring ; and the light heartedness, which was his real nature, had been absorbed by a rather grim but nevertheless keen sense of humour. But he triumphed over the problems of soaring flight and has made a further contribution to the progress of research into future air development of which his family must feel very proud.

Our sympathy is sincerely offered in such an irreparable loss and our admiration for a great pioneer can only serve as small consolation for them.

ROBIN FENDER.

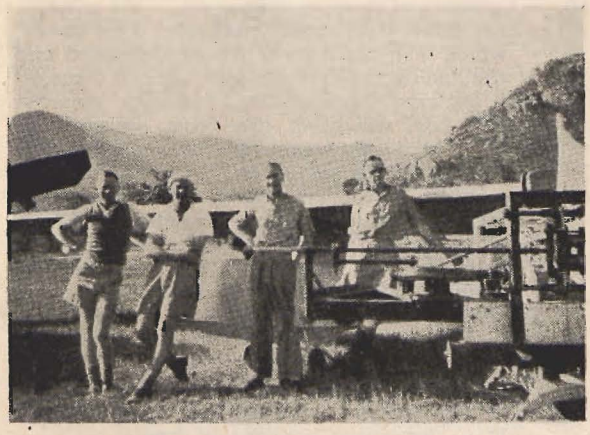
# GLIDING AT UMTALI

**By C. J. McGRANE, Chief Instructor**

THE Umtali Gliding Club, Southern Rhodesia, is once again in action.

Monday and Tuesday, July 14th and 15th (Rhodes and Founders) saw two of the three Club's machines flying over the local aerodrome for the first time since April, 1940, when, through lack of personnel and other conditions brought about by the war, gliding was reluctantly brought to a halt.

It is interesting to note that this time ten years ago, almost to a day, the Umtali Gliding Club first started active gliding in the field. It was an occasion of great excitement and enthusiasm after the long preparation which included organisation and building of machines; moreover, it was the first time this



*Four of the hard-working members. (left to right), Jimmy Harrold, the Secretary, Chris McGrane and Matt Howie.*

form of flying had ever been attempted in the Colony and those who took part had never previously flown a glider.

The various vicissitudes of the Club during the succeeding three and a-half years would make interesting reading. There were many exciting moments when pupils first took off from *terra-firma*—laughter and fun, minor mishaps necessitating spells of repair work—the thrills during qualification for the "A" and "B" Certificates, and throughout all remained that keenness and *esprit de corps* which makes gliding and soaring flight rank high in the field of scientific sport.

Despite many set-backs and the fact that Instructors had to feel their way step by step, many excellent displays were given and a very successful and progressive method of primary training evolved.

Well, all that now belongs to past history, but there were still a few of the old foundation members left who, on the conclusion of war, decided that the only Gliding Club in the country simply must be brought back to life.

Early in 1946 a general meeting of all those interested was held to discuss ways and means of resuming gliding activities, and a working Committee was eventually formed. This comprised some six foundation members, with Mr. Matt Howie in the chair.

Mr. Howie, with almost four years' Club experience of glider construction and a unique proclivity for detail and exactness, lost no time in getting busy, his programme being the building of a Primary training machine—the complete overhaul of the two existing sailplanes and the construction of a mobile winch.

Such an undertaking was enough to daunt the heart of a professional expert, but not Matt Howie, who with quiet confidence and determination and supported by the energetic Jimmy Harrold and Wally Tite, got things under way. Glider parts were difficult to obtain, but they got them, miles of the country side were scoured in search of old car chassis, wheels, etc; they even found time to locate one or two possible soaring sites, they worked practically every weekend since August, 1946, and by the end of nine months completed a Primary training machine, together with the complete overhaul of the intermediate sailplanes—a truly great achievement.

The erection of a mobile winch on an old car chassis was the next problem, however, nothing daunted, with the assistance of a few Club members and Mr. Newman, in a matter of six weeks produced a very amazing contraption, in fact it has to be seen to be believed, and alone is worthy of a special visit by the citizens of Umtali.

It can be driven into any position, has a separate engine to operate a drum carrying 3,000 feet of flexible steel cable, but, above all, there is the wizard mechanism which feeds the cable evenly on the drum. This latter cost Matt Howie and his henchman much head scratching.

Work was speeded up to commence gliding tests on the Saturday afternoon of the Rhodes and Founders weekend, but it was not until 2 p.m. on Monday that all was ready.

The most promising of the Clubs' pre-war pupils, Jimmy Harrold, who had since become an R.A.F. pilot and instructor, had come all the way from Darwendale to be present at the testing out.

Using a three hundred foot rope attached to the tow car, the primary glider was taken on a low test flight by the Chief Instructor, Mr. C. J. McGrane, who followed this up with two more flights varying between 60 and 100 feet. He would describe the experience as exhilarating after seven years' absence from gliding, but the machines proved comparatively docile and let him down gently every time.

Two succeeding flights each by Messrs. Harrold and Tite in the Primary and a short flight by C. McGrane in the "Kirby Tutor" closed the day.

The tests proved the airworthiness of the two machines and a tribute to the excellent workmanship of Matt Howie.

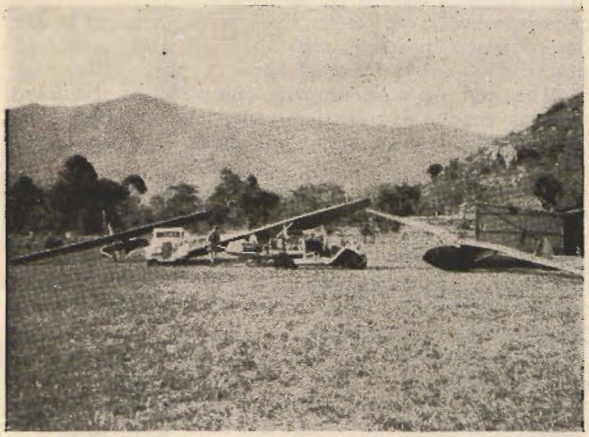
Tuesday morning, 15th, saw the winch in action with Jimmy Harrold, piloting the "Kirby Tutor."

With the winch (operated by Matt Howie) at the extreme west end of the aerodrome and the "Tutor" at the opposite end connected up by the 3000 feet of cable, the flag signal was given for the move off.

Following a run of some 60 yards the "Tutor" rose rapidly into the air and when about 600 feet up the cable was released and the machine left in free flight. Like some great bird she flew slowly and gracefully outside and around the northern boundary of the aerodrome past the hospital koppie and turned in over the east boundary to a perfect landing some 300 yards from the launching point. It was a perfect flight lasting 2 minutes 5 seconds.

This flight was succeeded by three more flights by Jimmy Harrold lasting 2 minutes 40 seconds, 2 minutes 30 seconds, and 2 minutes 15 seconds respectively.

Certain adjustments to the winch now became necessary and further flying was curtailed until later in the afternoon. Resumption of flying saw Messrs.



*General view of the club's three machines and hangar, with "Arthur" the tow car and "Willie" the winch in the foreground.*

McGrane and Tite on circuits lasting 1 minute 15 seconds to 45 seconds, but it became obvious that the winch engine was not behaving properly as the higher launches of the morning could not be attained. A cursory examination showed that engine overhaul and adjustments were necessary, so it was decided to spend the following weekend and evenings during the week on that work.

It is hoped to commence pupil training from the first weekend in August onwards, and all those interested are invited to contact the Hon. Secretary at the Club's hangar, or P.O. Box 46, Umtali.

Matt Howie has started on the building of a special trailer to transport the "Kirby Kite" sailplane, and when this is completed a soaring ridge located at the back of Old Umtali Mission will be tested out.

Should this prove successful negotiations will be opened with a view to securing an area of ground close by for training purposes and (it is hoped) the ultimate establishment of the Umtali Gliding Club.

# QUIZ

**Answers.**

1. Altocumulus is the cloud formation known as a "mackerel sky"; altostratus is very high thin cloud in parallel line formation.
2. A barograph is a self-registering barometer carried by sailplane pilots to record heights gained and time taken in flight.
3. A scale for estimating the velocity of the wind. It was designed by Admiral Sir Francis Beaufort in 1805. The Beaufort numbers run from 0 (calm, wind velocity less than 1 mile per hour) to 12 (hurricane, wind velocity above 75m.).
4. Blind flying is flying on instruments alone, either in cloud under a hood. The ceiling is the height of cloud base above the place in question.
5. The centre of pressure of an airfoil is the point in the chord of an airfoil, prolonged if necessary, which is at the intersection of the chord and the line of action of the resultant air force.
6. The forward edge of an advancing mass of cold air which is displacing warmer air in its path, thus causing a strong upcurrent very useful to sailplanes.
7. Convection is the upward or downward movement, mechanically or thermally produced, of a limited portion of the atmosphere. Convection is essential to the formation of many clouds, especially of the cumulus type.
8. Magnetic deviation is the error caused in a magnetic compass by disturbing magnetic influences in the aircraft itself.
9. The dry adiabatic lapse rate is a rate of decrease of temperature with height. It is roughly 1° C. for every hundred metres.
10. False cirrus is the name given to the cirrus-like formation sometimes seen at the head of a thundercloud.

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# GLIDING IN FRANCE

(*continued from page 5*)

"I came down, but I saw that another lenticular cloud was formed above the Durance river, and I found beneath it, at 10,000 feet, a new source of rising air. I again reached 15,000 feet, with every good chance of exceeding my previous altitude, but it was now 4.45 p.m. and the daylight was fading. I was forced to come down in a severe turbulence, and when I landed at 5.55 p.m. a gust of wind nearly overturned me."

F/Lt. Boselli is not only a skilled power and soaring pilot as one can realise after reading her account of her record flight, she also has her "Bacca-laureat"—the Diploma of the Paris "Ecole des Sciences Politiques"—is a Red Cross Nurse—she has visited nearly all European cities—she speaks several languages, is very charming and is very high spirited.

The French Soaring family, therefore, is lucky to include in its ranks a pilot who is so interesting and accomplished, and we shall certainly hear again from Elizabeth Boselli.

# BRITISH GLIDING ASSOCIATION

THE first Annual General Meeting of the British Gliding Association was held in Londonderry House, Park Lane, W.1., on Friday, 27th February 1948, at which there were present representatives of the Member and Associate Clubs plus the Chairmen of the sub-Committees.

The beginning of the proceedings was marked by a minute's silence in the memory of Robert Kronfeld and H. O. Davies whose deaths are reported elsewhere in SAILPLANE.

In his opening remarks the Chairman, Mr. Dudley Hiscox, compared the state of activity of the Gliding movement in Great Britain as it had been a year ago and in 1946. Whereas, in January 1947, some 55 aircraft were being operated and 41 were under construction, the figure for the beginning of this year could not be given because some of the Clubs had not replied to the questionnaire which was obligatory under the rules of the Association, but whereas two years ago the Clubs had anticipated that 200 aircraft could have been operated had they been available, it appeared that their second thoughts in January 1947 had reduced this number to half.

The Association had now functioned for one year as a Company Limited by guarantee whose Council consisted of one nomination from each full member Club. Previously it had existed under the Friendly Societies Act. Under the present system members of the Council do not have to refer back to their Clubs for instructions but lose their identity in the common Council working for the common good of the Gliding movement.

There had been some disagreement with this view and the Yorkshire Club had put down a motion for discussion at this meeting on this subject.

The achievements of the Association during the year might be listed as follows :—

(1) They had assisted to administer the Kemsley Fund. B.A.G. Meads was the Secretary of the fund and Ashwell Cook represented the B.G.A. on the Board of Trustees. Several loans had been earmarked for Gliding Clubs.

(2) National Contest had been arranged on neutral terrain.

(3) Evidence had been given before the Whitney Straight Committee.

(4) They had tried to buy 13 German Gliders for Club use.

(5) They had been successful in obtaining a grant from the Ministry of Supply for Research and this had been put under the control of the Test Group.

(6) They had secured that Reserve Command of the R.A.F. should recommend A.T.C. Cadets to apply for B.G.A. Badges and Log Books.

(7) They had registered 336 official Observers.

(8) Published a syllabus of Gliding Training.

(9) Promoted competition for the best British High Performance two-seater Sailplane, which had resulted in a very high standard of entry.

(10) Formed an Instructors panel for Sailplanes of less than 1,250 lbs., thus relieving the guild of Air Pilots and Navigators of this resonsibility.

(11) Secured a decision that Gliding Clubs and members should be eligible for petrol allowance.

(12) Advised the Minister of Civil Aviation on a Gliding subsidy.

(13) Advised him not to introduce a Glider Pilots Licence.

(14) Delegates had attended a Meeting of the F.A.I. in Paris.

(15) Issued the following Certificates and Badges. (A) 1575 (B) 604 (C) 341 (Silver C) 43 (Golden C) 1, (at which point the Chairman turned aside to congratulate Charles Wingfield on his magnificent performances in Texas).

(16) Fresh achievements of the British Gliding movement had been the following British records :—

Distance—C. J. Wingfield—216 miles. Cat. I Single seater, Eon Olympia Texas, British National Record.

Out and Return—147.2 miles—Wingfield—ditto.

Goal Flight—P. A. Wills—140 miles, Weihe Yelverton to Ratcliffe—British National Record.

Cat. II Multi-Seater—Distance Flight. Nicholson and Blake, 118.2 miles, Kranich British National Record.

Height-Flight, Lieutenant Williams and W. Khan, 8,399 feet, Oerlinghausen British National Record.

U.K. Local—Nicholson and Blake, 7,000 feet, Kranich.

Haberstich and Fahlander, U.K. Local Record, 126 miles, Swiss Record.

U.K. Local, Cat. I. Single-Seater, duration, L. Marmol, Dunstable, Krajanek 25 hours 5 minutes. Also Czech National Record.

Also during the the year following trophies had been added for competition.

The Londonderry Cup, worth £300.

The Eon Trophy contributed by Messrs. Elliotts of Newbury.

Amongst the things they had not succeeded in doing was to make an arrangement by which flying membership of Clubs was interchangeable. They had also failed to live within their income and the matter had been taken in hand only just in time. As from December 1st, the British Gliding Association organisation had been reabsorbed in the Royal Aero Club while retaining their identity and responsibility for policy. This had meant the resignation of Lt. Commander E. H. Spence (the

Admiral) to the great regret of all those who knew him. However, they had been fortunate in having allocated to them the services of Mr. R. Clowes who was looking after the affairs of the Association as full time Secretary under the Royal Aero Club. The surplus of cash in hand on December 1st, had been £28.

At the moment there were 13 full members and 26 associate members. The thanks of the Association were due to Anne Douglas, the Honorary Assistant Secretary, and to Miss Macilwaine of the Royal Aero Club staff, who had made the changeover in the organisation a very smooth operation. He offered his thanks to Colonel Preston in particular for his help in financial matters and to the Chairmen of the various sub-Committees.

The Secretary, Mr. R. Clowes, then presented his report. Owing to the fact that so few Clubs had replied to the questionnaire, it was difficult to make an accurate comparison of the last year's figures. However, it was noteworthy that with approximately the same number of aircraft as had been reported at the end of 1946, the Civil Clubs in England had carried out nearly double the number of launches and treble the number of flying hours in comparison with their figures for 1946.

Then followed reports from the Flying Committee, the Technical Committee and the Research Committee, but when the Treasurer was called upon to make his report, he had unfortunately disappeared, and the meeting therefore proceeded with the assistance of the Auditor.

Election of Council. The following were elected to the Council, W. Gardiner, P. A. Wills, L. Wright and K. R. Newman. Dudley Hiscox was elected Chairman on the proposal of the Yorkshire Club, seconded by Leicester, without there being any other nomination. Then followed the most amusing part of the proceedings.

The Council have recommended that the subscription should remain the same, as the legal adviser had ruled that they were unable to alter the fees of associate members. Full members fees could only be altered in a General meeting which required 21 days notice, but there seemed to be no point in holding a General meeting as the only people who could vote are the Council. Several subterfuges were thought of for getting round this legal quandary, including a suggestion from Wingfield that the Council might take note of the feeling of the meeting that the subscriptions might be increased. Rice said that something had to be done about the deficiency of about £288, it could not just be left to the Council. Sharp of Yorkshire moved that the budget for the forthcoming year which was under discussion, be referred back to the Council for them to make it balance which Rice seconded and which was carried.

It was then announced by the Chairman that on the question of Auditors he had been advised that the Royal Aero Club preferred to have their own Accountants as Auditors, which meant a break with the firm who had carried out this function for the Association for the past 18 years.

Amongst other subjects discussed was the National Contest for this year, and it was left to the Redhill Club to see what they could do.

# AUSTRALIAN GLIDING

## CHRISTMAS—NEW YEAR 1947-1948

## TOUR WITH "GULL" SAILPLANE

**Sydney Soaring Club, New South Wales, Australia.**

THE Sydney Soaring Club had decided on Coonamble as the base, or rather starting point, of Christmas 1947-48 sailplaning operations.

In the event Parkes was the base for part of the time. We all enjoyed the trip, especially myself since I did no work.

As regards results it was moderately successful with satisfactory and unsatisfactory features. Among the former were flights of 187 miles by Martin Warner and 148 miles by Len Schultz and a climb to about 8,100 feet above the point of release by Mervyn Waghorn (achieved by circling in cloud).

The disappointments were: 1. The many days which proved poor for soaring. 2. The fact that the



*Doc Heydon preparing to take-off*

turn of some of the best pilots fell on such a day (notably Sel Owen). 3. The slight accident to the "Gull" which curtailed the trip by a few days.

Before giving brief details of the day to day events mention must be made of the valuable lessons learned on this trip.

They were: I. The enormous value and success of Schultz's radio equipment. This operated on a shorter wave length than that used previously. As before, the equipment in car and "Gull" are identical, the aerial on the car being a vertical antenna and in the "Gull" a wire just inside the trailing edge. No tuning in is required. For the most part "Gull" and car communicated on ½-hour schedules. Apart from zones of poor reception "Gull" and car were able to communicate at all distances attempted; for instance Martin Warner landed 187 miles away from the car which was on the Parkes aerodrome; two-way communication

was achieved at this distance, even when the " Gull " was on the ground. Though conditions varied and reception was not always good, the car and " Gull " never lost touch for long on any of the flights, even though the car remained at the starting point. A listener in Sydney also heard many of the conversations between car and " Gull."

Schultz had another receiving set in his car through which a special weather report was received every morning by courtesy of the Met. people at Mascot.



*No flying to-day*

2. Our previous notion that one could hardly go wrong in mid-summer in the interior of New South Wales proved hasty. On this trip there were many fine days which were very poor, either for the whole day or for a very large part of it; on some of these days nobody would believe that conditions were not good until he himself tried and failed. I will make no attempt to discuss meteorological causes; but a discussion by a competent person should be valuable.

3. A new technique grew up during the trip which will be valuable to all sailplane voyagers who take an aeroplane for launching. This consisted in using the " Tiger Moth " to tow the " Gull " from the paddock where it landed to the desired point of departure for the next day's flight; this could be done either in the evening after the " Gull " landed, or next morning early while the air was still calm, or partly in each of these two periods.

Thus, if the "Gull" had landed at a place unsuitable for the next day's flight, having regard to the nature of the country and the probably wind direction, it could be got to a suitable place more quickly than by car towing it in the trailer, a procedure which often involves either an all night drive or the loss of most of a day.

**Details of Each Day Follow**

*Saturday, 20th December*, 1947. Len Schultz's car towed the " Gull " in trailer.

The " Tiger Moth V.H.-B.G.K. " arrived at Coonamble drome the same afternoon.

The " Tiger " was tied down beside a Butler's Airways " Dragon " (also tied down) near one corner of the Aerodrome. At 11 p.m. a remarkable local storm occurred which blew the " Dragon " into the Castlereagh River and wrapped the remains of the " Tiger " round the Men's Latrine. Little but the engine survived from the " Tiger " since both compasses and both magnetos were removed by souvenirers.

*Monday, 22nd December*, 1947. Fred Hoinville arrived at Coonamble from Mascot with another " Tiger " kindly lent by the Royal Aero Club of New South Wales. This " Tiger" V.H.-A.P.F. " was fitted with the towing gadget from the wrecked " Tiger."; however it lacked the extra tank possessed by " V.H.-B.G.K."

*Tuesday, 23rd December*, 1947. It was decided not to attempt cross countries on this first day. Flights were made by myself, Schultz, and Neary, and the radio was tried out.

*Wednesday, 24th December*, 1947. " Gull " did not fly, weather being unpromising and the " Tiger " finding no lift.

*Christmas Day*. Waghorn released at 1,500 feet and reached 4,500 feet; one hour; did not get away and landed back on the drome.

*Friday, 26th December*, 1947. No one got away, though Waghorn again stayed 1¼ hours and gained 3,000 feet.

*Saturday, 27th December*. Waghorn released over Coonamble at 9.50 a.m. at 1,500 feet, landed 1.15 p.m. 26 miles away after having gone up to 5,400 feet. Took off again from Gulargambone, released at 1,200 feet, got up to 5,000 feet and landed 10 miles on at 5.30 p.m. On this day Waghorn decided to get away South from Coonamble at all costs though




*The morning after the Storm*

there was a slightly unfavourable wind; light, more or less S.W.

*Sunday, 28th December*. Heydon flew 12 miles gaining 2,400 feet, and another 23 miles gaining 3,000 feet. During the first flight it was discovered that the variometer was not working owing to having become accidentally disconnected.

*Monday, 29th December*. Owen at his second attempt managed 35½ miles, rising to 4,100 feet.

Landed at 1.25 and on yet a third attempt found no more lift.

*Tuesday, 30th December.* After early flight which found no lift Warner landed at 12.30 p.m. 13½ miles from starting point in a paddock exclusively occupied by thistles of remarkable strength and thorniness. Was towed back to Parkes hoping to find lift on the way and release again, but nothing doing.

*Wednesday, 31st December.* Schultz found no good lift except near Parkes aerodrome, so did not get away, but he stayed up 1¼ hours having gained 2,000 feet. Neary found no lift in the afternoon.

about 20 m.p.h. at cloud level. Warner had three unsuccessful flights, Owen at 2.30 found conditions were improving, and Neary, taking off at 3.33 p.m. landed at 5.30 p.m. 62 miles away, having climbed to 5,000 feet, climb above lowest sink being about 3,400 feet.

*Saturday, 3rd January.* Warner released about 3 miles North of Parkes aerodrome at 1,600 feet at 9.5 a.m. and after reaching Parkes aerodrome was down to 500 feet at 9.25 a.m. He then found lift and proceeded North without having landed. Unfortunately the Barograph had not been started.



*Doc Heydon, Sel Owen, Pat Neary, Merv Waghorn, Martin Warner, Len Schultz, Michael Schultz.*

*Thursday, 1st January.* Cloud throughout day and rain in afternoon. No lift.

*Friday, 2nd January.* Schultz tried twice over Parkes, the second time flying straight into a cumulus cloud without finding lift. On this morning there were cumuli, some fairly large, forming irregular streets, about 6/10th, base about 3,000 feet; wind about S.W. about 15 m.p.h. Everyone thought conditions looked good and there was lift, but it was difficult to utilise and irregular during the first half of the day at least. In the afternoon cumuli were higher, about 3/10ths, wind S.S.W. probably

This day there were rugged cumuli in the morning, about 3/10ths, base about 4,500 feet, wind Southerly, probably 20 m.p.h. at cloud level; about 4 p.m. cumuli were flatter and higher, base about 6,000 feet, say 1/10th, moving slowly from the South.

Our special Met report in the morning was "High over most of the Continent; wind South 25 to 30 m.p.h. up to 5,000 feet, moderating above that height. No front. No Inversion.

In Len's car at Parkes aerodrome we had two-way communication with Warner throughout this day's flight (quarter hour schedules) with however

considerable fading in a zone from about Narromine to Coonamble. Warner had food as well as water in the " Gull " on this trip. He landed about 2 miles South of Coombogolong, a homestead on the road from Coonamble to Walgett; distance 187 miles, M. 6,500; near Coonamble drome he was forced down to 500 feet; his time of landing at Coombogolong (which was forced) was 3.30 p.m. After his landing we heard Warner give his position and



*Remains of a " Tiger "*

Coonamble police were rung up; Owen and Waghorn had left for Coonamble in the " Tiger " and on arrival they got our message and set off for Coombogolong. At 5 p.m. while listening in the car at Parkes aerodrome to Warner on the ground we suddenly heard him say that the " Tiger " had arrived. At 6 p.m. Len in the car in the town of Parkes communicated with Warner in the " Gull " which had now been towed off by the " Tiger " (which took it to the Coonamble aerodrome).

*Sunday, 4th January*, 1948. Owen with Warner as passenger in the " Tiger " left Coonamble aerodrome about 6 a.m., towing the " Gull " piloted by Waghorn; A more than 2 hour tow ended at Parkes aerodrome about 8 a.m.

This day light wind, Westerly; cumuli, about 2/10th, base 6,000 to 7,000 feet. Schultz released over Parkes drome at 2,500 at 10.19 a.m. Landed 6 p.m. at Coonamble aerodrome; distance 148 miles; did some circling in cloud; duration 7 hours 41 minutes; was forced down to at least 800 feet near Peak Hill and later reached M of 7,000 feet.

Waghorn in his flight this day got little help from the wind, which was very light and varied North and South of West. Early cumuli with base about 6,500 feet increased rapidly to almost 10/10ths in afternoon. In his first tow off from Parkes aerodrome he released at 1,600 and found no lift. In second attempt R. 1200 at 10.56 a.m. Proceeded towards Forbes and contemplated an out and return flight with Forbes as goal; after getting about 10 miles South of Parkes decided to return because sky looked unpromising to the South. By 3 p.m. he was about 12 miles North of Tomingley (at least 51 miles North of Parkes) and turned South again, aiming at a hundred miles out and return from Parkes; was forced to land 4.30 p.m. about 8 miles North of Alectown.

Waghorn did some cloud flying in this flight and reached his maximum height of about 9,300 feet in a cloud; duration 5 hours 34 minutes. On this strenuous day Waghorn got, with ample margin, his last remaining leg (height) for his Silver " C."

The same evening Schultz flew " A.P.F. " to Waghorn's landing point and towed him back to Parkes aerodrome.

*Tuesday, 6th January*, 1948. This looked a promising day but proved otherwise. Our Met. report was inversion at 7 to 8,000 feet South wind 20-25 m.p.h. At Parkes there were cumuli (4/10th base about 3,000 feet) in morning rising about mid day to base of about 5,000 (2/10ths) moving from South to S.S.W.

Neary in his first flight found no lift. Third flight very bumpy and lift broken and difficult (wind now perhaps 25 m.p.h. near cloud base). Fourth flight R. 12-46 p.m. about 5,000 and landed 1.12 p.m. We were surprised to observe Neary hang on in this flight to 5,0000 feet and the " Tug " pilot, Waghorn was also getting worried. We noticed Neary yawing rather violently; when he landed we learnt that the yaws were intended as signals that he could not release; to tow the " Gull " on the ground a ring had been slipped over the towing hook and the take off was inadvertently made thus; pulling the release cable of course had no effect, and moreover the weak link was excluded. He finally released by getting above the " Tug " and then diving up beside him until the ring fell off.



*Wot! No Salvage?*

About 3 p.m. Neary began a tow off for a fifth flight from Parkes aerodrome. When considerable speed had been gained, but before the " Gull " was airborne the port wing tip caught in a clump of strong and high Scotch thistles which afflicted part of the drome. The wing did not tear loose and the " Gull " did a sudden 180 degree turn rising a few feet from the ground in the process, and landing on its nose. Neary was unhurt but the port wing, the nose, and the fuselage were slightly damaged.

The weak link (at the " Gull " end) had yielded just before Pat pulled the release. The " Gull " was immediately packed into the trailer on the drome.

*Further Notes.* On this trip a parachute (nylon) was worn on all flights. The barograph used gave satisfactory tracings on most flights. Full records of many flights were kept by the listener in the car. The rate of turn indicator worked well but those who flew in clouds (even Schultz) found the " Gull " difficult to fly blind above a very slow rate of turn.

This T and B instrument was an English one slightly modified by Ted Baker. Two sets of batteries were mounted in front of the instrument board, one set being a reserve; each set consisted of four 3 volt cycle lamp batteries joined in series; the instrument was started on 12 volts and run on 9 volts; the switch on the instrument board has six positions (12 volt, 9 volt and off for each set of batteries).

A good clock was mounted on instrument board. The altimeter was a Kollsman sensitive.

The " Gull " had a trimming tab, operable from cockpit, fitted to elevator before this trip.

The " Gull " is being repaired at Macquarie Grove Aerodrome, Camden, New South Wales.

Report by Dr. G. A. M. Heydon.

15*th January*, 1948.

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# ULTRA LIGHT AIRCRAFT ASSOCIATION

ON the 27th April, 1947, a Mr. M. J. Conry, flying a Douglas-engined " Drone " ultra light aircraft, crashed into a field at Gerrards Cross, Bucks. Had it not been for the fact that U.L.A.A. had at the time of the accident already established sound contact with technical departments of the Ministry of Civil Aviation, the whole ultra light aircraft movement might well have crashed at the same time for it is now clear from the recently-published report of the accident by the Chief Inspector of Accidents that Mr. Conry had broken practically every flying regulation that could be broken under the circumstances. Many opponents of ultra light aircraft said at the time that this was the sort of thing that was going to happen if ultra light flying was encouraged and we have had an uphill fight convincing them that the Conry incident was by no means typical of the sort of flying we believe in.

The " Drone " aircraft was of a type which had been allowed to operate before the war—and is now once again allowed to operate subject to adequate inspection—under a Permit to Fly. But at the time of the accident such Permits had not been re-introduced and Mr. Conry decided, therefore, to take the law into his own hands and fly without permission. That alone was a bad enough breach of the regulations but coming, as it did, at a time when the whole future of the ultra light movement was in the balance, it was little short of a miracle that M.C.A. did not decide there and then to ban all future amateur flying in ultra lights. Fortunately, we managed to convince M.C.A. that Mr. Conry's antics were deplored just as much by U.L.A.A. as by the Ministry and so, eventually, our negotiations for re-introduction of Permits to Fly reached a satisfactory conclusion in August last year. Yet in a recent interview with a newspaper reporter following publication of the official report on his crash, this brash young man had the nerve to claim that it was this accident which had frightened M.C.A. into re-introducing Permits in August !

Shortly before the crash, Mr. Conry (who, be it known, is *not* a member of U.L.A.A.) had informed us by telephone that his illegal flying was in the nature of a crusade to secure freedom for amateurs to fly as and when they liked, without restriction. Despite our request that he should not fly again (he had already made a number of flights before the accident) until our negotiations on the Permit to Fly question had been settled, he refused to be guided by us with the deplorable results now well known.

Now while U.L.A.A. is all in favour of securing as much freedom as is possible consistent with safety, we realise that certain regulations and controls are essential in aviation and we cannot subscribe to Mr. Conry's idea of freedom. What he favours amounts, in effect, to anarchy in the air, with everybody flying what, how and when they will and may the devil take the hindmost ! This is made clear by the findings of the Chief Inspector of Accidents who investigated the crash. Apart from the fact that the " Drone " had no permit to fly, Mr. Conry himself did not have at the time of the accident, nor was he qualified to obtain a pilot's licence. The fact that just prior to the accident he had failed in a test for such a licence would have deterred most people from attempting a cross-country flight under conditions obtaining at the time of the crash but Mr. Conry had, apparently, a higher estimation of his own skill as a pilot than had the examiner who failed him. But perhaps the most serious of Mr. Conry's many omissions was the fact that there was no Third Party insurance cover in force in respect of the " Drone." True, he had applied for such insurance but his application had been turned down because he, himself, had no Pilot's licence and there was no permit in force for the aircraft. To our mind, flying without Third Party cover is the worst sin of all since any individual on the ground who suffers damage to his property or injury to himself is left with very little chance of redress against the pilot of an uninsured aircraft which might crash on him. Apart from all this, the Douglas engine with which the " Drone " was powered was revealed by the Inspector of Accidents to have been in a shocking condition, and in need of a complete overhaul. It was failure of this engine which led to the crash when, due to his inexperience, Mr. Conry committed an error of flying technique while attempting to carry out a forced landing.

This sort of thing must not be allowed to happen

again. If it does ultra light flying will soon be in bad odour and all our efforts to introduce really cheap flying will have been in vain. The whole aim of U.L.A.A. is to get people into the air as cheaply as possible but with complete safety and we would like at this point to go on record as being dead against Mr. Conry's type of crusading. All of us fight against increasing restrictions on our daily lives but if we study the situation impartially, it soon becomes clear that many of the most irksome controls have become necessary because of the irresponsible actions of a few people. Far from resulting in more freedom for the individual, crusading of the type indulged in by Mr. Conry usually leads to the imposition of fresh controls or the tightening up of existing ones so as to prevent a recurrence of similar incidents and so the population as a whole suffers.

In our own case it is only by abiding by such rules as are at present in force so far as ultra lights are concerned that we can show that we are responsible enough to be trusted with more freedom. This does not mean that we intend to submit meekly to such controls as are manifestly unnecessary but the ones Mr. Conry chose to ignore are, in our opinion, essential and we look to our members to support us by seeing that they are never broken again.

## ANNUAL GENERAL MEETING

Subject to confirmation of our Booking, it is proposed to hold the Annual General Meeting of members of the Association in London on the afternoon of Saturday, the 10th April. This will be followed by a Meeting of the General Council (consisting of members of the Executive Committee and representatives of affiliated Groups, Individual Members and Associate Members) on the evening of the same day or the morning of Sunday, the 11th April.

## SUPPLY OF ENGINES FOR ULTRA LIGHT AIRCRAFT

Up to now, one of the biggest bottle-necks in the field of ultra light aircraft construction has been the supply of suitable engines and it is, therefore, with great pleasure that we are able to announce that U.L.A.A. has been able to purchase a complete batch of 37 h.p. J.A.P. aero engines. These engines are of a type-approved design and brand new. However, having been stored for some time since their acceptance tests, it will be necessary to carry out a certain amount of overhauling on each engine after which they will be available for sale to members of the Association, complete with A.R.B. test certificate and log-book. The necessary work of overhauling is now in hand and the first of the engines will be ready for use in the near future. Members and Groups interested can have details of these engines, together with price, etc., on request.

## WORLD SPEED RECORD—100 Km. CLOSED CIRCUIT

As announced some months ago, Sqn. Ldr. R. L. Porteous established a world record for the class in his Chilton monoplane at Lympne last August but subsequently there was some dispute when the engine capacity came to be measured. We are, therefore, glad to be able to announce that this matter has now been cleared up and that the record has been accepted officially by F.A.I. in the up-to 2 litre class. Congratulations to Porteous and to the designers of the "Chilton."

## SHORT SPAN WINGS

We were recently accused (unjustly!) of encouraging the development of aircraft with very short-span wings which, in the opinion of certain members, would be highly dangerous in rough weather. The effect of wing span on controllability is, however, an interesting design point. A very long span (such as is found in gliders) is rendered fairly stable laterally by the high inertia of the wing and its damping effect in roll. A high aspect ratio wing, however, is necessarily rather flexible with the result that the aileron control circuit lacks stiffness, thus making lateral control sluggish. In rough weather, such an aircraft wallows about uncomfortably but is unlikely to suffer any dangerous degree of displacement in roll.

Short-span aircraft, on the other hand, are more sensitive laterally and may consequently be rolled through a considerable angle on encountering a sharp vertical gust. At the same time, instantaneous correction is possible since their aileron controls are crisp and responsive, making the aircraft far more manoeuverable and pleasant to handle. When stalled, short-span aircraft tend to spin more readily than long-span types but their positive lateral control enables immediate recovery to be made.

It is probable that short-span aircraft may be found tricky at first by a pilot used only to gliders but for an experienced pilot, they are far more amusing to fly. An ideal compromise would appear to be as for the "Chilton" monoplane (span 24 feet) which is delightfully manoeuverable without being over-sensitive. Spans of less than 20 feet, however, might well prove dangerous in the hands of inexperienced pilots.

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MESSRS. THOS. COOKS & SON, LTD. have communicated with *Sailplane* offering to arrange parties to visit Samedan, Switzerland, as spectators of the International Gliding contests from July 19th—31st, cost inclusive of all meals, Second Class reserved seats on trains, and Boat Saloon is about £39, payable in this country.

Will those interested please communicate with *Sailplane* marking their envelopes "Swiss Visit 1948."


*Want to Fly Cheaply?*

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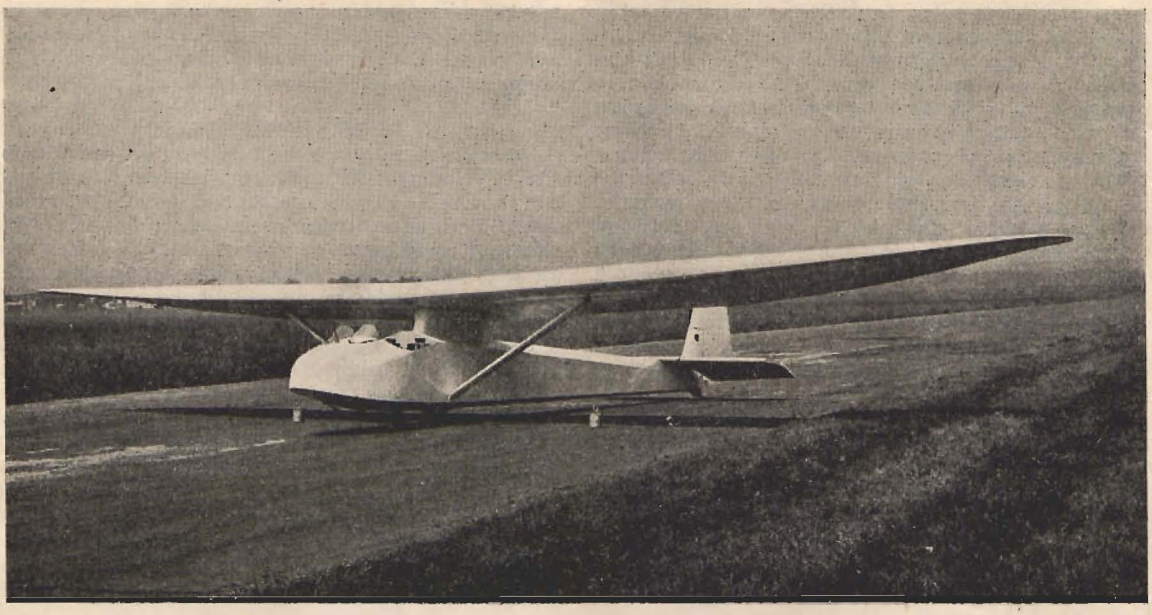
**Group-operated home or factory built ultra light aircraft offer the very cheapest form of non-subsidised private flying. This is what U.L.A.A. is sponsoring, so why not find out more about this rapidly expanding national organisation?**

*Full details on request from:* **HON. SECRETARY,**

**ULTRA LIGHT AIRCRAFT ASSOCIATION**

**15, Westbourne Park Road, London, W.2.**

**Telephone: BAYSWATER 7394**



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Fitted for catapult or winch launch, and aero-tow up to 73 m.p.h.

The "T.21 B" is now used by the three leading gliding clubs of Great Britain.

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| Span .. .. .. .. .. | 54 feet | Empty weight (equipped) .. .. | 592 lbs. |
| Wing Area .. .. .. .. | 260 sq. feet | Overall length .. .. .. | 27 feet |

PERFORMANCE WITH FULL LOAD.

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| Gliding angle at 42 m.p.h. .. | 1 in 21 | Minimum sinking .. .. | 2.7 ft. sec. |
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# NEWS FROM THE CLUBS

## DERBYSHIRE AND LANCASHIRE GLIDING CLUB

*January.*

*Sunday, 4th.* Wind W.S.W. 20. J. S. Armstrong was launched in his "Olympia" but had difficulty in keeping out of cloud, which was down to 500 feet. After 10 minutes he gave it up and no other machines were launched.

*Sunday, 18th.* Wind W. 20-25. A fairly stiff westerly breeze gave us our best day for a long time. Gerry Smith was first off in the "T. 21" and he and Eric Taylor gave dual instruction to a few members. The "G.B." made an early appearance and was flown by Dickson, Thompson, Midwood, Leach, Rawless and Sharpe. Five "Olympia's" put in just over 10½ hours between them. The maximum height was obtained by Armstrong at 1,900 feet, otherwise the "Olympia's" were round about 1,300 feet.

It was quite an enjoyable day with 22 launches and 14 hours 48 minutes soaring. A small snowstorm which passed to the North of the site improved the lift a little, but hardly justified the publicity it received in the Press the following day.

*Sunday, 25th.* Wind S. 10. The weather brightened up a little after lunch, so that it was possible to test fly the "Kadet No. 2" which arrived back from Slingsby's recently after a repair and overhaul. Three members had flights after the test, the third landing on a wall soon and breaking the Skid.

### Annual General Meeting

The Thirteenth Annual General Meeting was held at Camphill on Saturday, 14th February at 6.30 p.m.

The Chairman, Mr. B. A. G. Meads in presenting his report for the year ended 31st December, 1947, said that the year 1947 had seen a considerable increase in our activities. Total winch launches were 2,571, nearly twice as many as in 1946. Total hours were, 470. Perhaps the most interesting development from a flying aspect was the discovery of standing wave conditions off the South slope and also off the North West slope.

Progress on the domestic or non-flying side had been steady rather than spectacular. The House Committee had managed to provide good meals in spite of all restrictions and there were plans for building a water tower to supply running water and the re-organisation and improvement of cooking and washing facilities. On the field, drainage had been vastly improved and there had been no flooding in the Club House, such as we have previously had.


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*Write to Hon. Secretary*
**A. J. THORBURN,**
**137, ROSSLYN STREET**
**KIRKCALDY**
**PHONE DYSART 5442**

The policy of the Club had been to order the machines we required well in advance. Four machines had been ordered for delivery between March and June this year. One or two of the older sailplanes might be sold in order to keep the fleet up to date.

The Chairman pointed out that the Club had provided *ab initio* training since its inception in 1935. It was one of the cardinal points in the policy of the Club that training must be continued almost at any cost in order to preserve the enthusiasm and spirit of the Club. At the same time, our experience of the past two years had shown us that we can only carry on training by the exercise of extreme care and rigid economy.

The Accounts for 1947, showed a profit of approximately £350, but this was after taking credit for £655 contributions towards the cost of new machines, so that there was actually an operating loss last year of £305.

Petrol rationing and rising costs would this year further increase this loss to £550. The Committee felt that immediate steps should be taken to meet this situation and considered that their duty was to reduce the cost of gliding by commissioning only such machines as could be fully employed the whole time. All machines not immediately required would be stored in reserve. The Chairman closed his remarks by saying that he hoped members would appreciate the urgency of the situation and the necessity of reducing costs as much as possible.

As a result of the ballot for the new Committee, Mr. Harry Midwood was elected for the ensuing year, in addition to the five retiring members.

Miss Margaret Swale was presented with a pewter tankard suitably engraved, as the most promising *ab initio* pilot of the year. This award was instituted at the last Annual General Meeting by the ladies and was dubbed the "Widow's Mite." Margaret is the first recipient of the award.

The meeting was followed by a supper arranged by the ladies, who did all the catering, cooking, and decorations. Approximately sixty members attended the meeting and dinner, which, but for petrol rationing, would have been held at some local road-house at colossal expense and with indifferent success.



*Marshal of the Royal Air Force, Sir John Salmond, and R. G. Stevens at the Southdown Dinner.*

## SOUTHDOWN GLIDING CLUB

On the afternoon of Saturday the 17th January, the Annual General Meeting of the Southdown G.C. was held at Arnold House Hotel, Brighton, being followed by a very successful Dinner and Social in the evening.

At both of these events we were honoured by the presence of our recently elected President, that very distinguished aviator, Marshal of the Royal Air Force Sir John Maitland Salmond, G.C.B., K.C.B., C.M.G., C.V.D., D.S.O., who displayed a very keen interest in the affairs of the Club.

The Dinner and Social was the first of its kind held by this club since 1939, and afforded members the much needed opportunity of meeting over a drink instead of the wing of a glider.

Among other very welcome guests were G. T. Rubick, one of our prominent pre-war members to whom the Club owes much, and our good friend "Doc" Slater, who incidently, roused the whole establishment at 11.30 by "going to town" very determinedly on the piano. It was really superb.

From the Surrey G.C. we were very pleased to have with us Mr. Lorne Welch and "Soapy" Hudson. The latter, now resplendent in the uniform of His Majesty's Army, made every use of his week-end and accompanied us to Friston on the following day, where after one unsuccessful attempt at soaring the West Slope (due we believe, to the added weight of the Hon. Sec's No. 11 Wellingtons) made a very good flight of 30 minutes and thus gained a long awaited "C."

All this was the finale to a very successful year at Friston. Not successful from the point of view of cross country's or duration records, but because an old club

has been re-born with a new spirit, and the foundations firmly laid for far greater things ahead.

Talking about foundations, we expect that permission will shortly be granted to erect our Hangar and Club House. After months of negotiation, patient waiting, and the completion of forms and drawings in triplicate, the local Country Planning Committee are now expected to consider our pleas.

Our plan is to erect the building in a shallow disused chalk-pit which borders the site. In this position even the most aesthetically minded of the local gentry should find no cause for complaint.

When we have the Hangar, and not until, we can seriously consider the purchase of new machines and the general expansion of the club. At the moment we are making do with ex-R.A.F. huts for glider stowage and club-room.

To those members of neighbouring clubs who are prepared to take us as they find us, for better or for worse, we extend a very cordial invitation to visit us at Friston this year. If you have not yet tried cliff soaring over the sea, come down and " have a go."

During the periods when overland winds are blowing, visitors will have the opportunity to search for thermal activity among the surrounding hills and valleys. Whatever the winds we can assure you of a very pleasant week-end by the sea, guaranteed to cure all aches, pains and crisis cares, with of course, our closest co-operation at all times.

The rates payable by visitors were fixed at the A.G.M., and are as follows: Visitors membership (two days), 10s. 6d.; Launching charge for private machines (including retrieving), 2s.; Use of Southdown Club machines at same rates as members, e.g., 10s. per hour for soaring. For those interested, the rates for country membership, over 50 miles from Friston, are: Entrance Fee, £2. 2s. 0d., Annual Subscription, £2. 2s. 0d.

We would like those who intend to pay us a visit to inform the Hon. Sec. beforehand if possible, at 178, Old Shoreham Road, Southwick, Nr. Brighton, Sussex.

## R.A.F. STATION WUNSTORF GLIDING CLUB

This club under its previous name of 123 Wing R.A.F. Gliding Club has appeared in print only under the heading of " Gliding Certificates," but the time has come, we feel, when our presence in the Gliding world should no longer remain secret.

1947 was a hard year for us working as a few enthusiasts against the difficulties of limited equipment and staff. We had only two " Primaries," a " Grunau," an " Olympia," and one balloon winch. The transport position was difficult and irregular; for a short time, even the services of a bicycle were utilised to chase wing tips, but alas! the bicycle was the victim of one of our only two serious " prangs " in the year, the other being due to over-confidence and a serious breach of flying-discipline.

In spite of these difficulties, the club has not only survived, but is at this moment full of intense enthusiasm and excitement at the prospect of recommencing activity at the end of February under very different circumstances. Equipment now includes six types of machine, the " Primary " (S.G. 38), the nacelled " Primary," the beloved baby " Grunau," the " Mu 13," the " Olympia," or " Meise," and that disciplinarian the " Kranich." (Forbes beautiful " Weihe " complete with radio, oxygen, " speaking " tube, etc., will be available for attempts at the " Golden C.")

There are now available two modified balloon winches, one Pfeiffer winch and a cable retrieving winch. Four of the German staff, Adolf, Heinz, Gustav, and Brunau, from the now closed Salgitter site are ready to join us as soon as the local Stadtdirektor can produce accommodation for them. A club-room is being organised overlooking the very large and very unobstructed airfield with a launch length of up to 2,500 metres where, with C. of G. launch, heights of 1,000 metres are expected.

Membership is open to all British personnel at the modest fee of £2 for Officers and senior N.C.O's, and £1. 10s. 0d. for Corporals and airmen or equivalent ranks. Membership is payable quarterly.

Solo flying is prohibited to members of the women's services, but they are welcome to join the club at reduced rates to join the queue for the " Kranich."

We are proud to have among our instructors, a late C.O. and the C.F.I. from Salzgitter Gliding School and five Silver " C's " among our members, so we look forward to a high standard of training and to performances which may well appear later in these pages. The two ex-Salzgitter men are F/Lt. " Dave " Hughes and F/O. " Jock " Forbes, in case any old members wonder where those two stick-happy boys have gone. Forbes is now flying " Spit. 24's " with 80 Squadron and, so far, has managed to keep straight and level every time he has hit a bump. Wing Commander Hanks, President of the Club and Wing C.O. Flying at Wunstorf had his doubts as to what our new " Spitfire 24's " might do when subjected to repeated rate 15 turns and, not less, what might happen to Forbes.

The three men mentioned above are the three 84 Group members of the 1947 B.A.F.O. team which took part in the British contests. Already we are casting our eyes towards the Brady challenge cup if (and when) the B.A.F.O. contests take place, by which time we shall have three or four " Golden C's," we hope!

In closing, we extend a welcome to all those in reach of Wunstorf, near Steinhudemeer, and who wish to learn to fly. If you are an A.C.2 and keen, you are as welcome as your seniors.

Any enquiries should be addressed to Fl/Lt. A. T. Johnson, Secretary, Gliding Club, R.A.F. Station, Wunstorf, B.A.F.O., c/o B.A.O.R.5. Tel. Wunstorf 631, Ext. 10.

## BRISTOL GLIDING CLUB

The mild, often wet, weather we have been experiencing at Lulsgate in the last month has allowed a fair amount of flying, although southerly gales have been uncomfortably prevalent. One week-end's flying had to be sacrificed so that all hands might occupy themselves in replacing the tattered hangar curtains by less tattered ones, a job which was complicated by having also to replace one of the rails. Better sleep is now enjoyed on gale-swept nights, however.

Our full-time engineer-instructor is making his presence felt, and is preparing for the Courses which will start in April. This scheme, designed for those people who live out of range of a Club taking *ab initios* and those who wish to try gliding before committing themselves to club membership, is based on intensive auto-tow training under one experienced instructor. Membership of each weekly course is limited to ten to ensure plenty of instruction per member. The Clubhouse being not yet fully developed, hotel accommodation in nearby Wrington is included in the single charge for the Course.

When the summer days are at their longest a Club camp is to be held at Lulsgate. This, of course, is not to be confused with the Courses, and it is probable that everyone will live on the site. The success of the affair will depend largely on the lapse rate.

Last year's launch totals have now been promulgated. 2,382 launches (117 hours flying) were made in Club machines and 117 launches (24 hours) in private owners'. Aero-tows totalled 42, 13 Club pilots having their first tows. R. Ae. C. Certificates gained comprised 18 " A's," 23 " B's," 13 " C's," and 1 Silver " C " height.

At the time of writing, our " Grunau " has had over 29 hours in the air since it went to the Mynd. Cochrane and Chantrill gained their Silver durations there on the 7th and 8th February respectively. On the 7th, especially, conditions were very rough, low cloud restricting John Cochrane to the turbulent layer near the hill and giving him a most strenuous five hours.

We are hoping for a few more efforts like this before we withdraw the " G.B. " from Shropshire and take temporary leave of our hospitable Midland friends.

Our official Test Group, which includes Keith Turner, pre-war Secretary of the Club, and John Cochrane, has received its first contract, which concerns performance testing of the " Olympia."

We are now on the telephone, and Club Secretaries and private owners may care to make a note of our number, Lulsgate 304.

## SCOTTISH GLIDING UNION

There were only two Sundays in January, the 4th and the 25th, when the weather was good, but the most was made of them, especially by the " Dagling " zealots, who ploughed through mud and snow in a good cause, and are grateful for the lengthening days. We adjourned for tea at dusk, and discovered great satisfaction in being able to say " This year," a propos hill-soaring, for our hut-plus-hangar for Bishop Hill is on its way, and we are preparing for some practice in stone-breaking, always useful for Dartmoor, on the site.

February weather failed to ground the keen types at Balado, in fact every week-end showed an increase in numbers. The " Dagling " squad was almost always first on the field, eager to graduate before spring, and Messrs. Flockhart, Labarr, Paton, and Pearce took their " B " Certificates on the " Cadet."

Tea-time discussions centred on our plans for three summer gliding camps, of a week's duration each—the last week in July, and the second and last weeks in August. Our hut has at last been dismantled by its war-time A.T.C. owners, and should be gracing Bishop Hill by the time these words appear in print. Prospective instructors at the gliding camps are torn between brushing up their pupils' Commandments (starting with " Thou shalt not stall "), and gleeful thoughts of summer soaring.

## LONDON GLIDING CLUB

*January*, 1948: The new year opened well with a soaring wind on the first week-end—but only just. On Saturday the 3rd it was S.S.W./15, giving a very restricted beat at the " bowl " end and 3-400 feet of altitude for the " Tutor " types. By Sunday the 4th it had freshened to S.S.W./30-40 in the morning, giving 4-500 feet for the " Tutors " on a slightly longer beat but requiring considerably more muscle effort from pilots. " Tutors " had to be flown considerably faster than their best speed to make any headway. By the afternoon the wind had dropped and backed to S./20, once more reducing the beat to " figure eights " in the bowl at uncomfortably low altitudes, and not all " Tutor " pilots were able to cope. It was under these conditions that a new member, Milicer, a Polish " Silver C " of considerable pre-war experience, essayed his first soaring flights in a " Tutor." He " caught on " at the second attempt and would have been awarded full marks if he had not made a straight-line approach and crossed the leeward boundary at nought feet—a practice heavily frowned on at Dunstable, and one which frequently exacts heavy penalties in machines and self-respect.

The high spot this month was Sunday the 18th when 43 hours 20 minutes were flown, constituting a post-war record. The club's private owner syndicates made this their field day, producing and flying no less than 11 aircraft in which they flew more than half the above hours.

A list of these machines and their owners (not all of whom flew on this day), may be of interest :—

" Minimoa " : Wright, Tudor Edmunds, Latto, Reilly
" Olympia " (Red) : Anson, Buckley, Hurry
" Olympia " (Blue) : Greig, Stephenson
" Olympia " (Blue) : Saunderson, Cartwright
" Olympia " (of indescribable hue) : Cocheme
" Krajaneck " : Marmol
" Rhonbussard " (Lemon) : Passold Bros.
" Rhonbussard " (Cream) : Joan Price, Phillip Cooper
" Gull " (Blue) : Arnold, Lee, Smith
" Scud II " (Black formerly Green): Allan
" Camel " (the one-and-only ) : Ivanoff, Sproul (?).

The club's two " Kadets," four " Tutors " and " T. 21 " two-seater completed the balance of this record number of hours, the club " Gull " unfortunately not having completed its C. of A. overhaul. There were frequently 11 machines in the air on this day, but the wind was S.W./20 and enabled the whole length of the ridge to be employed.

We have referred previously to the fact that Cocheme's " Olympia " has so far defied all attempts to distinguish it from other " Olympia's " by reference to its

colour. For the benefit of those who have not yet seen this craft we shall attempt to satisfy their curiosity by saying it has the appearance of a faintly blood-shot lilac. We hear that Mrs. Cocheme deserves most of the credit for this original effort, and furthermore, that the formula was contrived in a similar fashion to that employed by Macbeth's three witches when concocting their famous potage.

The week-end January 24th/25th, being unfavourable for soaring at Dunstable, Cocheme, Anson, Buckley and Hurry took their "Olympia's" to Luton airport where they had enterprisingly laid on some aero-towing, and those who had not previously enjoyed this method of launching were initiated.

Saturday the 31st rounded off a successful month with excellent conditions for the time of year, even providing a thermal which carried Greig to 1,600 feet though hill lift provided no more than 650 feet.

This month has also provided a useful crop of certificates. Russell took his "B" on the 3rd and "C" on the 14th, Cadman took his "A" on the 10th and "B" and "C" on the 18th (he has extensive "power" experience) while Silvester collected a "B" on the 18th. The end of the month also saw the names of Marmol, Milicer and Scarborough added to the "Gull" list. It also saw the end of the primitive toilet arrangements we have been compelled to use while we were denied access to the main club building. Extensive repairs to drains and plumbing have been carried out during the month and members may now shave in comfort.

Unfortunately, while some improvement was made towards earlier morning starts, considerable flying times was lost this month through lack of co-ordination in launching and retrieving. Some of our day instructors unfortunately try to do all the work themselves instead of organising other members to do it and this over-zealousness usually leads to delays.

*Summary of flying for month of January.*

Number of launches, 251.
Number of hours flown, 108.
Certificates gained : "A"—1
"B"—3
"C"—2

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# LETTERS TO THE EDITOR

One can hardly reconcile R. M. Williams' letter in your February issue with the advertisement of his old B.A.F.O. Club in the same issue offering Non-Members full Messing, Accommodation and Flying for a week for the very small sum of £4. 4s. 0d.

No Club in this country could approach this figure, and it would seem an impossible one for any Club which has to buy, insure and maintain its own Machines and equipment at present day prices, not to mention running expenses, catering costs and wages of staff.

Please Mr. Williams let us harassed English Secretaries see some of the Balance Sheets you mention; they might prove illuminating !

Yours faithfully,

F. G. BATTY,

*Secretary.*

Midland Gliding Club Ltd.

On "FAILURE TO RELEASE THE WIRE."

We still see pilots begin a flight before casting off.

The pilot may be at fault because he only gives the release a half-hearted anaemic pull instead of several full-blooded pulls or there may be a mechanical defect. If the self release does not work, he is chopped and some wire stays flying. I saw one pilot last year go round with about 1,200 feet of wire hanging from his nose and bouncing in the heather until it dropped off.

The pilot does not always know the wire is still on even if he has been chopped. I know three pilots who failed to release, were chopped and did not know they still had the wire dangling from the nose of their machines until they landed. One was even pulled into a nose-dive of over 100 feet before he was chopped and still he did not realise the winch-wire was still on and remained on until he landed, when he released with an easy pull.

Of course, the automatic release has been designed to avoid these accidents, but they may fault sometimes.

To increase safety, I suggest an inspection panel be placed where the pilot can see the wire all the time he is on his climb.

He will know he is still on the wire, whether it is slack or not and when it is gone. Such a look-out panel should lessen the perils of a wire breakage in the early part of the climb, which can be very frightening, because an early break may take place without any snatch being perceived by the pilot, the first awareness of his danger being the sudden quiet.

Whereas, if he could see the wire all the way, the pilot would see it slacken.

I give you the suggestion for what it is worth.

A. DE REDDER,
124, Laygate, South Shields.

# ROYAL AERO CLUB GLIDING CERTIFICATES

**(Issued under delegation, by the B.G.A.)**

**GLIDING CERTIFICATES:** "A" .. 146 (7601-7746).
"B" .. 50
"C" .. 21

**SILVER "C": 0.**

| *No.* | *Name.* | *A.T.C. School or Gliding Club.* | *Date taken.* |
|---|---|---|---|
| | | "B" CERTIFICATES. (50) | |
| 4540 | Patrick William Wallace | 139 Wing G.C. | 5.10.47 |
| 5436 | Gordon Victor Eli House | 89 G.S. | 28. 9.47 |
| 5787 | John Thomas Hobbs | 126 G.S. | 9.11.47 |
| 5811 | John Lewis Roberts | 81 G.S. | 7.12.47 |
| 5882 | Walter Frederick Arthur | 108 G.S. | 21.12.47 |
| 5989 | Gerald Bird | 48 G.S. | 30.11.47 |
| 6054 | John Eric Nelson | 166 G.S. | 26.12.47 |
| 6937 | Frank Reeks | Derby Lancs. | 31. 8.47 |
| 7083 | John Patrick Silvester | London G.C. | 18. 1.48 |
| 7222 | Derek Pierce Owen | 126 G.S. | 21.12.47 |
| 7245 | Anthony Insley Topps | 68 G.S. | 16.11.47 |
| 7291 | Alan Hickox | 161 G.S. | 16.11.47 |
| 7351 | David Elliott | 49 G.S. | 26.12.47 |
| 7542 | Arthur Charles Hilliard White | 143 G.S. | 9.11.47 |
| 7564 | Matthew Sillars | 10 G.S. | 14.12.47 |
| 7601 | William Louis Joce | 4th Armd. Bgde. | 28.11.47 |
| 7607 | Gordon McLaurin Browu | 183 G.S. | 9.11.47 |
| 7609 | Alec Lawrence Lunn | R.A.F. Sylt | 7. 9.47 |
| 7611 | George Gerard Rimmer | R.E. F.C. | 13.12.47 |
| 7612 | Philip John Parks | B.A.F.O. G.C. | 15.10.47 |
| 7619 | Eric Baker | 182 G.S. | 25.10.47 |
| 7627 | Laurence Fraser Levy | R.A.F. Lubeck G.C. | 15. 7.47 |
| 7640 | Barbara Brice | Bristol G.C. | 13. 7.47 |
| 7645 | Malcolm Young | Air H.Q. | 2.11.47 |
| 7648 | Francis Roger Dearden | London G.C. | 21.12.47 |
| 7650 | David John Holmes Ogilvie | B.A.F.O. G.C. | 5.10.47 |
| 7651 | Arthur Napier | B.A.F.O. G.C. | 8.10.47 |
| 7652 | Martin Peter Zeylmans | 4th Armd. Bgde. | 19. 7.47 |
| 7653 | John Inglis Purser | R.E. F.C. | 6.12.47 |
| 7654 | Michael Charles Russell | London G.C. | 3. 1.48 |
| 7660 | Dennis Langley Foley | Ulster G.C. | 6. 9.47 |
| 7661 | John Leslie Smith | 28 G.S. | 13.12.47 |
| 7662 | Leslie George Reubens | R.A.F. Lubeck | 10. 8.47 |
| 7663 | Harold Decius Wells | 140 Wing G.C. | 4. 9.47 |
| 7672 | James Bernard Thompsou | 84 Group G.C. | 21. 9.47 |
| 7675 | Ronald Lauder Pullan | 135 Wing G.C. | 27. 4.47 |
| 7676 | Edsthil Kanoth Hari Krishna | R.A. A.C. | 28. 9.47 |
| 7680 | John Kennedy | 8 G.S. | 19.10.47 |
| 7681 | William Arthur Marshall | Air H.Q. G.C. | 13. 9.47 |
| 7703 | Wladystaw Rozycki | Scottish G.U. | 28.12.47 |
| 7706 | Edward Arnest Hatch | Luneburg G.C. | 26. 5.47 |
| 7709 | Alfred Grynblatt | 84 Group G.C. | 12. 7.47 |
| 7721 | John Hose | 84 Group G.C. | 28.10.47 |
| 7722 | William Denys Rutherford Lamb | R.A.F. College | 4. 9.47 |
| 7723 | Timothy Hawkins French | 140 Wing G.C. | 31. 8.47 |
| 7728 | Leslie Albert Webb | 85 Wing G.C. | 28. 7.47 |
| 7735 | Kenneth John Cadman | London G.C. | 18. 1.48 |
| 7744 | Geoffrey Darry Perks | 139 Wing G.C. | 7.12.47 |
| 7745 | Ivor William Hastings Morgan | 84 Group G.C. | 27. 7.47 |
| | | "C" CERTIFICATES. (21) | |
| 2940 | Bernard Arthur Hudson | Imperial Coll. | 8. 1.48 |
| 3813 | John Edward Tindall | 68 G.S. | 21.12.47 |
| 6750 | Thomas Davidson | Scottish G.U. | 21.12.47 |
| 7260 | Marian Debicki | Polish G.C. | 8. 8.39 |
| 7545 | Arthur Gough | Air H.Q. | 3.12.47 |
| 7627 | Laurence Fraser Levy | R.A.F. Lubeck | 16.11.47 |
| 7640 | Barbara Brice | Bristol G.C. | 21.12.47 |
| 7648 | Francis Roger Dearden | London G.C. | 21.12.47 |
| 7654 | Michael Charles Russell | London G.C. | 14. 1.48 |
| 7661 | John Leslie Smith | 28 G.S. | 28.12.47 |
| 7662 | Leslie George Reubens | R.A.F. Lubeck G.C. | 21. 9.47 |
| 7663 | Harold Decius Wells | 140 Wing G.C. | 21. 9.47 |
| 7672 | James Bernard Thompson | 84 Group G.C. | 16.10.47 |
| 7675 | Ronald Lauder Pullan | 135 Wing G.C. | 27. 4.47 |
| 7706 | Edward Ernest Hatch | Luneburg G.C. | 2. 8.47 |
| 7709 | Alfred Grynblatt | 84 Group G.C. | 31. 8.47 |
| 7721 | John Hose | 84 Group G.C. | 4.11.47 |
| 7723 | Timothy Hawkins French | 140 Wing G.C. | 4. 1.48 |
| 7728 | Leslie Albert Webb | 85 Wing G.C. | 10. 8.47 |
| 7735 | Kenneth John Cadman | London G.C. | 18. 1.48 |

SILVER BADGES: 0.

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Full details may be obtained from:—THE SECRETARY, Oerlinghausen Gliding Club, c/o R.A.F. Station, Gütersloh, B.A.F.O., B.A.O.R. 15.

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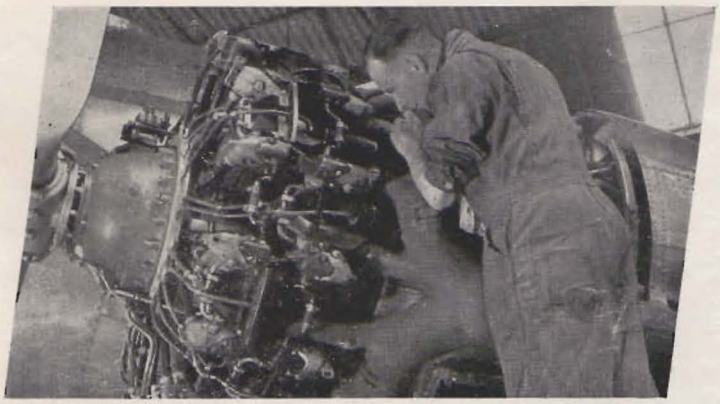
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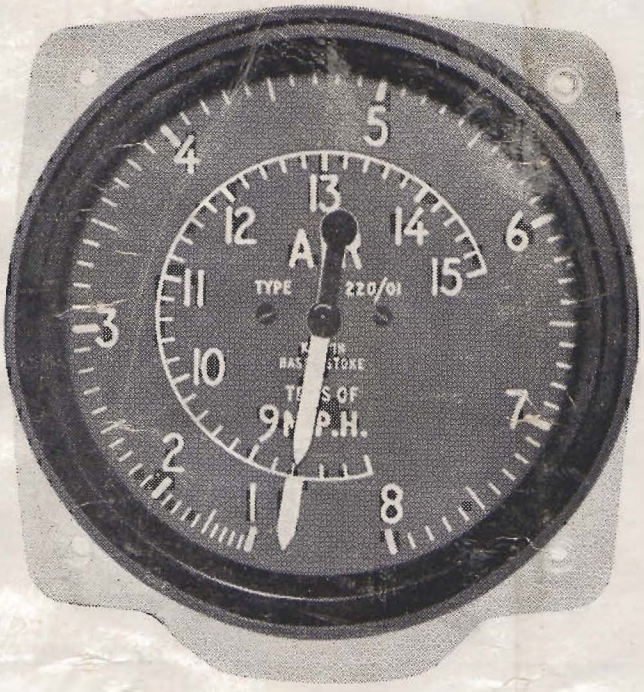
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