Sailplane and GLIDING

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SAILPLANE AND GLIDING

OFFICIAL ORGAN OF THE BRITISH GLIDING ASSOCIATION

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COVER PHOTOGRAPH.—Captain A. Nunez in his Slingsby "Sky" at the Cerro de Telegrafo, Madrid. In the background: the office, dormitory and dining-room building.
—Photo by Alex Aldott.

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The British Gliding Association Chairman's Report on 1955

THE past year has shown a steady growth in all aspects of the British Gliding Movement, and the main limiting factor is still that of sites—most existing clubs are full or almost full, and there is evidence that in many parts of the United Kingdom new clubs would find abundant support if the basic problems of forming them could be overcome. The great number of people who want to glide if only facilities were available is shown by a recent five-minute broadcast, which resulted in more than 800 letters enquiring for training courses. It seems to me that it is more than ever important in a Welfare State to provide avenues for the natural expression of the qualities of initiative and enterprise.

In every other field this has been a vintage year, and one record broken has been the number of records broken, or established for the first time.

The most important advance of all has been the acquisition of security of tenure of no less than three club sites; at Nympsfield for the Bristol Club, Bo-Peep Farm for the Southdown Club and Hutton Moor for the Newcastle Club. Since the last site acquired for any U.K. club was nearly twenty years ago, this indeed is an occasion, and one for which most of our gratitude must go to our President whose Trust made these acquisitions possible. But in other clubs the position is still desperate, and for some the outlook is even worse than last year. Our largest centre is still on a one month's lease at Lasham, which makes its further consolidation well-nigh impossible. If it were forced to close down we should lose most of the growth and gains of the last fifteen years.

Membership

This is now (1954 in brackets):

Full Member Clubs	17	(16)
Associate Member Clubs ..	12	(12)
Private/Group Owner Members..	32	(29)
Individual Assoc. Members ..	28	(34)

Operations

At the time of writing 24 Clubs have completed the Annual Questionnaire and report that from their club sites they have flown a total of 14,770 hours involving 99,624 launches.

This shows an increase of 3,319 hours and 29,648 launches over 1954. The R.A.F. Gliding & Soaring Association Clubs who reported (1,389 hours and 15,082 launches) and five Royal Naval G.S.A. Clubs who reported (515 hours and 6,823 launches) are included in these totals. These returns cover all active U.K. Clubs except one R.N.G.S.A. Section which was included in the 1954 totals.

Over and above these figures the Air Training Corps report 7,194 hours with 95,476 launches, against 7,497 hours and 99,575 launches in 1954.

The total number of certificates issued by the Association shows an increase of 351 compared with 1954.

Certificates were issued as follows (1954 figures in brackets): A, 1,877 (1,712); B, 1,892 (1,726); C, 348 (328); Silver C, 71 (34); Gold C, 4 (1); Diamond Badge, 1 (—); Diamond legs, 5 (—). These were made up as follows:

	A.T.C.	*Civilian*	*Service*
A	1,407	279	191
B	1,407	292	193
C	106	157	85

These figures are the highest ever recorded, and the extraordinary increase in the numbers of Silver C's gained is heartening evidence of the expansion of high-performance flying.

Finance

The year has resulted in an increased surplus of income over expenditure above that of any previous year. This is due mainly to the increased sales of books and publications and the widening range of equipment now made available for purchase by members of the Association. Contribution, too, was made by the quite substantial increase in the issue of Certificates which were 9.3% greater than in the previous year and were issued in the proportions of 70.9% (74.4%) to the A.T.C., 17.92% (15.03%) to Civilian Clubs and 11.38% (10%) to Service Clubs.

Although there is a very marked increase in the activities of the Association in every direction, there has been no appreciable increase in the expenses of administration, which fact, in itself, is a strong testimony to the efficiency of our Office staff.

Kemsley Flying Trust

During the year under review, eight gliding clubs have received loans for the purchase of gliders or equipment, and six private groups have purchased gliders with the assistance of the Trust. Two permanent sites are now in course of development for which funds have been made available, and both will be ready for use by the clubs concerned this year. Proposals regarding a third site have had to be deferred pending agreement with a quite friendly local authority. The Trustees are well aware of the urgency to the gliding movement of the site problem, and will continue so far as funds permit to help in the creation and equipping of new permanent sites—and the improvement of established ones.

The Trust Secretary reports on the most satisfactory way in which loans are "coming back" and make it possible for the money recovered to be turned over again to the advantage of the flying and gliding movements.

Work of the Council

An immense amount of work was got through by the Council during the year, but most of the material which comes before the Council is created by the various Committees, and final decisions on Committee recommendations and a constant review of the work of the Secretariat takes up most of the Council's time.

The Council implemented the various legal and other steps involved in the amalgamation of THE SAILPLANE and GLIDING, concerning which further details appear under a later section of this report.

They also initiated the work required to carry out the various Constitutional revisions decided at our last Annual General Meeting. Many decisions fell to be made regarding the 1955 Nationals which were so successfully run at Lasham last July, and I would like to record the universal gratitude expressed by all participants to the Surrey Club and all those responsible for what proved to be one of the most successful and interesting Championships yet organised.

Much work arose with the Air Registration Board as a result of our achieving the final freedom which we have striven for —the abolition of the requirement for an Official Certificate of Airworthiness for home-operated gliders. This great concession shows, as nothing else could, the confidence we have earned in official quarters in the skill and competence of those responsible for the running of British sporting gliding. We must, on the other hand, never relax our efforts to maintain and improve on our current standards of airworthiness and operations and thus show all concerned that we are worthy of their trust.

During the year Messrs. Pye Telecommunications most generously donated to the B.G.A. three of the air sets and two of the ground sets which we used so successfully in the 1952 and 1954 World Championships, and this equipment will be available for special purposes in future.

The K-1 high-performance two-seater project was carried to the point where a polar curve was produced and this, together with a history and report on the whole project, was submitted to a meeting with the Ministry of Supply and Kemsley Flying Trust representatives. It was decided that unfortunately no adequate further funds were available of the order probably necessary to cure the spin trouble which has been encountered, and the prototype was therefore sold to Messrs. Elliotts, who hope to develop it further. The money so realised was paid over to the K.F.T. and M.O.S. and the project concluded in so far as we are concerned.

From start to finish this ambitious project has taken nearly ten years to reach this unfortunate conclusion, and an immense amount of time and money has gone into it. Looking back over the whole history, it is easy now to see where mistakes were made, but each major decision was made after taking the best expert advice, and the final spin trouble which defeated us was totally unexpected and unforeseeable. I personally feel particularly sorry that the fine work put into this design by Mr. Hugh Kendall should have met with so unmerited a set-back, but we can all feel glad that his small jet aeroplane which owes so much in design to the K-1 has had brilliantly successful initial reports.

Our relations with the Central Council for Physical Recreation have produced fruitful results, and the latest example of these is the allotment of certain Flying Bursaries by the Whitbread Sports Trust Fund to enable selected candidates to take gliding courses during the summer.

During the year A.T.C. policy became to close down certain schools in favour of operating a smaller number of larger ones, and this resulted in certain areas of the

country becoming even more starved of gliding facilities than before. It also meant that one of the main difficulties of starting new clubs was lessened because of the number of ex-A.T.C. gliding instructors which automatically became available. The Council therefore decided to try and stimulate the creation of new clubs in selected districts, and at the time of writing there appears to be a good possibility of a Kent Gliding Club being started in the Maidstone area.

KRONFELD CLUB.—The Association gave its support to the formation of the Kronfeld Club at 74, Eccleston Square, and this is proving a very popular London social centre for all gliding enthusiasts.

Instructors' Panel

During the year the Instructors' Panel widened its scope by approving in principle the formation of Instructors' Schools. The object of such schools is to enable instructors who wish to obtain a category to join an instructors' course and take a category test at the end of it.

Approved Instructors' Schools may not train and categorise their own club instructors, but there are many pilots who wish to obtain instructor's categories either for the purpose of starting a new club here or abroad, or because their own club has not the necessary facilities. Such instructors can receive a course of training, and if up to standard will be tested and granted an instructor's category by the school.

Instructors' Schools will be approved by the B.G.A. only if they are in the direct charge of a member of the B.G.A. Instructors' Panel, and if they have the equipment and facilities to run comprehensive instructors' courses. So far one Instructors' School has been approved.

The number of categorised instructors to date is 90.

Flying Committee

The Committee last year did most of its work by telephone and letter. Twelve National and U.K. records were checked and recommended for homologation and, as in the past, the Committee is also recommending the Annual Awards which will be presented at the Ball.

In addition, pilots were chosen to represent Great Britain at both the French and Yugoslav National Championships.

Equipment Committee

Launching cable has been selling steadily during the year. Ample stocks remain, sufficient for about 1½ years' normal requirements. The stock left is in good condition and should remain so.

The first batch of reconditioned silk parachutes was sold out by January and a further 25 Nylon canopies were located and purchased, but found to be unsuitable. After considerable delay these have now been replaced by some very excellent quality second-hand unused silk 'chutes. These are being inspected, repacked and fitted with new glider back-type packs and harness by the G.Q. Parachute Co., and will be available at £36 10s. each, including a new bag.

Magazine Committee

Our Official Publication has made great strides forward this year. Through the generosity of Mr. and Mrs. Platt an amalgamation of GLIDING with the SAILPLANE AND GLIDER took place, the first issue of the resultant SAILPLANE AND GLIDING being in October. It has as a result already proved possible to increase the frequency of publication to bi-monthly and the size from 48 pages to 56 pages per issue. The circulation has nearly doubled and advertising revenue shows an increasing tendency.

Advertising management has been transferred to Cheiron Press, whose leading spirit is Miss Peggy Miéville of the London Club; and Production management to Alan Betts Ltd. We all feel grateful to Mr. Loader and Mr. Porter of the Trade Press Association for the great assistance given us during the formative years of GLIDING.

The Magazine Committee has been strengthened, and Mr. Godfrey Harwood has undertaken the Assistant Editorship, to lighten the increased burden on Dr. Slater by taking over the Club News section of the paper.

It was thought advisable at this stage to transfer the entire running of the magazine to the B.G.A., so that the current accounts of your subsidiary, "Sailflying Press Ltd.," are probably the last which will be put before you. The Company will, however, be kept in existence for the time being and can be revived if necessary. In the meantime its shares in our Balance Sheet must be written down to zero.

Our Magazine is doing a first-class job in promoting our sport all over the world, and we now have subscribers in 48 different countries.

I must conclude by again expressing our

thanks to Dr. A. E. Slater for the tremendous job he does as Editor.

Publicity Committee

During 1955 the work of the Publicity Committee continued unabated. The friendly relations with the Press, the film world and the B.B.C. resulted in far greater coverage than ever before. The total number of Press cuttings received during the year exceeded last year's total by more than 50%.

Whereas ample publicity is always forthcoming about records and the National Championships, the need for news items about the clubs and their members is ever with us. Photographs of pilots and machines, especially unusual ones, are much in demand.

The increased membership of all clubs throughout the country surely reflects to some extent on the help given to us during 1955 by the Press. No-one knows better the increased volume of publicity we are now achieving than Ann Proctor, who for many years has uncomplainingly stuck all gliding Press Cuttings into our scrap-book, for which we are very grateful.

Secretariat

Our secretariat must be one of the hardest worked offices in the country, and the handling of the greatly expanded SAILPLANE AND GLIDING has added yet one more large straw to its back. We badly need more office space, but so far none has become available in Londonderry House.

During the year Anstace Goodhart left us to become Mrs. Gladstone. We were extremely sorry to lose her, but it was in a good cause. Of our Secretary I cannot say more than that she has proved a worthy successor to Alex Orde.

O.S.T.I.V.

The Association has continued its membership of the *Organisation Scientifique et Technique Internationale du Vol à Voile*. The main work of OSTIV is to organise the Congresses which take place at the same time as the World Gliding Championships. The meteorological and technical papers read at the 1954 Buxton Congress are being printed, and some have already been published in meteorological magazines.

The 1956 Congress will be held in France in July. It is hoped that recent British contributions to gliding science will be described.

The Future

Our future hangs on two things, only one of which is entirely under our control. This is the maintenance of a high standard of self-discipline, on which hangs the continuance of the freedom from outside control which is the fundamental source of our strength. And here I must underline that in this respect we are without doubt the most favoured nation in all the world, for which we must chiefly thank our Minister and Ministry of Civil Aviation.

But the preservation of our freedom requires constant vigilance, and particularly that no club or individual should ever do anything that might hazard a third party or parties. In this matter your Association has an overriding duty to the entire gliding movement to preserve their interests as a whole.

The second matter on which our future hangs is the old problem of security of tenure of gliding sites, and in this field we are very much dependent on official and public support. If the man-in-the-street comes to believe that we are doing something of intrinsic value, then public opinion on our side may ease our problem when a potential gliding site becomes available. Indeed, this actually happened during the negotiations which ended in the acquisition of the new site at Nympsfield: for the first time in history our proposals were enthusiastically endorsed by the local Press and Councils.

But at present it must be confessed that we have never yet succeeded in obtaining adequate security of tenure on any airfield, and when an airfield is released it is turned back to the Ministry of Agriculture and Fisheries who give little weight to any request for security of tenure for a gliding club. Amongst the multifarious claims on the restricted land of our overcrowded islands, those of the gliding movement are at present accorded all too little priority.

PHILIP A. WILLS,
Chairman.

Extracts are given below from the reports of two Committees which reported separately.

World Championships Master Committee

The Championships are to be held at St. Yan (Soane et Loire) from June 30th to July 12th. The Opening Ceremony will be on June 29th and the Closing Ceremony on

July 13th. The Practice Period will be from June 23rd to 28th.

The French Aero Club have now informed us that unless the number of entries exceeds 60 they will be able to accept four sailplanes per nation, either 2 single-seaters and 2 two-seaters or 3 and 1.

The Selection Sub-Committee met on November 3rd to seed pilots for the team. The first six seeded were:—Philip Wills, C.B.E., Geoffrey Stephenson, Nicholas Goodhart, Tony Deane-Drummond, Frank Foster, Peter Bisgood. The pilots met on November 30th to choose a Team Captain, and Mrs. Ann Welch was unanimously elected.

In view of the fact the Council had agreed that no public appeal should be made, it was decided that each pilot and crew should be asked to contribute £100, and the team manager £50, to the fund. It was hoped to raise the balance of the money required within the movement from donations by Clubs and interested individuals, and the proceeds from the Ball to be held on March 16th.

The aircraft to be flown would be the single-seater Slingsby Skylark III, or perhaps the modified Olympia IV, and in the two-seater class either the second prototype T-42 or the Elliott modified K-I.

The Standard Motor Company had again generously promised to make available five cars.

The team will leave on June 21st and 23rd in the Dover-Boulogne Ferry, and will return on July 15th.

Messrs. Normalair had generously agreed to loan Oxygen Equipment to the whole British Team and Commander Goodhart was negotiating with them.

Pye Radio would again be used by the teams, and Dr. Machin was working on this.

E. J. FURLONG,
Chairman Master Committee

Technical Committee

During 1955, four meetings of the Committee and five of the Design Requirements Sub-Committee were held; 119 Certificates of Airworthiness have been issued (108 in 1954), of which 14 were initial applications; eight new inspectors were approved and 25 inspectors and five firms renewed their approval. Mr. Pinninger, Examiner of Inspectors, has visited five clubs and has examined two inspectors, finding that the general standard of their work and standard of maintenance in the clubs was quite good. The Committee has, however, found it necessary to remind clubs and inspectors about the importance of keeping logbooks up to date, and the Council has agreed to charge fees for the extension of Certificates of Airworthiness and for the replacement of the document.

The Ministry of Transport and Civil Aviation regulations concerning C.'s of A. have been relaxed and, legally, no glider in the U.K. need have a C. of A. The practical effect of this is that more machines will be granted B.G.A. C.'s of A., to comply with Operational Regulations. In particular, Manufacturers' prototypes may also be granted B.G.A. C.'s of A., and the Slingsby T-42 was certificated in 1955. The Skylark III is currently under consideration, this machine being of particular interest in that the wing has been designed to B.G.A. Draft Design Requirements.

The Committee regrets that it is still unable to grant a C. of A. to the Fauvel AV-36, since flight tests in France of a machine with a revised skid arrangement showed that its landing characteristics were virtually unchanged. It is still very easy to produce an uncontrollable bouncing motion on landing.

Design Requirements Sub-committee.—Five meetings have been held with the object of producing a set of revised Design Requirements which it is hoped will be adopted by the Air Registration Board as official B.C.A.R. Section E. The first proposals, dealing mainly though not solely with diving speed, were submitted to A.R.B. last March. No formal acceptance has been given, though a representative of the Board has agreed in principle.

Proposals for revised Flight Test Requirements have been completed and are about to be submitted to the Board. Proposals for modification to the Rough Gust Case have been formulated, and discussed with A.R.B. without agreement being reached as yet; further work is being carried out on this. Proposals on a number of strength and Design and Construction requirements have been formulated and will be submitted to A.R.B. as soon as they have been written up, whilst Take-off and Landing requirements are at present under investigation.

F. G. IRVING,
Deputy Chairman, Technical Committee.

South Australian Gliding Contest

by Allan Ash

WAIKERIE, in South Australia, is probably the most air-minded town in Australia. It is 109 miles by road north-east of Adelaide and has a population of about 2,000, mostly orchardists and small farmers. The district produces grapes, citrus fruits and nuts, and boasts the most active gliding club in the Commonwealth.

The Waikerie aerodrome, about two miles east of the town, was chosen by the South Australian Gliding Association as the site for the 1955 State Gliding Contest. The local club, acting as organisers, made an excellent job of the planning and running of the contest, which was the biggest ever held in Australia.

Fourteen sailplanes were entered and 13 actually took part. Ten came from various clubs in South Australia, one from West Australia and two from Victoria. Launching was mostly by winch, although there were a few aero-tows carried out.

To fully appreciate the flights carried out, it should be realised that the Waikerie district does not permit flights in all directions. The Murray River flows past the north boundary of the aerodrome, and a few miles north of this the country becomes heavily timbered and is almost completely without roads. To the south the country is cleared but has few good roads. As a result, retrieving becomes an arduous and dusty job. The only really good sectors are from east to south-east and from west to south-west.

Under the rules of the contest, sailplanes were divided into three categories according to gliding angle. Those with a ratio of 1 : 26 or better became Class A; those with a ratio between 1 : 20 and 1 : 25 were Class B; and those with a ratio below 1 : 20 became Class C. Class A machines were on scratch, Class B had a 10% bonus, and Class C had a 30% bonus. Marks were scored at the rate of one per mile for distance, with a bonus for successful goal or out-and-return flights. The system of allotting 1,000 points to the winner for each day was adopted, with other contestants scoring in proportion to the best flight.

The contest committee was fortunate in having the services of Derek Reid, of the Victorian Motorless Flight Group (late of the Surrey Gliding Club) as meteorologist. His forecasts were always good and his advice on flying was also a big help to pilots who lacked previous contest experience.

After the morning met. report, a committee of three decided on a task for the day. To reduce retrieving it was decided to make as many of the tasks as possible finish back at Waikerie. This not only reduced expenses and effort, but made the tasks so much more interesting, since it involved a lot of cross-wind flying.

December 5th.—The met. report indicated generally fine weather with 6/8 cloud at 3,500 feet, clearing later in the day. As it turned out, the clouds cleared completely



A general view of the take-off point. The aircraft are:—On the left, front to rear, Olympia, Grunau 4 and ES-56. Centre, foreground, Golden Eagle; background ES-49. On the right, Olympia.

during the afternoon and thermals improved.

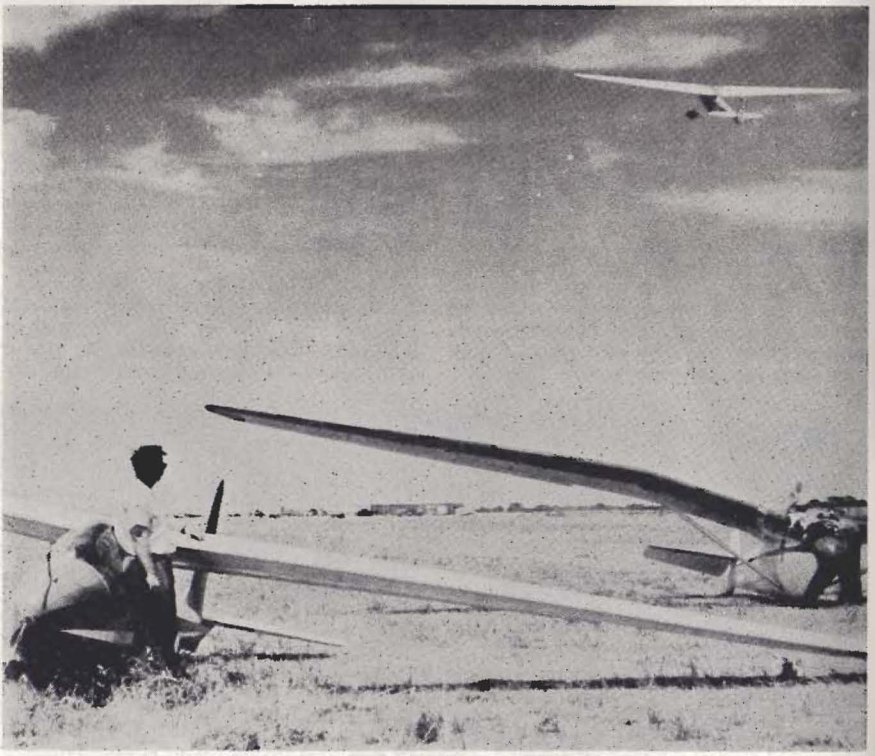
The task for the day was a race to Morgan and return, total 48 miles, and was timed from take-off to landing. Throughout the contest all races were timed from take-off, mainly because of the difficulty of setting a starting line.

Sam Cant in the Skylark was one of the first away and he returned after three hours two minutes. As the thermals strengthened during the afternoon, he decided to try again. The second circuit took only 1 hour 57 minutes and was the fastest for the course. Kevin Sedgman in the Joey made the circuit in 2 hours 2 minutes; being a Class B machine, however, his corrected time was 1 hour 50 minutes, and this won him the day.

Others completing the task were Colin Buckley (Olympia), Andy Wozniakowski (Gull I), and Cliff Gurr and Marianne Adair (ES-49). Jock Barratt and Alan Gandy in the Pelican landed near Morgan (20 miles), Bob Rowe in the Olympia went 12 miles, and Harry Schneider (ES-56), Wolf Lellau (Grunau 4) and Reg Currell (AV-36) each went about 10 miles.

December 6th.—A weak anticyclone centred over southern New South Wales produced a light N.E. wind, and a weak inversion was apparent at 6,000 feet. Thermal activity was moderate during the middle of the day, died off during the afternoon only to return in the evening.

The task was a race of 74 miles over a triangular course, with Morgan and Blanchetown as turning points. Contestants were given the choice of flying the circuit either way, but those who went clockwise



The ES-56 and Gull I on the ground and an Olympia taking off.
Photographs by courtesy of W. Iggulden

(i.e., to Blanchetown first) did better than those who went the other way.

The only pilot to complete the course was Dudley Schultz in the Olympia. He took 3 hours 21 minutes and averaged 22.09 m.p.h. Several times he was down to 1,000 feet. John Wotherspoon and Willy Dahman in the Kranich flew to Blanchetown and then landed a few miles short of Morgan for a total distance of 44 miles.

After failing to get away earlier in the day, Rupert Brown in the Skylark and Otto Brand in the Golden Eagle left Waikerie about 4 p.m. and landed in the same field at Blanchetown, having flown 26 miles. Harry Schneider in the ES-26 went towards Morgan first but had to land on the racecourse there. Roy Stanley in the Kite and Forbes Walker in the Gull I both set off for Morgan but landed after 17 and 12 miles respectively

December 7th.—A freshening northerly wind was forecast with a cold front expected to reach the west coast of South Australia during the afternoon. Convection to 10,000 feet was promised, with only small amounts of high cloud.

The task was a "free choice", and some very optimistic goals were nominated. The only pilot who did not elect to fly downwind was Cliff Gurr, who declared for a crosswind out-and-return flight to Gawler in the ES-49. This proved to be a very cunning move. Cliff knew from previous experience at Gawler that he would receive some help on the return journey from a sea-breeze which would come in during the afternoon. He also realised that many of the higher performance machines would fly so far downwind that they would not get back to Waikerie in time for an early start in the next day's flying. This would mean that the ES-49 would have less opposition and stood a good chance of winning the next day. Results proved this theory to be correct.

The longest flight of the day was 167 miles to Padthaway by Colin Buckley in the Olympia. Other good flights were 153 miles to Bordertown by Kevin Gillespie in an Olympia, 144 miles to Inglewood by Jack Iggulden in the Skylark and 130 miles to Walpeup, in Victoria, by Harry Schneider in the ES-56. Cliff Gurr and Marianne Adair in the ES-49 reached Gawler at 10,000 feet to find the sea-breeze just coming in as expected. They did not manage to get all the way back to Waikerie, but landed at Blanchetown after a total of 131 miles. The Class B bonus and an additional bonus for reaching his turning point and getting more than halfway back put the ES-49 into second place in the day's scoring.

Others who scored were Jock Barratt, 95 miles in the Pelican; Kevin Sedgman, 80 miles goal flight in Joey; Andy Wozniakowski, 85 miles in Gull I; Bill Iggulden, 64 miles goal flight in Golden Eagle; Reg Currell, 63 miles in the AV-36; and Alf Kilian, 40 miles goal flight in the Grunau 4.

December 8th.—The northerly airstream continued and convection was forecast to reach 10,000 feet. The weather in general was hot with ground temperatures going to 100 degrees. Pilots were warned that the thermals would be strong, but some distance apart.

So that crews would get some rest, an easy task was set for this day. An out-and-return race to Loxton (total 80 miles) was decided upon. Cliff Gurr's strategy of the previous day helped the ES-49 to win top points, although no-one actually completed the task.

Some of the best machines did not get back from the previous day's flight until the afternoon and evening, so only seven aircraft took part in the task. The only pilot to arrive back at Waikerie was Ron Roberts in the Golden Eagle, but it was found that he had mistaken Moorook (20 miles away) for Loxton and had made his turn there. A large area of flooded country near Loxton destroyed thermal activity and everyone came to grief there. Wolf Lellau (Grunau 4) landed at Loxton and others came back only a few miles. The best distance was by Ron Adair in the ES-49, with 52½ miles. Rommily Barratt and Bill Wurst in the two Olympias flew 53 and 50 miles respectively.

The next two days, December 9th and 10th, were rest days, but no-one got much rest with temperatures over the century.

December 11th.—On Saturday evening a cold front went through, bringing cooler conditions and a gusty wind from the south. Strato-cumulus clouds at 3,000 feet and broken thermals promised a difficult day for flying.

Since it was impossible to fly downwind, a crosswind race out-and-return to the Woolpunda water tower was decided upon. The total distance was 20 miles. The weak thermals and strong wind gave trouble, and only two pilots managed to complete the course. Dudley Schultz (Olympia) took

1 hour 28 minutes and Sam Cant (Skylark) took 1 hour 49 minutes.

Forbes Walker (Gull I) and Otto Brand (Golden Eagle) landed at the turning-point, but no-one else went far enough to score points.

December 12th.—A fresh S.E. wind and solid inversion at 4,000 feet promised another difficult day. Since the wind was too strong to fly upwind and the country was too rough to fly downwind, it would have to be a struggle across the wind.

Another "free choice" day was declared, but no-one went very far. Andy Wozniakowski in the Gull I went the longest distance, 21 miles to Moorook. The only others to score were Kevin Gillespie (Olympia) 15 miles, Jack Iggulden (Skylark) 14½ miles, and Ron Adair and Bill Selge (ES-49) 14 miles.

December 13th.—Cloudy conditions with an inversion at 5,000 feet were forecast, with moderate convection and a strong south wind. Since a downwind flight was out of the question, a crosswind free distance task was set.

So that pilots would keep over safe areas, it was required that they pass over Eudunda (52 miles due west) during the flight. After passing Eudunda they could go in any direction they chose. For the purpose of scoring, the distance flown would be measured via Eudunda.

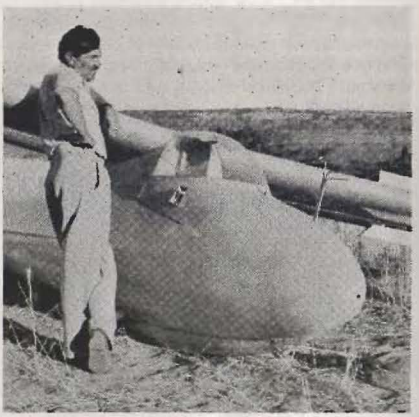
Most pilots gave goals N.W. of Eudunda, but conditions were so poor that all but one landed before they reached this town. The only one to go any distance was Sam Cant in the Skylark. He landed at Merriton (127 miles), about 16 miles short of his goal of Port Pirie. The only others to score were Colin Buckley (Olympia) 26 miles, Rommily Barratt (Olympia) 20 miles, and Harry Schneider (ES-56) 16 miles.

December 14th.—A 10-12 knot wind from the S.E. was forecast, with moderate convection to 5,000 feet. The task was a race over a triangular course from Waikerie to Blanchetown to Morgan to Waikerie, 74 miles.

Conditions proved more difficult than anticipated, and no-one completed the task. Longest distance was flown by Otto Brand (Golden Eagle) who went four miles past Blanchetown, for a total of 30 miles. Those landing at or near Blanchetown were Ron Adair and Bruce Hoffman (ES-49), Jock Barratt and Christopher Barratt (Pelican), Bob Rowe (Olympia), Dudley Schultz (Olympia), Rupert Brown (Skylark) and Harry Schneider (ES-56). Wolf Lellau (Grunau 4) and Andy Wozniakowski (Gull I) only went about 10 miles each.

December 15th.—A warm day, light southerly winds and high overcast were forecast, and an out-and-return race to Loxton (total 80 miles) was set for the task.

Conditions during the day, however, turned out much worse than was forecast. The wind was stronger, the overcast was heavier, and to cap it all a wild cold front swept through about 2 p.m. bringing rain and cloud. No-one managed to get away and a no-contest day was declared.



Jack Iggulden, of Melbourne, after a 144 miles flight in the Skylark.

December 16th.—The last day of the contest brought fine weather with a light S.W. wind and a promise of some small cumulus. These clouds did not eventuate and the soaring was all done in dry thermals.

A cross-wind race to Woolpunda water tower and return (20 miles) was set for the task, but only two pilots managed to struggle around the course. Andy Wozniakowski (Gull I) took 1 hr. 10 mins. and Colin Buckley (Olympia) took 1 hr. 50 mins. Jock Barratt (Pelican) and Kevin Gillespie (Olympia) did not quite get back and scored only on a mileage basis. Maximum height for the day was only 3,000 feet.

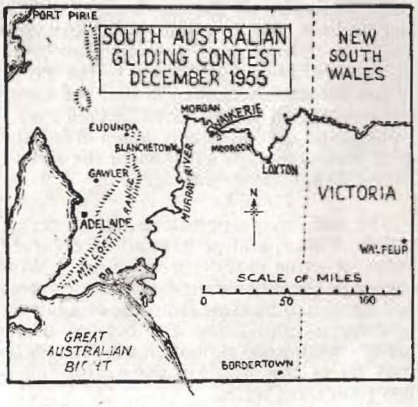
Individual Placings

Pilot	*Aircraft*	*Average Points*
1 Sam Cant	Skylark 2	915
2 Dudley Schultz	Olympia	880

3	Colin Buckley	Olympia	665
4	Kevin Gillespie	Olympia	656
5	Otto Brand	Golden Eagle	622
6	Andy Wozniakowski	Gull I	604
7	Ron Adair	ES-49	566
8	Kevin Sedgman	Joey	549
9	Jack Iggulden	Skylark 2	448
10	Cliff Gurr	ES-49	376
11	Romilly Barratt	Olympia	351
12	Harry Schneider	ES-56	336
13	Rupert Brown	Skylark 2	327
14	E. R. Barratt	Pelican	309
15	William Wurst	Olympia	276
16	Robert Rowe	Olympia	273
17	Wolf Lellau	Grunau 4	235
18	John Wotherspoon	Kranich	218
19	Forbes Walker	Gull I	207
20	William Iggulden	Golden Eagle	201
21	Ron Roberts	Golden Eagle	112
22	Alf Kilian	Grunau 4	107
23	Roy Stanley	Kite 2	102
24	Reg Currell	Fauvel AV-36	94

Team Placings

	Contest Number	*Team*	*Average Points*
1	6	Olympia	681
2	10	Skylark 2	636
3	2	ES-49	472
4	3	Gull I	455
5	5	Olympia	427
6	14	ES-56	335
7	4	Joey	329
8	11	Golden Eagle	321
9	7	Pelican	310
10	1	Kranich	218
11	8	Grunau 4	130
12	9	Kite 2	102
13	12	Fauvel AV-36	94



The Laminar-Flow Olympia

MESSRS. Elliotts of Newbury write that the altered Olympia IV should be flying at Long Mynd during Easter. Alterations resulting from most extensive tests carried out since last National Competitions have proved that the revised version should give a better performance at low speeds. The wing from half-span has been entirely rebuilt, and each extended approximately 3 feet. The ailerons have been enlarged, which should overcome the criticism made by the few pilots that had flown it.

It is proposed that, should the wing show the improvement anticipated, a new fuselage will be produced with lengthened cockpit, new bubble canopy, and new empennage. These will be for experimental development only, and the eventual Mk. IV will be possibly a combination of this revised machine and the K-1 (Kendall high-performance two-seater).

The K-1, after some most exhaustive tests, is now coming in for alterations. Everyone who has flown this machine has been impressed with its performance. It has several features that are excellent, and although it has been considered by some a "rogue", much more favourable comment can be expected in the future.

Elliotts do not propose to discontinue sailplane construction, but "they are determined not to introduce in production any half-measure types, but prefer to go on developing until such time as they have vastly improved prototypes which warrant putting into production." With their extensive organisation and plant they are confident they can meet the severest competition throughout the world; but the foremost considerations are types which must be a considerable improvement on the Olympia II. which they consider still the finest all-round Club high-performance machine. They have only four out of the original assembled batch remaining, and are considering continuing with this type with newly assembled machines, which would cost less than £1,000 each and still be the cheapest of the type on the market.

ONCE IS TOO OFTEN

by Frank Foster

NINETEEN fifty-five was probably a record year for cross-country flying. Also with little doubt there was more cloud flying done than ever before. With the ability to fly blind comes a responsibility which some people are not facing—that of controlled airspaces. The Ministry of Transport and Civil Aviation go out of their way to be helpful, but there is one thing that neither they nor public opinion would overlook—a collision between a sailplane and a passenger-carrying airliner. Such an incident would also spoil the sailplane pilot's day! If it ever happens, it is probable that all gliding in controlled airspace would have to cease.

Do you wish to stop nearly all cross-country flying, British-gained Gold C's and possibly all cloud flying? Club C.F.I.'s must surely realise their responsibilities in this matter. A prosecutor at a public enquiry would certainly be able to assess it. By all means fly blind, but by every means ensure that you are free so to do.

The whole of the United Kingdom (and much of the Continent) is covered by a system of airways: that is, air traffic lanes. In addition, certain areas are designated control zones. In these Airways and Control Zones *you* may not fly under instrument flight rules.

Much of the civil and military air traffic flows along these lanes, with consequent high localized densities. Traffic on airways runs at allotted heights and does not as a rule divert around cumulus; to do so would upset both time and height intervals between different aircraft. This may be rough on the sailplane fraternity—rougher still on the passengers!

With certain exceptions, airways commence at 3,000 ft. and stretch upwards to 11,000 ft. The map gives a brief outline of those of which you should have a reasonable knowledge. In addition, certain airfields and a five-mile radius surrounding them are banned completely when below 2,000 ft. (except for "force majeure"). Remember, too, that though you may by the rules of the air have right of way over power, power cannot do 20-second circles at 300 m.p.h. Instrument rules (no look-out) apply for him and you when any of the following apply:—

Visibility below 3 miles.
Within 2,000 ft. horizontally of cloud.
Within 500 ft. vertically of cloud.

Below 3,000 ft. you need only remain in visibility above 3 miles and remain clear of all cloud.

Before you plan your 1956 epics, make sure you have marked airways clearly on your maps. The I.C.A.O. 1:500,000 sheet does this for you. If you need to clarify your information, the nearest Ministry of Transport and Civil Aviation airfield will have up-to-date information available to you.

EDITORIAL NOTE.—A knowledge of the exact situation of the air traffic lanes is essential not only for pilots but also for club publicity officers and others who send accounts of climbs in clouds to the Press. It has sometimes happened that the cloud has been stated to have been entered over a place which is in an airway, when in fact the pilot was careful to get outside the airway before going into cloud.

The main map opposite is after a sketch by Mr. Foster, and we have added enlarged maps of some clubs' surroundings. With regard to the diagram at the bottom, it does not appear to be clear from the regulations whether a pilot *below* the bottom of an airway must keep out of cloud, though he may fly in this position when visibility is less than three miles.

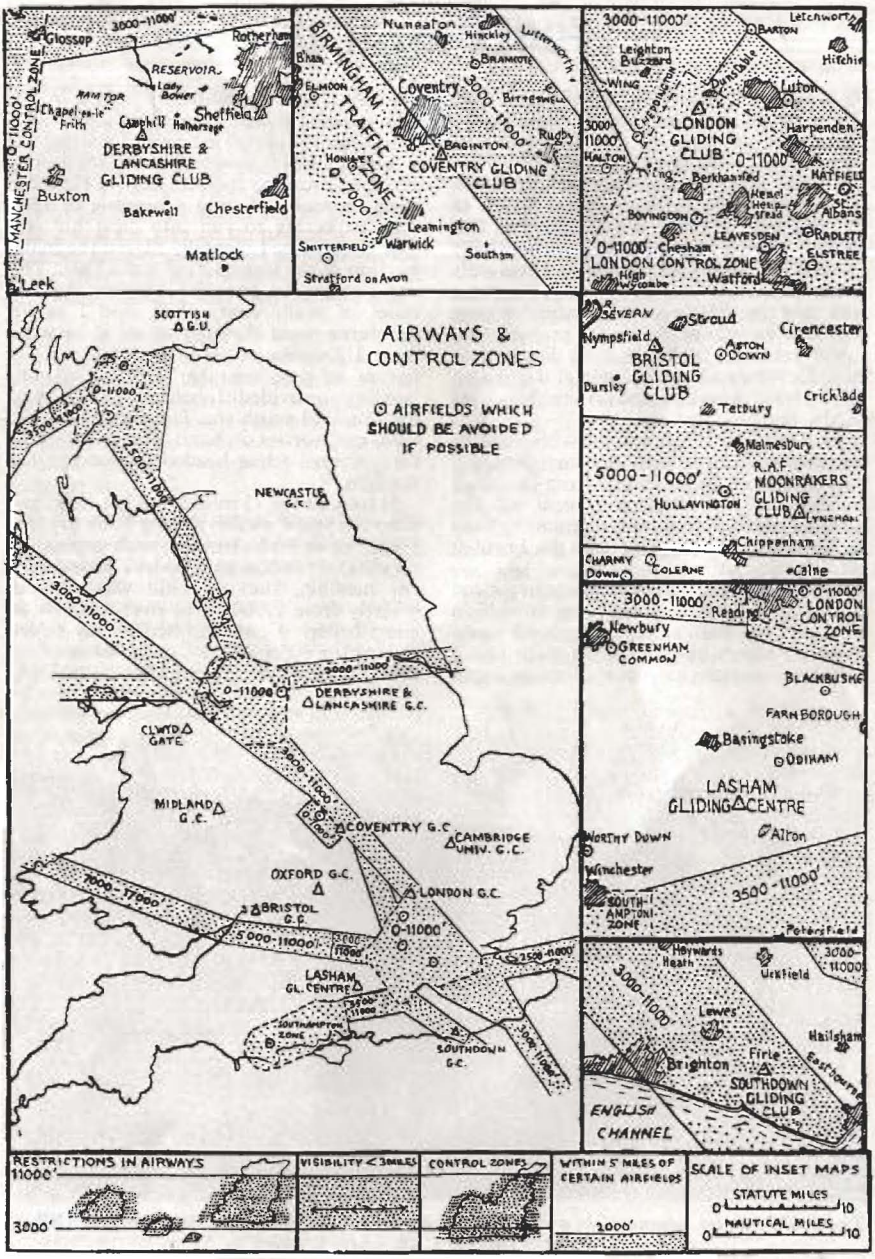
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RESTRICTIONS IN AIRWAYS
VISIBILITY < 3 MILES
CONTROL ZONES
WITHIN 5 MILES OF CERTAIN AIRFIELDS
SCALE OF INSET MAPS
STATUTE MILES
NAUTICAL MILES

FOOLS RUSH IN

As the result of an inadvertent brush with a well-developed winter cold front recently in a Gull I, my size in hats is now considerably reduced.

I must make it clear that my intention was to fly along the face of the storm in clear air all the time. I had done just this before, during the summer, without any trouble. I had no parachute, as I had only taken off to do a little hill soaring; if anyone had told me that in some 45 minutes time I would be above 4,000 ft. in turbulent cloud I would probably have laughed at him, for it was a beautiful winter day with a strong wind, sunshine and no sizeable cloud in the sky.

This huge cold front arrived with amazing rapidity while I was slope-soaring. Seeing a sudden chance for an escape from the hill, I hooked on, expecting a repeat of the summer performance—a nice smooth climb in front of it, never going into the brute at all.

I made, however, a classic error in tactics. I was so occupied positioning myself in relation to the advancing clouds and climbing slowly up parallel to them that I failed to realise that, due to some rapid changes, I was being neatly ringed in and was actually flying up a blind cloud alley which rapidly closed in on me. I realised this at about 2,000 ft. and then made my second error, opening my spoilers fully. I turned at once through 90° onto a heading of 180°, fully expecting to run into clear air very quickly, as I had mentally placed the major portion of the storm to my north side. This was not so; on the 180° heading was ten miles of really nasty stuff, and I in my ignorance went through all of it because, once I became involved and realised the nature of my mistake, I felt that any heading—provided I held it—must bring me out, and south was fair enough. I had sufficient worries on hand to have little time for rational clear-headed meteorological thought.

It took about 25 minutes to get clear, and after ten years' steady gliding I can say that I have never flown through such unpleasant conditions; almost as soon as I turned onto my heading, the old Gull was whistled smartly from 2,000 ft. to over 4,000 ft. in short order. I concentrated all my efforts on staying right side up. Memories of my link trainer days came flooding back;



The Gull I, whose adventure in a cold front is described in the accompanying article, is here seen at the London Gliding Club, where it normally lives.

"centre the needle", "centre the ball", "watch the air speed"—this latter would not behave and varied rapidly between some 40 and 80 m.p.h., but I did manage to keep it well below 70 m.p.h. most of the time. I held grimly to my 180° and we ploughed on, ripping up and down in alternate areas of sink and lift. On two occasions I emerged from one set of clouds only to see the way ahead barred by more; once I saw the ground quite clearly in one of these patches and I tried to spiral down in the clear, but even with full spoiler and steep bank the wretched vario showed 3 up!

I was anxious on two scores: firstly of being carried to some vast height and passing out for lack of oxygen—rather unlikely, really, when flying straight—and secondly of structural failure because I had no parachute; the turbulence from time to time was rather violent and I have a good imagination.

Eventually we untangled ourselves, the old Gull and I, about ten miles from where it all began, to find cloud base below 1,000 ft. and torrential rain in progress. The surface wind was obviously very strong indeed, as I could see the tree-tops waving as I searched rapidly for a suitable field. They were a very poor selection, and I had little time and poor visibility. I selected what looked like stubble and approached at 60 m.p.h. I.A.S. Fully committed and almost down, I saw that it sloped into wind at just about my fully spoilered glide angle; I could not induce the old Gull to sit, and the way ahead was barred by a very solid iron fence. In sheer desperation I shoved the stick forward and bounced her neatly over the fence under the telegraph wires into the next field, to touch down smoothly on harrowed ground, with no damage except to my nerves!

However, this miserable business was not yet over. No one saw me land, and I sat in the cockpit watching the rain pour down and feeling the gusts of wind shaking the old bird. After a while I realised that I would have to do something. Waiting for a lull in the gusty wind, I leapt from the cockpit and turned the machine out of wind, more or less; then removing my size nine shoe, I dug huge quantities of soft earth from the field and buried the wing tip with about a hundredweight. After this I banked up earth around the stern-post and set off for help, looking like an escaped convict after a night in a field.

I came to a large and very lovely house. They did not think me unusual, covered in mud and soaking wet, and were kindness itself. Incredible to relate, they knew Philip Wills quite well and so were presumably used to us gliding folk; anyway, they let me wander around in my stockinged feet, drinking coffee and phoning for the trailer.

From this flight I have come to several conclusions. The first is that spoilers are utterly useless for cloud-flying, and any machine not fitted with speed-limiting air-brakes should be refused a cloud-flying category. Further, pilots of machines fitted with spoilers should realise that cloud lift is often far too strong to escape from by use of spoilers and diving without reaching dangerous speeds. It should be possible in an emergency to jettison the cockpit canopy with one hand. When landing as I did in a strong gusty wind in heavy rain, one hand is fully occupied with the stick; you just have no time on the approach to fumble around with catches, and clear vision "in extremis" is vital. I agree it may never happen to you, but it can, and the ability to get rid of the canopy in a hurry may save the machine—and your neck.

Picketing when alone is a problem. I always carry a portable gear for this, but it won't work in very soft earth. I suggest a small canvas bag with a metal lip attached for scooping up earth; folded, it takes no space to speak of, and it can remain permanently in the machine. Finally, unless you have a machine with air-brakes, properly instrumented, and are wearing a parachute, *keep well away from all clouds*; do not try to be clever and play with them, or you will find one day that you cannot escape being drawn in, with possible lethal consequences.

Last, but not least, there are considerable possibilities of winter cross-country and altitude flights by exploiting similar conditions with proper equipment; however, an aero-tow to contact is almost essential, as the chance of such a system being reached via hill lift in the winter will not come very often. A good pilot in a suitable machine could easily have got Gold C height in this front.

P.F.

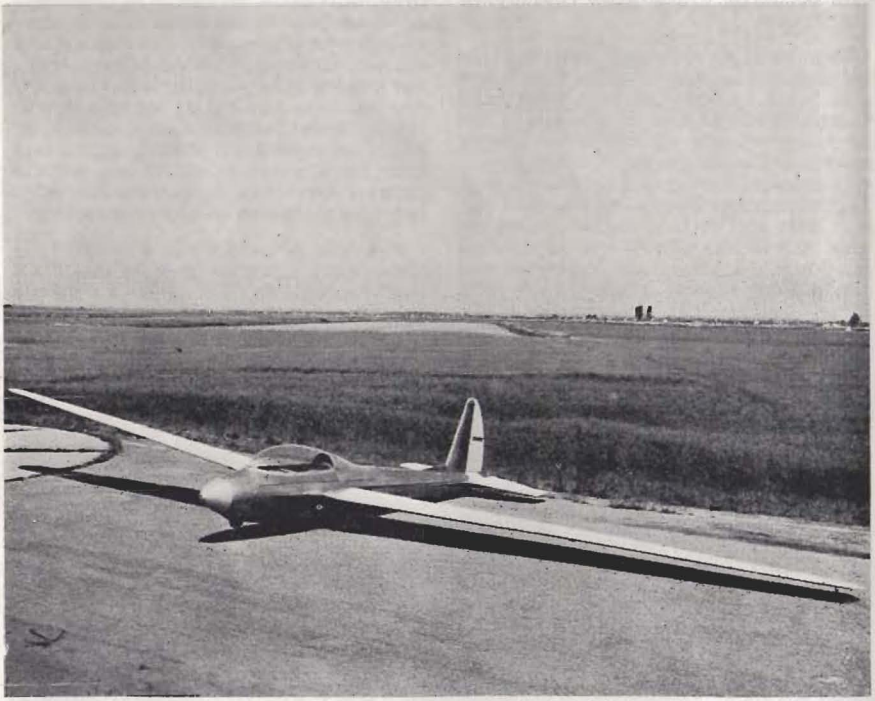
Cross-Country in a Hummingbird

by George A. Downsbrough

SINCE the Hummingbird was to be finished late in July in California, and our plant would be closed the first two weeks in August for summer vacation, I thought it would be an interesting venture to initiate the ship on a cross-country flight to the East. We (my wife Margaret and I) felt that the trip would be too strenuous to undertake with two, and furthermore, having a two-place ship, we wanted to share our experience with someone else. Dave and Tiddum Potter, who had been quite active during the past couple of years at Wurtsboro, appeared to have the right interests and temperament and were quite willing and ready to join us. It was decided that California to New York was too much to attempt in the time available, and accordingly we would start our flight at Denver and proceed easterly as long as the vacation lasted.

Saturday, July 30th, was set as the rendezvous time and Sky Ranch Airport, just east of Denver, was selected as the place. Ted Nelson was very co-operative in the proposed venture, and made arrangements for trailering the ship to Denver.

On the 29th Dave arrived from California, then Margaret and Tiddum arrived from New Jersey in the car with which we were to pull the trailer back east, hopefully without the glider. At midnight Ted Nelson, and his wife and son surprised us by flying in from California. The ship which he had sold me



The first cross-country tour ever made in an auxiliary-engined sailplane is described in the accompanying article. Here is the machine, a Nelson Hummingbird, shown with its engine and airscrew stowed inside the fuselage. During the tour, the engine was only used for take-off to 2,000 ft.



was not number two as planned, but number one, the first all-metal Hummingbird which he had built.

Saturday morning, July 30th, we were out at the airport fairly early as there were many things to be done. Take-off was finally accomplished at 11.50 a.m. There was a considerable amount of scepticism around the airport about getting the ship off at an elevation of 5,500 feet with the existing very high temperatures and with a 40 h.p. engine. However, in about 10 minutes Dave and I were 2,500 feet over the ground and cut off the engine. Incidentally, this engine time proved to be about the maximum, for on our subsequent flights we climbed to 2,000 feet over the field, which took less than 10 minutes.

The engine had been a little rough in the climbing in the thermals, so we called Sky Ranch Unicom and asked them to contact Ted Nelson for us. When Ted answered our call, he advised that he felt the turns were too steep, that we were pulling too many *g* for the fuel pump and hence the rough action of the engine. He was sure that everything else was quite satisfactory.

At 1.00 p.m. conditions had improved considerably and we had 8,000 ft. over terrain. I asked Dave what he would like to do. He immediately said: "Let's be on our way; there is too much confusion on the ground—there's no point going back there."

In planning the trip we had decided to fly along U.S. Route 34 rather than proceed along the airways, since it would be better driving for the crew, and further, there was a fair distribution of small towns with their associated small airports. At 1.30, which was our next radio check time with the car, we found they were still at Sky Ranch trying to assemble all the gear and re-pack the car. We advised them that we would proceed on course.

It was necessary to go north somewhat in order to contact Route 34, so that our next couple of hours were spent flying in a north-easterly direction over one of the most desolate sections of the country that either of us had ever seen. After travelling about 60 miles out of Denver, lift began to get somewhat weak and conditions did not look too good ahead, and so it was decided that we would turn due north to the Platte River, where there were signs of some civilization and better-looking cloud conditions.

At 2.30 p.m. we had our best thermal of the day and went to 15,000 ft. From this thermal we headed to Brush, where we found another good thermal and hence back on course to Akron. We arrived at Akron 4,500 feet over the ground and made a position report to the C.A.A. station. This report stirred up a great deal of interest. The people at the station asked many questions and a conversation followed which must have lasted 10 or 15 minutes. During this time, Dave, who had been flying from the back seat, worked another good thermal which took us up to 15,500 a.s.l., so that at 4.35 p.m. we reported to Akron Radio that we were on course for Yuma and please advise our crew when they called them. We flew the next 25 miles at our best L/D and found no lift in the long glide. We arrived at Yuma with several thousand feet over the field and accordingly kept on course toward the next airport, Wray, which was another 25 miles. Still no lift was encountered, and it soon became obvious that we could not reach Wray, so we turned around and landed at Yuma at 5.15 p.m. We had been in the air for 5 hours and 25 minutes and covered an air-line distance of 115 miles.

The only activity on the Yuma airport was the duster who operated the field and one other ship. The glider was soon placed in the hangar and we were driven to town

for a motel. Just as we reached the motel, where one of us was planning to wait on the main highway while the other made arrangements for the night, we saw the trailer coming down Route 34, exactly 30 minutes after we had landed at Yuma.

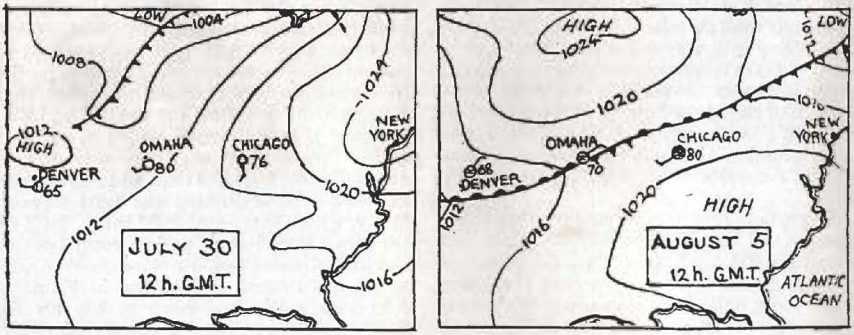
During dinner that night we reviewed the day's events and learned to our surprise that this was Dave's first cross-country flight. He learned to glide in the late 'twenties before cross-country flying was thought of. We both agreed that the ship was well suited for cross-country flying. It was very roomy and comfortable, very easy to fly with light stick loading, and had excellent penetration.

Sunday, July 31st: it was decided that this would be a good time for me to attempt a Gold C flight, so a goal was chosen along Route 34. This time we were at a small country airport, and while quite a few people had assembled to see the take-off, there was not nearly the confusion that we had experienced at Denver with friends, reporters and photographers. We were able to get an early start at 10.55 a.m. and at 2,000 feet over the field the engine was tucked away and forgotten.

We had decided, on purchasing the ship, that we would use the engine solely for take-off purposes and not attempt re-starts in the air, and while subsequent experience has made it somewhat easier to start the engine, we are almost convinced during the first couple of weeks that it would have been impossible to start it in the air even if one had so desired. In any case, a two-cycle engine is rather tricky to start and we did not want to learn to rely on it and find that it could not be started just the time we most needed it. Since returning home, we have been asked often if the feeling of having the engine in the ship did not change our mental attitude toward cross-country flying. I can say honestly that after it was once put away, I never gave the engine another thought. I have checked this point also with Dave Potter, and he confirms that he had exactly the same feeling on his cross-country flights with me, even though once we had been down to 1,000 feet above the ground. The question is purely academic with Margaret, who has neither the weight nor strength to start it on the ground.

The early morning lift at Yuma was rather weak and I was drifting badly to the north of course, with beautiful cloud streets in the direction of the wind. After struggling for almost an hour, conditions improved considerably and I was able to get 6,000 feet over terrain and then back on course. From then on, conditions improved rapidly—in fact almost too fast, as I soon found myself flying in extremely heavy rain and hail falling from some of the clouds that were forming. So it now became necessary to detour around the weather instead of the terrain.

As on the previous day when I had flown with Dave, it was found that the clouds generally did not mark areas of lift. We had learned the hard way on Saturday not to fly toward a good-looking cloud, but to work the dry thermals which appeared reasonably



The Hummingbird tour started in good soaring weather on July 30th, but by August 5th it was held up at Omaha by a stationary front sitting overhead. Weather charts adapted from the Air Ministry's Daily Weather Report, which gives a chart of the whole northern hemisphere for noon each day (5 a.m. at Denver, 6 a.m. at St. Louis).



Ted Nelson, designer and builder of the Hummingbird, stands beside it while George Downsbrough (front seat) and Dave Potter discuss the first cross-country flight with their respective wives, Margaret and Tiddum.

frequently, and only occasionally did these thermals develop into clouds. When they did, on neither of these days were we able to get into the cloud.

I was now becoming quite encouraged with the good conditions and felt that I might make up for the drift off course that I had had earlier and get a Gold C out of it. However, about 95 miles from Yuma there was a complete change of conditions, and the sky was devoid of clouds with wind drift about the same.

We had been having some radio trouble, and while I had been able to hear the car from time to time, I had been unable to get a message to them. Furthermore, we were off the airlines and I had no C.A.A. station to give my messages to. I think at this stage of the flight, if I could have gotten word to my crew, I would have turned north and gone with the prevailing winds, rather than fight the poor conditions which appeared ahead. However, this was pretty wild and open country and it did not seem wise to deviate from the proposed plan without getting word to the ground crew, so I struggled on course for another three hours and twenty minutes, arriving at a duster's field at Arapahoe, Nebraska, at 5.10 p.m. with absolutely no lift remaining in the area. This was a 6 hour and 20 minute flight with an airline distance of 155 miles.

The duster, Al Fritz, who owned and operated the field, was at his hangar as I rolled up. He was completely confused as to what was going on and was sure, for a few moments, that he had inhaled too much of the spray fluid which he was transferring to another container at that time. However, after he regained his composure, he proved to be extremely interested in soaring, knew many of the national records, who made them, and apparently remembered everything he had ever read about soaring.

Monday morning, August 1st, looked just about the same as the past two days that we

had had. This was the day for Margaret and myself to fly. We had been doing so well in the past that we got a little over-ambitious with a 10.30 a.m. take-off, and were unable to stay up. There was some unstable air, and thermals were definitely going to start soon, but we had been a little too eager with our 2,000-foot start.

On returning to the field, we decided to take Al Fritz for a ride, since he was so keenly interested in gliding and everything associated with it. Taxiing out for a take-off we dropped the nose-wheel in a badger hole and damaged the mounting arrangements, so the remainder of the day was spent in making replacement parts and installing them. You guessed it—Al Fritz and his many friends did all the work. In the meantime we had called Ted Nelson and ordered a new assembly which was being flown to Omaha.

On Tuesday, August 2nd, it was decided that Margaret and I would fly again, so take-off was made at 11.05 a.m. and we found conditions essentially the same as on my Sunday solo flight. The early morning lift was fairly weak, and we drifted fairly well north of course in an effort to keep in the air. After a couple of hours of flying in rather rough thermals, Margaret became sick. Since we were drifting badly north it was decided that we would head for Grand Island and probably land there.

We arrived at Grand Island about 1.30 p.m. with plenty of altitude and greatly improved conditions. Margaret flew from the rear for a while in the vicinity of the airport, and felt much better, so suggested that we might go on course. Accordingly, a report was given to Grand Island radio and we headed back south-east toward Route 34.

We were now nearing more populated areas and the charts were not showing all the terrain features. We were also running into a considerable amount of haze and very poor visibility. As a result, we missed our first check point, a town and airport 40 miles from Grand Island, and had to continue on course. By now it seemed certain that we should be in the vicinity of Lincoln, though no signs of the city appeared. I therefore called Lincoln Air Force Base and asked for a fix. They responded immediately, but advised that they could give a fix only on U.H.F. and not on V.H.F. There followed the usual friendly conversation as to the nature of our flight. Soon we could see the Air Force Base and at the same time they reported that G.C.A. had a target eight miles north-west of the field: could that be me? Roger. It was getting late in the day, Margaret had again become ill from food which she had eaten after leaving Grand Island, and we still could not see the city, so I requested Lincoln Air Force Base, which is the headquarters for Strategic Air Force, for permission to land.

If I had been busy with radio contact with Lincoln Air Force Base before that, this really started the ball rolling! They first asked if I was declaring emergency. I didn't wish to take this action, so advised them that I had a sick passenger and no power, and they could decide what the conditions were. The tower finally came back with "permission to land granted", but by now we were nearly over the field and only about 10 miles from Union Airport in Lincoln, still only the outline of some of the larger buildings could be seen. We had worked another thermal while talking to the tower, which gave us adequate altitude to cross town and reach the airport, so I called Lincoln, thanked them for the help and advised them that I was proceeding to Union, the municipal airport for Lincoln. By now they advised me that they had me in visual contact, three miles north of runway 18.

Before landing at Lincoln, I reported my position, asked for landing information, at which time they gave me their location on the field and requested that I report upon landing. I thought now I had really done something at the Air Force Base. Landing was completed at 5.35 p.m. with 6 hours and 30 minutes and 178 miles.

On reporting to C.A.A. I found that the Lincoln Air Force Base tower wished to talk to me. The C.A.A. people offered me the use of their direct wire to the Air Force Base. Upon taking up the phone and identifying myself I heard a very cordial voice at the other end say: "Sure wish you had landed here, we wanted to see that job. We had some trouble getting permission for you to land from the topside people, but once we had it, we wanted you to come in." So ended another very interesting flight and experience. The next day several of the Air Force personnel came over to see the contraption flying around the country without power.

Wednesday morning looked good as

usual, but now I had had three flights, 18 hours and 15 minutes in the cockpit, and made almost 450 miles along our route, so it was certainly time for me to climb out of the front seat and give somebody else a chance. Margaret was checked out, we went to Omaha and got the new front wheel assembly which Ted had forwarded, and took care of personal chores which had been neglected with the very busy schedule of the last four days. Maybe we relaxed too much—but we felt that with a break in the weather we might make the East Coast in our allotted time.

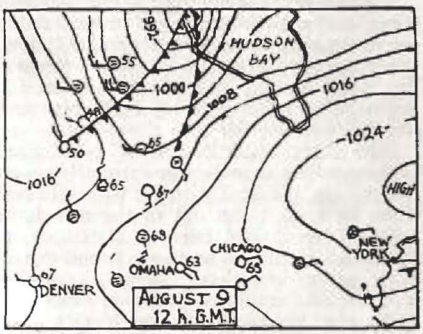
Thursday morning found Margaret in the front seat with Tiddum Potter, who had worked so hard and waited so long, as passenger. Tiddum had made her solo flight in the glider at Wurtsboro 10 days previous and was anxiously looking forward to her first cross-country venture. With reporters and television cameramen around, it was five minutes of 12 before they got off. A half hour later we had a call that they were at cloud base, 6,000 feet, and setting course for Omaha. So we hooked up the trailer and started for Omaha by car. It was obvious that there was a very bad north-westerly wind drift and an open area almost 50 miles wide between Lincoln and Omaha that would take considerable crossing. Since the clouds looked good on either side of the dead area, we tried unsuccessfully to get a message to the glider, suggesting that they continue on a more north-westerly course, rather than staying on Route 34.

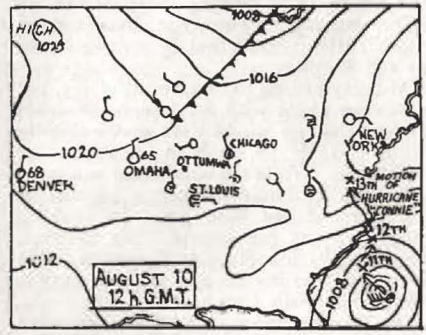
The first message which we received from the glider was at 2.30 p.m. when they advised us that they were 5,400 feet, with Omaha Airport in sight. Flying had been rather difficult and they would land there. This, however, proved to be somewhat of a problem, and it was not until three hours later, at 5.35 p.m. that they landed at Omaha Municipal Airport. At the time of our 2.30 p.m. contact they had been north-west of the field, and in order to get to Omaha, had to go back nearly to Lincoln, where they were able to cross the dead area and proceed on a northerly direction again to Omaha. After 5 hours and 40 minutes in the air, they had made 48 miles along our course.

Radio contact was made with Omaha radio and then with Omaha tower, so no trouble was experienced in getting into the field even though it is a large busy Municipal airport used by United and Braniff.

The weather map the next morning showed a stationery front right over Omaha, which was confirmed by the overcast sky, so we took the day off and went swimming.

Saturday the 6th found conditions still the same. We visited the airport manager in order to pay our respects. He asked us what our plans were and we advised him that conditions did not seem to be satisfactory for cross country flying, and we rather doubted the advisability of flying out of a busy airport of this type. He immediately advised that he would like to see the glider fly and would place at our disposal all of the facilities of the airport. In view of the





A cold front was expected to pass over Ottumwa on the night of August 9th, bringing north-westerly winds in its rear, but by next morning it was dissipating and the winds were still north-easterly. The hurricane "Connie", moving up the Atlantic coast, was waiting for the party when they finally got home on August 13th.

favourable attitude of everybody at the field, we decided to make a test hop which was so successful that we made several demonstration flights with passengers who had shown a real interest in soaring, including the tower supervisor.

During Saturday night a cold front passed through, but unfortunately it left us with winds of 17 knots at 50 degrees up to 5,000 feet and in the next 1,000 feet there was an abrupt change in direction of almost 90 degrees, which meant that the tops of any thermals that developed would be relatively low and the thermals would probably be extremely rough. It was decided, however, that it was about time we were on our way, so we headed south, hoping that after the frontal passage, we would again pick up a favourable southerly wind which we could use to advantage to take us back on course.

Dave and I took off at 12.25 p.m. and about two hours later we were at Nebraska City, 45 miles from Omaha and down to 1,000 feet above the ground. Soaring conditions were very poor and we were having trouble making any time under the weak conditions and heavy westerly drift. We were almost ready to give up when we picked up a thermal and went to 5,500 ft. It was still quite early, so we set out on course.

At 4 p.m. we arrived at Falls City, 85 miles airline from Omaha, with reasonable altitude, but conditions did not look good for continuing to St. Joseph, Missouri, so we flew over the town, located a swimming pool for our evening swim and were able to pick out a good looking motel where we stayed that night. Twenty minutes later we landed, after 3 hours and 55 minutes in the air and 85 miles.

Monday proved to be a beautiful day, but a weather check with St. Joseph, Missouri showed that we would have north-easterly winds of 15 knots up from the surface to 10,000 feet. While the wind shear was gone and soaring should be better, conditions certainly did not look good for making progress along our course. We decided, therefore, to use the day to get in more flying with the Potters and give the airport operator at Falls City a ride.

On Tuesday morning, the 9th, we were greeted again by a north-east wind, so for the first time, 10 days out of Denver, we put the ship on the trailer and drove to Ottumwa, Iowa. A check with C.A.A. revealed that a good front was predicted to go through during the night with clearing by 7 o'clock in the morning, followed by north-westerly winds. We were further advised to put our ship in the hangar as thunderstorms were predicted with the frontal passage.

On the morning of Wednesday the 10th we found the wind still strong from the north-east and in checking with C.A.A. found that the anticipated front had dissipated and they expected the winds would continue out of the north-east for several more days. It was decided then that trailering for another day was in order, so we crossed the Mississippi at Moline, stopping at Bradford in Illinois, where we assembled the ship that night. It had been decided that I would fly the next day and attempt Gold C distance, which would be the last chance. By now we realized that a Gold C Flight could not be made against or across winds under the conditions we were experiencing, so the flight would have to be down-wind. We were hoping for a shift to a west or north-west wind in order that we could make further progress along our course.

Thursday, the 11th, looked like a beautiful day, but the winds were from 40°, ranging from 24 to 28 knots. The only thing to do was to select a goal down-wind, which did not permit much choice: Columbia, Missouri, 210 miles, would make a Gold C distance, as well as a Diamond goal. Accordingly, a V.F.R. flight plan was filed with Bradford radio after good-natured jesting on their part as to cruising altitude.

I got a good, early start, 11.15 daylight time, and cut the engine off in reasonably good conditions at the usual 2,000 feet. With the wind as strong as it was, there was no point staying around the airport for altitude, so I activated my flight plan and headed down-wind.

The early conditions were quite good although the thermals were extremely rough as one might expect with the wind. In less than an hour I ran out of the nice farm country which had been so characteristic of Iowa and Illinois and soon found myself over rather unpleasant open pit mining country and in all my afternoon flying saw only one town of any reasonable size. About 3 hours and 15 minutes after take-off I found a large airport, the only one of any description that I had seen on the whole flight. I had not been used to flying down-wind and hardly believed that this could be

Quincy so soon, since it was 120 miles airline distance from my point of take-off. I called Quincy radio and definitely established that the airport was the Quincy-Baldwin Airport, so I made a position report and then a survey down into Missouri. The terrain was very uninviting and there was only one small airport between Quincy and my goal, another 90 miles away.

Considering that the girls were trailering alone, as Dave had left to return to work, and my unhappy feelings with the several hours of flying over the open pit coal mines of Illinois, I returned to Quincy and had a great deal of fun flying around the airport. As it so often happens, conditions picked up and were quite good when I got back to the airport. I landed at Quincy at 4.10 Daylight Time after 4 hours and 55 minutes in the air and 120 miles from my point of take-off.

Cross-country driving in this area was nearly as bad as flying. It was several hours before Margaret and Tiddum arrived. After putting the ship on the trailer we headed for home, (Boonton, New Jersey), where hurricane "Connie" was waiting for us. While there was a great deal of rain all of Saturday on our drive through Pennsylvania, the winds were not high enough to cause us any real trouble, and we arrived home on Saturday evening, August 13th.

We found cross-country flying extremely interesting and were amazed at the time we accumulated in the two weeks. One of the most gratifying parts of our trip was the opportunity we had to meet such wonderful people and the excellent opportunity offered us to learn so much about the places where we stopped. We all had a wonderful time and heartily recommend it to anyone who has the opportunity.

Summary of Cross-Country Flights

Date	*Route*	*Miles*	*hrs.*	*mins.*
July 30	Denver-Yuma	115	5	25
July 31	Yuma-Arapahoe	155	6	20
Aug. 2	Arapahoe-Lincoln	178	6	30
Aug. 4	Lincoln-Omaha	48	5	40
Aug. 7	Omaha-Falls City	85	3	55
Aug. 11	Bradford-Quincy	120	4	55
	Totals	701	32	45

FAMOUS LAST WORDS

. . . Funny how easily this bungey stretches . . .
. . . Once above the Moelwyns, Snowdon should be in the bag . . .
. . . No need to hold the tail back in this wind . . .
. . . I'll just put these pins in my pocket for the moment . . .
. . . We can always make a plan over the radio *after* you're airborne . . .
. . . Must get off quick before the wind drops . . .
. . . I told you Muriel could tow this trailer at 60 . . .
. . . quite all right . . . they only use black Veloxes round here . . .
. . . My one ambition is to land back on the top . . .
. . . I've launched here in half this wind . . .
. . . No point in flying to Derby and Lancs. on a weekday . . .
. . . The Power Wires are a purely psychological obstruction . . .
. . . It only needs a little bit of bold flying . . .
. . . Don't think that I despise the humble thermal . . .
. . . Easily get through the stream in 4-wheel drive . . .
. . . Yes, I know the cliff drops straight into the sea just here, but you can always glide round the corner . . .
. . . It's the wind at 3,000 feet that really counts . . .
. . . I'm sure it's all right/duff; look at that seagull/pigeon over there—it's soaring/flapping like mad . . .
. . . To-morrow we'll make a *really* early start.

Heard on a Gliding Expedition by ANON.

BONDS OF EMPIRE, 1955

by Philip Wills

I WAS having my early morning cup of tea in bed at the Hotel Victoria, in Bulawayo, when the phone rang.

"Hullo? I see your name in the *Chronicle* this morning. This is Whidborne speaking.' "Not *Whiddy*?"—"Well, as a matter of fact, I'm his son. I don't suppose you remember me, I was a boy in those Sutton Bank days, but I remember you. So you remember Dad?"

Indeed I did. In the early 30's, when the nascent gliding movement was riven with internal dissension, Whiddy had been one of our stalwarts: a member of the "other side", but one respected and liked by all, because of the immense amount of hard work which he put in on the actual field. I remembered him (possibly incorrectly) as a short, stocky, sandy chap—a lawyer, I think, and a keen amateur astronomist. Perhaps after this lapse of time I will not give offence if I say that our chief worry about him was that, as a pilot, his keenness exceeded his ability by a very large margin. Indeed, this led to our witnessing one of the shortest and most startling flights I have ever seen—even twenty years later I can still see every detail of it, and remember the curious feeling which, I realised, was the sensation described as "one's hair standing on end."

It was the last day of the first national contests which had ever been held, at Sutton Bank, in September, 1934. Throughout the meeting Whiddy had been a tower of strength, selling programmes, time-keeping with Howard Flanders, marshalling spectators—the lot. We had so far managed to resist his repeated requests for a flight (this was before the days of two-seaters), but on the last day he absolutely insisted on a reward for his labours, and we weakly gave way.

There was a stiff westerly blowing up the cliff-face, so we strapped him in to the nacelled Primary and gave him a good strong bunjy launch over the edge. The machine shot forward, and Whiddy, startled by the acceleration, pulled hard back on the stick, with the result that by the time the aircraft hit the knife-edged updraught it was climbing at an angle of perhaps 30°. The upcurrent hit her with an almost audible "woof!", and coming on top of his brisk launch, this quite upset the remainder of Whiddy's *sang-froid*. Desperately he yanked the stick right back into his stomach, the spellbound watchers saw the gawky Primary shoot up until it was practically standing on its tail, perhaps 25 yards out from the edge and the same distance above it. She faltered, plainly puzzled; then a wing dropped, the nose fell in a stalled turn until it was almost vertically down, she did a half-turn of a spin, but, in the terrific updraught, without losing much height, like a model suspended in a spinning tunnel. Then she picked up speed, Whiddy's stick-in-tum brought her out into level flight, but now facing straight back at us. She whistled over our heads and back over the landing field downwind; Whiddy put on a desperate vertical turn, the port wing just scraped the heather, and—plump, there was aircraft, Whiddy and all, resting exactly on the spot he had left perhaps 15 seconds before . . .

That was Whiddy's first and last flight at that meeting.

"Oh yes, I remember your father very well. Where are you?" And so I got an invitation out to the Bulawayo Gliding Club, but three weeks later, as I was leaving for Untali, Salisbury, and the Copperbelt on that day.

* * * *

A week later, another morning cup of tea, in Meikles Hotel, Salisbury, another phone call.

"Hullo! I see in this morning's paper that you're in town and going out to the gliding club to-morrow. I don't suppose you remember me? My name's Marjason." —"Good Heavens, weren't you the Bank manager at Dunstable who helped us so much when we were raising the loan to build our clubhouse?"—"Yes, that's me. It would be nice to have a chat over old times: may I come along some time?"

It must have been also around 1935. With the aid of Espin Hardwick, whose lasting memorial is the security of tenure of two of our main gliding club sites, at Dunstable and the Long Mynd, we owned our own land, and now were planning to erect a permanent clubhouse. And not merely a brick box, but, by making use of the genius of Kit Nicholson, what was to be,

and still is, the finest and most modern gliding clubhouse in the world.

With much difficulty we had persuaded the local Council to pass the plans—they would unhesitatingly have approved a pseudo-Teudo oak-beamed leaded-bottle-glass-windowed structure, but were at first appalled by modern functionalism. Now remained the problem of finance.

Toby Ashwell-Cooke had worked out an ingenious scheme for a £2,500 Bank Loan, to be guaranteed in units of £100 by 25 members. This was workable from our point of view, but from that of the Bank was not so good, since we could not offer a "joint and several" guarantee, but only one in which each guarantor was limited to £100 maximum. On top of this it was well-known that anyone mad enough to go in for this new-fangled desperate "sport" of gliding must obviously be by definition feckless, slightly mad, irresponsible, and probably with somewhat criminal tendencies which he was trying to sublimate by adventuring his neck in this ridiculous way—in fact, not a suitable guarantor for anything. It seemed hardly likely, therefore, that any Head Office General Manager in his sponge-bag trousers and top-hat would take more than a moment to turn down our daring proposal.

But in this vital moment our local Manager, Mr. Marjason, came strongly to our rescue. He actually knew us, had been out to the club, had drunk beer with us and seen that we, too, were human—indeed, that our enthusiasm masked a determined integrity. Possibly we might beat our



Nchange-Kitwe copper mine from the Bergfalke at 3,000 feet.

women in our spare time (it was hardly likely that any of us would be honourably married), or steal the odd pennies from a blind man's plate, but never would we do anything, however slight, which might bring discredit on our chosen sport. On his strong recommendation the loan went through, the clubhouse rose from the ground, the loan was in due course paid off, and the London club established on firm ground for all time.

* * * *

On Saturday, November 5th, I went out to Mt. Hamden, the large and dusty grass airfield near Salisbury where the gliding club operates. This club has probably more aircraft per member than any other in the world—five ancient but serviceable machines for around 20 members, with a Tiger Moth for towing. Although in theory the life of a wooden sailplane in a hot and dry climate should be limited by the drying out of the plywood, and possibly by its partial consumption by white ants, in fact African skies are still studded with such gliders of all ages up to 20 years, and I have yet to hear of a machine having to be scrapped for this reason.

I was towed off in Derek Lane's Kirby Kite, and had two-and-a-half cramped but glorious hours in a cumulus-filled sky. It was again brought home to me that in hot countries the only part of the Polar Curve which really matters is the right-hand side. You are either climbing at 20 ft./sec. or coming down at the same rate: in these conditions it does not matter at all whether your minimum sinking speed is 2 ft./sec. or twice that; what really counts is the ability to bash your way through the intervening downcurrents to the next "up". In these conditions, good as they were, the safe radius of action of the Kite, even with cloudbase at 6,000 ft. above the 4,000 ft. high veldt, was not more than five miles from the airfield or, in a cross-country, the same distance from the nearest possible landing ground; and in few directions could one hope for safe landings spaced as nearly to each other as that. With something like a Skylark II, therefore, this range would be immediately doubled or even trebled, with entirely new fields of possibility opened as a result.

In addition to its aircraft, the club has an adequate hangar but practically no creature-comforts—in fact, I thought it was in the "bed-of-nails" stage of development, an entirely healthy but transient stage when red-hot enthusiasts resist any idea of attracting members who might be put off by mere extreme discomfort. I expect most religions go through this phase. But in the case of gliding, it has to be admitted that a man may still be a useful club-member even though he might wish it to be possible for his wife and family also to come with him to the club at week-ends without risking boredom, sunstroke, or death by exposure. So I am glad to be able to report that the S.G.C. is moving to less Spartan surroundings soon, with sufficient security of tenure to allow the erection of a clubhouse. For if a gliding fan has to decide between his sport and wedlock, how are we to expect the future expansion of the art to take place? Must gliding require of its devotees a complete repression of the philoprogenitive instinct? Then from whence is the middle-aged pilot to find his retrieving team?

* * * *

In this haze of philosophical introspection I motored 600 miles northwards, over the Zambesi, to the Copperbelt, that magic corridor where a line of small model towns have been cut out of the virgin *bundu*, which here is like a boundless park of trees and grass, pleasant enough to look at from the road, but infested with areas of tsetse fly and other hazards.

The average young mineworker here, whether working in an office or underground, earns around £1,200 a year which is *doubled* with his "copper bonus", and his wife goes out to earn pin-money which probably brings the family income up to £3,000 p.a. But I don't know that this makes for a noticeably more contented community than anywhere else, although it is certainly good for the Jaguar motor-car Company.

Here I met Ted Pearson, who had come up from the Rand to settle in Kitwe. His desire to start a gliding club was quickly gratified, for on collecting a comparatively small sum from a nucleus of members, the Kitwe lottery gave the club £2,000 with which they have bought a new German Bergfalke two-seater, a trailer and a Tiger Moth. I was towed up under another sky dappled with cumulus, with an exhortation to do the first Northern Rhodesian cross-country flight if I felt like it. But from 4,000 ft. the forest appeared to stretch illimitably to the horizon on all sides, with no apparent possibility for even a tsetse-fly to get down anywhere without breaking its

legs, so I decided to leave this honour to someone else.

The performance of the Bergfalke seemed excellent, though its stability and handling qualities and the size of its cockpit for large pilots could be improved. If you want to earn £3,000 p.a. surrounded by every mod. con. and spend your weekends floating around in a cumulus-studded sky, then Nchanga-Kitwe is the place for you. Thank you, Ted.

Back at Bulawayo, I was taken out by the Mason brothers to the club, which in one sense is the reverse of the one at Salisbury. For here they have very pleasant ground facilities, but a shortage of aircraft. A small grass airfield, a newly-erected hangar, a pleasant little clubhouse with a thatched open-sided cottage attached for a bunk-house, all guarded by a resident native watchman, 12 miles from town.

Dennis Mason has just acquired a Tiger with a hook, and shortly they will be experimenting to see if the airfield is large enough for aero-towing. Meanwhile launching is by an ingenious self-propelled winch mounting a vast ancient 12-cylinder American car engine.

The fleet consists of another elderly Kirby Kite, a group-owned H-17 and a Grunau 9 Primary for training, but the plan is to acquire a partly-built T-31 two-seater from a defunct club near Salisbury, complete it and use it for training; and if this succeeds Bulawayo might soon compete strongly with Salisbury as the premier gliding club in Rhodesia—it probably has a larger membership already, but does less flying.

The day ended with a braavleis (or barbecue), in which raw hunks of delicious meat and sausages called borrevoes (I think) are toasted on pointed sticks over the ashes of a huge bonfire. My hunk inevitably fell off into the heart of the fire at the crucial moment, but was retrieved and determinedly eaten with large draughts of beer. It was excellent, if a trifle gritty.

* * * *

And so southwards to Johannesburg, where I met many old friends, but sadly had to refuse the generous offer of a sailplane to fly in the South African nationals which were starting at Kroonstad that week.

Here, however, I learnt that even the dreadful weather at the 1954 World Championships at Camphill had had its brighter side. For, grounded by gales and rain, both Roy Lillienfeld and Pat Beatty had instead wooed and won their brides, and both are shortly expecting to become fathers. The child of a pair like Pat and Betty Rowell (who first discovered and flew in the Table Mountain Wave) should certainly be worth watching in the skies of the next generation; maybe in good time it will make amends for the 1954 frustration of Camphill.

And so on to a Union Castle liner and back to the stable, grey and icy skies of the English winter.

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Britain's

for

World Ch

i

Fra

July



1

1 P. A. WILLS, C.B.E.
Age 48.

British Gold 'C' No. 1. Height and Goal Diamonds. World Champion, Spain, 1952. British Champion, 1955. Chairman of the B.G.A.



3

3 H. C. N. GOODHART, Comdr., R.N.
Age 36.

Studied at Royal Naval Engineering College, Keyham. Started gliding in 1935. British Gold 'C' No. 9. First British Diamond 'C'. Holder of British Absolute Altitude Record—37,000 feet. Placed 1st in U.S.A. National Competitions, 1955.



5

5 FRANK FOSTER
Age 37.

Airline Pilot with B.E.A. Started gliding in 1938. British Gold 'C' No. 15. Height and Goal Diamonds. Member of British Team in Spain, 1952. Mrs. Foster also glides and holds her Silver 'C'.

The Slingsby

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SLINGSBY SAIL

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1956



2

2 G. H. STEPHENSON.
Age 44.

Started gliding in 1936. British Gold 'C' No. 14. Goal Diamond. First Pilot to soar across the English Channel. Twin sons are keen glider retrievers.



4

4 A. J. DEANE-DRUMMOND, M.C.
Age 38.

Started gliding in 1937. Silver 'C' 1938. Height Diamond 1955. Placed 2nd in 1955 British Championship Meeting at Lasham. Chairman of Army Gliding Club. Log-book shows 341 hours in single-seaters in 399 flights.



6

6 PETER BISGOOD
Age 33.

Studied at Northampton College of Engineering. Started gliding in 1948. Silver 'C' 1949. Gold 'C' Height 1951. Captain of winning team, National Championships 1933 and 1955.

Skylark III

to the Team from

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H. Ratcliffe	Derbyshire & Lancashire
A. J. Stone	RAF Middleton St. George
C. A. Fry	No. 92 G.S.
C. M. Smith	No. 22 G.S.
T. K. Patterson	No. 64 G.S.
J. E. Ryde	No. 642 G.S.

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Seng Chye Yeong	Perak F.C.
R. S. Whiting	No. 102 G.S.
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C. A. Clarke	No. 622 G.S.
Hoon Cheow Teoh	Perak F.C.
N. G. Vincent	No. 611 G.S.
I. S. Walsh	No. 84 G.S.
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L. G. Savory	Kettering
D. O. Shuker	No. 633 G.S.
F. W. Elliott	No. 31 G.S.
E. J. W. Barnes	Surrey
B. J. F. Green	No. 613 G.S.
P. J. Smith	No. 611 G.S.
K. A. Mansfield	No. 644 G.S.
B. R. Robertson	No. 84 G.S.
L. D. Muehmore	Bristol
J. H. Toplis	No. 146 G.S.
J. C. Kent	No. 644 G.S.
A. W. Burton	Portsmouth Naval
J. E. I. Day	No. 89 G.S.
K. Cresswell	No. 23 G.S.
A. Stevenson	RAF Abu Sueir
E. L. Nicholl	No. 634 G.S.
A. Booth	No. 49 G.S.
M. Cooper	No. 68 G.S.
R. T. Hughes	No. 43 G.S.
M. J. Baker	No. 130 G.S.
D. P. G. Puleston	No. 130 G.S.
B. S. Quance	No. 130 G.S.
B. W. T. Tolley	No. 130 G.S.
R. S. Parker	No. 633 G.S.
L. R. Keir	No. 614 G.S.
P. N. Walker	No. 24 G.S.
J. D. M. H. Laver	No. 89 G.S.
M. J. Evans	No. 89 G.S.
A. D. Porter	No. 621 G.S.
D. M. Machin	No. 614 G.S.
W. Shaw	No. 641 G.S.
A. D. Adams	No. 31 G.S.
J. Tye	No. 45 G.S.
A. Franks	No. 643 G.S.
C. J. Gilbert	No. 624 G.S.
B. D. Fox	No. 622 G.S.
A. E. Brunham	No. 622 G.S.
J. E. Lowe	No. 622 G.S.
R. H. V. Chandler	No. 614 G.S.
G. W. Briers	No. 623 G.S.
G. A. Cryer	Yorkshire
B. Hogarth	No. 641 G.S.
M. F. S. Burn	R. Engineers
E. F. Thompson	Surrey
G. F. Hamblin	No. 623 G.S.
T. Kerry	No. 45 G.S.
R. G. Aedy	East Midlands
H. Ratcliffe	Derbyshire & Lancashire
P. J. Skinner	No. 615 G.S.
R. E. Artis	No. 104 G.S.
R. A. Norris	No. 614 G.S.
T. L. Shaw	No. 89 G.S.
F. W. Grasswitz	Coventry
W. P. Vase	No. 615 G.S.
G. R. Goodman	No. 615 G.S.
R. N. Smith	Coventry
A. T. Winter	No. 613 G.S.
Grace M. Tarver	Coventry
D. W. Lee	No. 643 G.S.
D. F. Haynes	No. 106 G.S.
F. G. Dowling	RAF Abu Sueir
H. Hough	No. 45 G.S.
R. J. Taylor	No. 624 G.S.
S. G. Darby	No. 611 G.S.
W. A. Mclaughlin	No. 2 G.S.
R. M. Taylor	No. 621 G.S.
T. Bawn	No. 23 G.S.
W. J. Bagwell	No. 624 G.S.
D. R. Bricknell	No. 49 G.S.
V. J. Davies	No. 68 G.S.
G. D. Tester	Aberdeen
A. L. R. Dziwinski	Coll. of Aeron.

JANUARY A Certificates.

Seng Chye Yeong	Perak F.C.
Hoon Cheow Teoh	Perak F.C.
L. G. Savory	Kettering
F. W. Elliott	No. 31 G.S.
M. C. Rahman	R.N. Bramcote
A. L. R. Dziwinski	Coll. of Aeron.
G. A. Cryer	Yorkshire
H. Ratcliffe	Derbyshire & Lancashire
F. G. Dowling	RAF Abu Sueir

Other A Certificates are included in the B Certificate list.

FEBRUARY C Certificates

Name	*Gliding Club or A.T.C. School*
J. H. Dunn	Surrey
D. Holmes	RAF Windrushers
P. Chapman	London
D. K. G. Ross	No. 44 G.S.
M. S. S. Sanderson	No. 31 G.S.
R. Smithson	Coventry
J. Beaty	No. 642 G.S.
D. C. Stones	No. 31 G.S.
M. A. Elliott	R.N. Fulmar
J. R. Crompton	Avro
L. A. Wren	Southdown
K. Fuller	Southdown

FEBRUARY B Certificates

G. C. Gibson	No. 622 G.S.
M. A. Collins	HCGC Hawkinge
C. D. Tippett	Surrey
R. I. Stevenson	No. 632 G.S.
C. G. Poole	No. 42 G.S.
J. H. Dunn	Surrey
K. A. Minall	No. 623 G.S.
G. H. Giles	RAF Abu Sueir
R. G. Leathers	No. 188 G.S.
E. J. Antolak	No. 188 G.S.
J. E. Goulding	No. 188 G.S.
E. James	No. 188 G.S.
I. L. McCleary	No. 188 G.S.
D. Murray	No. 188 G.S.
K. L. Jones	No. 188 G.S.
H. J. Greenway	Coventry
D. C. J. Greenland	No. 633 G.S.
E. J. N. Wilson	No. 68 G.S.
M. J. Roberts	No. 142 G.S.
J. Hay	No. 5 G.S.
P. J. Briggs	No. 624 G.S.
A. R. M. Wright	No. 623 G.S.
G. F. Perkins	RAF Wildenrath
R. N. Boulton	Surrey
D. G. Richardson	No. 633 G.S.
T. Dilworth	RAF Gütersloh
J. D. King	No. 624 G.S.
C. L. Rattray	HCGC Hawkinge
P. D. Flockhart	No. 2 G.S.
A. C. Boyce	No. 661 G.S.
E. Cowan	No. 661 G.S.
A. J. Kirkham	No. 183 G.S.
P. W. Parker	No. 615 G.S.
O. M. Pozniak	Coll. of Aeron.
G. L. Winterbourne	HMS Fulmar
R. J. Ridley	No. 661 G.S.
B. W. Barber	No. 621 G.S.
C. J. Stevenson	No. 2 G.S.
K. C. Musgrave	No. 615 G.S.
B. T. Giddings	No. 634 G.S.
R. A. L. Stanton	No. 2 G.S.
D. Delacassa	HCGC Hawkinge
M. Lesley	No. 622 G.S.
P. E. G. Hingston	HCGC Hawkinge
J. R. Young	No. 634 G.S.
C. J. Hutton	HCGC Hawkinge
D. Holmes	RAF Windrushers
S. Walton	No. 642 G.S.
T. A. Hyde	HCGC Hawkinge
C. R. Dempster	HCGC Hawkinge
R. I. Brooks	HCGC Hawkinge
P. Chapman	London
C. R. Hurst	Oxford G.C.
J. E. Smith	HCGC Hawkinge

W. D. K. Lawman	No. 2 G.S.	P. E. Bunn	No. 632 G.S.	FEBRUARY A Certificates	
R. J. Dolman	No. 622 G.S.	A. R. Gould	No. 615 G.S.	G. F. Perkins	RAF Wildenrath
D. G. P. Brown	RAF Abu Sueir	S. F. Hunt	No. 143 G.S.	T. Dilworth	RAF Gütersloh
P. K. J. Spencer	No. 644 G.S.	R. L. Hadwin	No. 188 G.S.	D. Holmes	RAF Windrushers
G. M. Chamberlain	No. 644 G.S.	D. C. Collins	No. 634 G.S.		
J. C. Cutler	R.N. Lossiemouth	K. Rogers	No. 634 G.S.		
		B. E. Allen	No. 644 G.S.		
		D. K. G. Ross	No. 44 G.S.		

Other A Certificates are included in the B Certificate list.

Accident Analysis for 1955

THERE have been more reported accidents during the past year than in any year since 1950 and the cost has also been greater than ever before. Whilst hours flown have increased, the situation shows room for radical improvement in certain directions.

Two collisions throw primary emphasis on lack of observance, of discipline and rules. This type of accident should have no place in gliding if emphasis was placed on look-out from the very early stages of instruction and maintained continuously.

Approach accidents still remain the most serious as regards cost and damage, and the one fatality was due to this cause. With the wide use of braked sailplanes it would appear that sufficient insistence is still not being placed on turning in at a reasonable height—more especially with pilots who have graduated away from the ab-initio stage.

A series of stalling accidents pin-points the need for stalling and spinning exercises to checked and advanced as well as pre-solo pupils. This has perhaps been magnified by newer types of aircraft where control response is good down to the point of stall, the stall warning not being reflected by excessive control slop as on older types of gliders.

Approximately two-fifths of the total cost of this year's accidents come under the heading of carelessness:—being blown over; faulty cockpit checks; collisions; an instructor severely damaging a machine after a winch stalled; taking off near obstructions, etc. Cost of such accidents averaged £170 each.

Generally this year's accidents show the ab-initio side of operations to have a fair record. The casualties are to an excessive degree more advanced pilots who should, it might be expected, be beyond such errors. Their mistakes by and large are more serious and made in costlier sailplanes. There would appear to be a case for progressive checks during a pilot's career until he has, say, 100 hours on sporting gliders.

An interesting moral drawn from two of this year's mishaps is that bulls need not be identified from cows when choosing a cross-country landing field! Both are expensive and should if possible be avoided.

FRANK FOSTER,
Accidents Analysis Officer,
British Gliding Association.

Summary of Statistics Given in Table

Accident Category	*No.*	*Average Cost*	*Totals*
Landing	22	£31 10s.	£696
Approach.. ..	17	137 0s.	2,333
Take Off	5	126 0s.	632
Pilot not in charge	8	49 10s.	353
In Flight	4	—	856
Hops	1	—	5
No details ..	4	—	42
			£4 917

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B.G.A. ACCIDENTS STATISTICS FOR 1955

Serial No.	Aircraft	Accident Category	Pilot Category	Cost £	Remarks
1	Tutor	Approach	Under 5 hrs.	2	Undershoot.
2	T-31	Approach	Instructor under training	20	Pilot being trained as Instructor.
3	T-21	Landing	Instructor under training	1	Pilot under test in charge failed to correct mistakes of examiner acting as Pupil.
4	Olympia	Approach	5 hrs. plus	80	Stalled.
5	Viking I	In flight	5 hrs. plus	1	Loose nut jammed stick (freed later).
6	Cadet	Low hop	Under 5 hrs.	5	Solo training, pupil dived in.
7	T-31	Landing	1st Solo	5	Hit obstruction after landing.
8	Olympia	Approach	200 hrs.	750	Pilot hit tree. Killed.
9	Olympia	Landing	Silver C	250	Thermalled too far from nearest landing field, landed on rocky ground.
10	Olympia	Pilot not i/c.	Silver C	4	Aircraft attacked by bulls.
11	Olympia	In flight	15 hrs. plus 1000 power	750	Pilot recently converted to gliding, stalled.
12	Olympia	Pilot not i/c.	—	—	Ottfur release jammed.
13	Kite II / Skylark II	In flight	Qualified / Qualified	5	Inadequate look-out (collision).
14	Skylark II	Approach	Qualified	550	Attempted circuit off low cable break.
15	Skylark II	Approach	Silver C	25	Stalled on approach.
16	T-21	Approach	Instructor	1	Failed to see fence on approach.
17	Cadet	Approach	Under 5 hrs.	16	"S"-turned until too low for approach.
18	Olympia	Approach	Over 5 hrs.	40	Flew circuit with brakes out, undershot.
19	Olympia	Approach	Over 5 hrs.	30	Cross-country landing, last turn too low
20	Olympia	Landing	Over 5 hrs.	50	Held off high.
21	Olympia	Landing	Over 5 hrs.	18	Rolled back on elevator after landing.
22	Olympia	Landing	Over 5 hrs.	4	Airbrake caught obstruction.
23	T-21	Landing	Over 5 hrs.	53	Bad landing and ground loop.
24	Tutor	Take-off	Over 5 hrs.	150	Launched near obstruction, hit it.
25	T-21b	Pilot not i/c.	—	250	Empty aircraft blown over.
26	Tutor	Pilot not i/c.	—	20	Ground-handling with too few crew.
27	T-31	Landing	Over 5 hrs.	1	Landing toward hangar, hit obstruction.
28	Olympia	Landing	Not known	5	Poor repair failed after several landings.
29	Olympia	Take-off	Over 5 hrs.	150	Take-off too close to parked a/c; hit one.
30	Petrel	Landing	Silver C	5	Cross-wind landing.
31	Skylark	Approach	Over 5 hrs.	80	Last turn too low.
32/55	Olympia	Pilot not i/c.	—	16	Hit aircraft subject of No. 29.
33	T-31	Pilot not i/c.	—	50	Turned over by launching cable.
34	Olympia	Landing	Silver C	100	Pilot made no plan for landing when low thinking he might regain home site.
34	Tutor / Eon Baby	In flight	Under 5 hrs. / Over 5 hrs.	100	Collision due turning into hill plus poor look-out.
36	T-31	Take-off	Instructor	50	Weak link broke before airborne; machine ran into rough ground.
37	Eon Baby	Landing	Over 5 hrs.	50	Weather conditions beyond pilot's ability.
38	Sky	Approach	Silver C	650	Cows cut across landing path.
39	T-31	Take-off	Instructor	275	"Pulled up" without safety speed or height; winch failed.
40	T-21	Landing	Silver C / Instructor	36	Poor procedure; "neither had her".
41	Grunau By.	Approach	Over 5 hrs.	30	Too short landing, hit boundary marker.
42	Prefect	Approach	Over 5 hrs.	26	Faulty judgement.
43	T-21	Approach	Over 5 hrs. (Instr.)	6	Took over too late.
44	Prefect	Take-off	Over 5 hrs.	7	Machine not aligned with winch, and turned by long grass.
45	Tutor	Approach	Under 5 hrs.	15	Undershot.
46	T-21	Landing	Instructor	25	Pupil "twitched controls" at touch-down.
47	Grunau By.	Landing	Over 5 hrs.	4	Cross-country landing, rough field.
48	T-21	Landing	Instructor	13	Rough ground.
49	T-21	Pilot not i/c.	—	13	Ground-handling collision.
50	Olympia	Landing	Over 5 hrs.	50	Poor use of brakes at hold-off.
51	Tutor	Landing	—	15	Unreported heavy landing.
52	Tutor	Landing	Under 5 hrs.	1	Poor landing.
53	T-21a	No details	No details	18	No details.
54	Sky	Landing	Over 5 hrs.	7	Succession of landings on bad ground.
55	T-21	No details	No details	8	No details.
56	T-21	No details	No details	6	No details.
57	Olympia	No details	No details	10	No details.
58	Prefect	Landing (?)	—	?	Presumed heavy landing; found on Daily Inspection.
59	T-21	Approach	Instructor	12	Failure to note increase of wind velocity.
60	Tutor	Landing	Under 5 hrs.	3	Machine rolled into bad ground.
61	Tutor	Pilot not i/c.	—	Not available	Turned over by launching cable, laid in a loop around it.
				£4.917	

Thunderstorm Observations Required

by R. H. Golde, D.Sc., M.I.E.E.

CUMULONIMBUS clouds appear to have aroused the curiosity of aviators for a long time. One of the early accounts of the sensations felt during a flight through such an active cloud is due to Professor John Wise,[1] who gives a vivid description of his observations when, on his forty-first aerial excursion on June 17th, 1843, his balloon was dragged into such a cloud:—"I soon found myself whirling upward with a fearful rapidity, the balloon gyrating and the car describing a large circle in the cloud. A noise resembling the rushing of a thousand milldams, intermingled with a dismal moaning sound of wind, surrounded me in this terrible flight. Whether this noise was occasioned by the hail and snow which were so fearfully pelting the balloon I am unable to tell, as the moaning sound must evidently have had another source. I was in hope, when being hurled rapidly upward, that I should escape from the top of the cloud; but as in former expectations of an opposite release from the terrible place, disappointment was again my lot, and the congenial sunshine invariably above, which had already been anticipated by its faint glimmer through the top of the cloud, soon vanished, with a violent downward surge of the balloon, as it appeared to me, of some hundred feet. The balloon subsided, only to be hurled upward again, when, having attained its maximum, it would sink down with a swinging and fearful velocity, to be carried up again and let fall. This happened eight or ten times."

Since these early days a great deal has been learnt about the up and down draughts in and near cumulo-nimbus clouds, and gliders have not only learnt to use these air currents for their flights but have also contributed materially to the knowledge of the meteorological conditions existing in such clouds.

Apart from their violent air currents, cumulo-nimbus clouds are further characterized by a process of electrification which frequently gives rise to the development of lightning discharges and thunderstorms. The processes involved in the generation and distribution of these electric charges and the mechanism and characteristics of the ensuing lightning discharge[2] have been studied by meteorologists, physicists and engineers. Glider pilots have also contributed to our knowledge of the effects of lightning discharges on their planes[3].

In addition to their purely scientific aspect, lightning discharges are of particular concern to the electrical supply engineer, since lightning is responsible for more interruptions to the British supply systems than any other single cause. The Electrical Research Association (E.R.A.) have studied lightning for many years and are, at present, engaged in a nation-wide survey of lightning faults on the British high-voltage supply systems.

As an adjunct to this investigation accurate knowledge is required on the frequency of occurrence and the geographical distribution of thunderstorms in England, Scotland and Wales. This information is being collected by the Meteorological Office, but the network of observers reporting under this scheme is not sufficiently close to give all the desired information. A survey was therefore started several years ago which has since been extending steadily so that some 600 voluntary observers are now reporting to the E.R.A. whenever thunderstorms are witnessed. There is, in general, no difficulty in finding sufficient assistance in densely populated regions, but in many rural areas the present density of observers is still far below the desirable figure of about one observer for each 200 square miles of territory.

The operation of the survey is extremely simple and does not involve the observer in any expenditure. Each observer is sent a supply of pre-paid postcards which are confined to four questions: the time and duration of the storm; the direction of movement of the storm; the severity of the storm; and the estimated number of lightning flashes to earth. These questions and the types of answer required are discussed in an explanatory note which is sent to each observer. If an observer is unable to complete the last question the report remains nevertheless valuable, as it is the main purpose of the survey to obtain a record of every thunderstorm in the country.

This article is written in the hope of enlisting the interest of glider pilots in a

scientific project, to the progress of which they are particularly well endowed to contribute. Any reader who is prepared to undertake the slight amount of work requested is asked to write to The Electrical Research Association, 5 Wadsworth Road, Perivale, Greenford, Middx., marking the envelope "Thunderstorm Observations".

1. W. Blasius, "Storms", Philadelphia, 1875, p. 141.

2. T. W. Wormell, *Quart. J. Roy. Met. Soc.*, Vol. 79, 1953, p. 474.

3. D. Piggott, *Weather*, Vol. 10, 1955, p. 304.

THIS GLIDING

Fish and Milk Run

"Denham Flying Club have just acquired some new bright orange silk parachutes in miniature—in readiness against the time when one of their members, Mr. John Everett, resident gliding instructor at Dunstable Downs, may find himself in difficulty in getting provisions. Mr. Derek G. Wright, chief flying instructor at Denham, said that he had applied to the Air Ministry for formal permission to drop supplies to Mr. Everett should he need them. 'He has only to phone us here and we can obtain what he wants, fly the few miles and help him,' he said. 'Even if he says the cat has run out of fish or milk we will help.' "—*The Star*.

Know-how

"I live in the Ozarks and I guarantee we still have our share of hillbillies. I will give an illustration of incidents which have occurred over and over concerning soaring. We have not had a glider in this area for 15 years and never have had a high-performance ship. Here is a typical example. A 'native' will approach the ship and ask me if that 'air one o' those glider-critturs which is drug to the top of a mountin' and flies back to the bottom'. I will patiently explain that warm air currents can keep sailplanes up for hours at a time, that only about three horse-power of work is utilized because the ships are so streamlined, and that a steady pull of 25 pounds would keep the ship in the air. One local type nodded knowingly at each step of the conversation and I realized I had a convert. After all, some hillbillies come by idication naturally. So I was not surprised when he turned to answer a friend who had just asked the usual 'air that one of . . .' and knew he would repay my 30-minute lecture by passing on at least some of the free information. Came the answer: 'Yeah, that air a new-fangled machine that three horses drag to the hill-top, and on a warm day, only 25 pounds of pull air needed to keep a holt o' this here stick . . .' "—*Jack Hickey in "The Thermal"* (*Southern California Soaring Association*).

* * * *

Police! Fire! Ambulance!

"Eastbourne and Hailsham police cars, an ambulance and a fire engine raced to Austin's Farm, Langney, last night when a glider was seen coming down in a hayfield. They found the pilot, 28-year-old Mr. Edward Hargreaves, jubilant because he had just flown 64 miles from Lasham (Surrey) Gliding Club . . . After landing, Mr. Hargreaves walked nearly two miles across the marshes to a farmhouse to telephone for a trailer to pick up his machine."—*Sussex Daily News*.

"Police were alerted when it was reported that a plane had crashed in Clacton on Wednesday. But the scare didn't last long—it was found that a glider piloted by a Cambridge University student had landed safely—and according to plan—in a cornfield near St. Osyth."—Clacton Times.

"When a glider landed in a field behind Cheltenham Cemetery, on Tuesday, it was reported that a 'plane had crashed. Police, firemen and ambulance personnel rushed to the scene, only to find the glider pilot, Sgt. E. F. Edwards, already dismantling his craft."—*Cheltenham Chronicle*.

"GLIDER CRASH LANDS ON AERODROME.—Hinckley police officers yesterday went to the rescue of the pilot of an Olympic glider, Dr. Henry Norman Cregg, who force landed on the Lindley Aerodrome track a few miles from Hinckley . . . He escaped uninjured and helped Police Inspector B. J. Hares and Police Constable Norton to dismantle the wings of the glider ready for transport back to Baggington."—Leicester Mercury.

* * * *

What's in a Name?

"A glider pilot's wife (anonymous) thought a Horn Variometer is a device for giving audible warning of ascent."—*From a member of Cambridge University Gliding Club*.

A 300-Kilometre triangle at 46 m.p.h.

by Commander Tony Goodhart

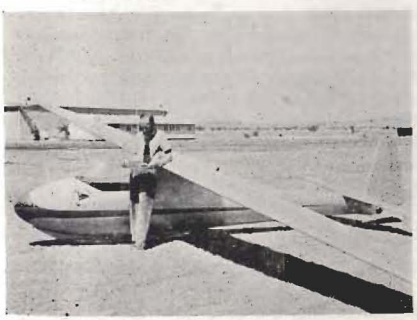
THE forecast on the dead calm, clear Monday morning of January 9th was for three-eighths cumulus, base 5,000 ft., tops 8,000 ft., light north-westerly winds increasing to 15 knots at 7,000 ft.

A few days previously, I had gone round a 200-kilometre triangle, taking 7½ hours, but there had been a 20-knot headwind on one leg and it had been my third-ever flight in the "Lo-150". Since then I had done 205 miles out-and-return in 7¾ hours, so there seemed a reasonable chance of getting round a 300-kilometre triangle, and this I decided on.

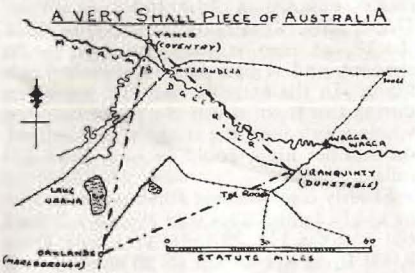
I had previously drawn out a selection of triangles on my map and, in view of the forecast wind, chose one with a slightly short north-west (into wind) leg and with the longest leg with the wind on my quarter.

When to start? By now, after six flights, I was beginning to get the feel of Wolf Hirth's Lo-150, and it appeared that I should expect to make good up to 40 m.p.h. in still air for 5 hours. Working on 2 p.m. as the time of maximum insolation, I decided on 11.30 as the time to cross the starting line.

Small cumulus started developing soon after 10.30 and I managed to collect my "bits and pieces" in time to take off shortly after 11.00. I cast off from the Tiger Moth at 1,700 ft. in a good thermal, a mile or so south of the aerodrome, which took me to 4,000 ft. with no trouble—in fact, I had some trouble *losing* height in order to cross



Tony Goodhart studying his map before starting on his 300 kilometre triangle in the Lo-150



the line below 1,000 metres; this was done at 2,800 ft. at 11.25, and almost immediately I found a new thermal of reasonable strength to 6,000 ft.

From then on, it was plain sailing to the first turning-point, Yanco; though, as the route ran straight up the course of the River Murrumbidgee, I was in some doubt about which side of it to keep. The cloud shadows were moving very satisfactorily slowly—not more than 10 knots—and cloud base was already nearly 7,000 ft. It had been consistently higher than forecast, and on this occasion gradually rose during the day to over 10,000 ft.

It was obviously one of those days glider pilots dream of: no more than three-eighths cloud cover with no spreading out and strong thermals at frequent intervals, so that one just kept on course and disregarded lift that didn't show 10 ft./sec. all the way round.

Arriving at Yanco at 12.55, having made good nearly 40 m.p.h. against the wind, I had a little difficulty taking my turning-point photograph as I was in a particularly turbulent thermal. However, having achieved this with only one wasted exposure, I set off on the southerly leg towards Oaklands, making a slight detour to the west to get away from some marshy ground which was giving off poor thermals and delayed me a bit.

Oaklands was easy to see from afar with its big aluminium roofed store (or something) buildings glistening in the sun. I was mildly concerned, as I approached, to notice on my map that it was a prohibited area—but I pressed on and took its picture, hoping that it would not notice me over-

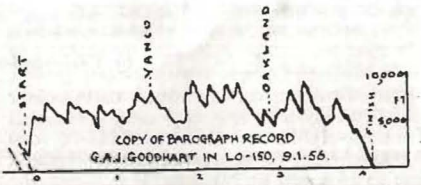
head. With the help of the wind I had averaged just over 46 m.p.h. on this leg.

Sticking up 1,000 ft.-odd out of the flat terrain of this neighbourhood is a large rocky outcrop a few miles south of Uranquinty. It is known, simply, as "The Rock", as also is the township in its shadow, and it acts as an excellent landmark. In the extreme visibility prevailing during this flight it was clearly in sight the whole way round the triangle, and indeed, on another flight could be seen from 120 miles!

Shortly after turning for home I had an awkward ten minutes, but this sorted itself out and the last 30 miles was done from 8,000 ft. at speeds up to 90 m.p.h., only slowing up for a couple of particularly violent thermals which were allowed to whip me up the odd thousand feet.

At 15.34, with 300 ft. to spare, we whistled (literally) over the line sufficiently loudly to bring the timekeeper out of the hangar in which he had been snoozing and not expecting me for another hour.

As may be seen from the barograph trace,



I was never below 4,000 ft. (above terrain), but it is surprising how worried one can get when one gets down "that low" after half an hour or so above 7,000 ft.

The conditions on this day were so good that, after an hour off for a cup of tea and a stretch of my legs, I took off again for a hour and a half's cloud flying practice. The lift was still active up to 10,000 ft., and above into cloud, when I decided to come down at 18.00.

I cannot let this article come to an end without passing much of the credit for the flight to Wolf Hirth and to Alfred Vogt, the designer of the Lo-150; they have produced a sailplane of truly remarkable performance at an equally remarkable price.

INSTRUCTION COURSES

Non-members, as well as members of gliding clubs, may join the following gliding camps provided places are available. Details will be sent on application to the Course Secretary of the respective Club at the address given. Fees include board, accommodation, flying and instruction.

Bristol Gliding Club.—At Nympsfield, weekly from June 4 to Sept. 28 inclusive, except Aug. 6-11. Fee: £13 13s., except August (£14 14s.) and June (£12 12s.). J. B. Daniell, 63, Sefton Park Road, St. Andrews, Bristol, 6.

Derbyshire & Lancashire Gliding Club.—June 10-16, 17-23, July 1-7, 8-14, 22-28, July 29-Aug. 4, Aug. 19-24, Aug. 26-Sept. 1, Sept. 2-8. Fee: £12 12s. R. Mills, 27 Heath Road, Stockport.

London Gliding Club.—May 7-12, May 28-June 2, June 11-16, June 25-July 7, July 16-28, Aug. 13-25, Sept. 3-15, 24-29, Oct. 1-6. Fee: £14 (Courses Nos. 1, 2, 3, 8, 9.), £24 (Nos. 4, 7.), £26 (Nos. 5, 6.) Tring Road, Dunstable, Beds.

Midland Gliding Club.—For B and C certificate holders and qualified aeroplane pilots only: June 9-16, June 30-July 11, August 11-18, Sept. 8-15. Fees: £17 17s. J. W. G. Harnden, 37, Hugh Road, Smethwick 41, Birmingham.

Scottish Gliding Union.—April 7-14, June 10-July 7, July 14-21, July 28-August 4, August 11-18, August 25-Sept. 1. Fee: £14. Balado Airfield, Nr. Milnathort, Kinross-shire.

Surrey Gliding Club.—Summer Season: weekly courses from April 29 to July 28 and Sept. 2-29, except weeks beginning June 24, July 8 and July 22. Fee: £18 18s. (unless already booked). Winter Season: weekly courses from Sept. 30 to December 22. Fee: £12 12s. A. F. Gotch, Lasham Aerodrome, Nr. Alton, Hants.

Yorkshire Gliding Club.—June 17-23, July 1-7, 15-21, July 29-August 4, August 12-18, August 26-Sept. 1, Sept. 9-15. Fee: £14 14s. Sutton Bank, Thirsk, N. Yorks.

Aberdeen Gliding Club.—Two or more courses lasting a week; dates not yet fixed. Fee: £6 6s. for flying only; food and accommodation extra. A. J. Milne, Lawsondale Cottage, Kingswells, Aberdeen.

B.G.A. NEWS

Annual Awards for 1955

DE HAVILLAND CUP for greatest height: 22,800 ft. by A. D. Piggott (Surrey Gliding Club) in a Skylark II from Lasham on July 14th; U.K. Gain of Height and Absolute Altitude records. The figure was the highest that the barograph could record, but it is believed that he reached about 25,000 ft. (Flight described SAILPLANE & GLIDING, October, 1955, p. 115.)

MANIO CUP for best goal flight: 198 miles by B. Thomas (Derbyshire & Lancashire Gliding Club) in a Slingsby Sky from Camphill to Ferryfield: U.K. Speed records for 200 and 300 km., 41.28 m.p.h. (described in SAILPLANE & GLIDING, February, 1956, p. 9) August 7th.

WAKEFIELD TROPHY for longest distance and SEAGER TROPHY for best two-seater performance: 254 miles by L. Welch and F. G. Irving (Surrey and Imperial College Gliding Clubs) in Slingsby T-42 "Eagle" from Lasham to Louvain, Belgium, on May 14th; British National and U.K. Local Distance record (described in GLIDING, Summer, 1955, p. 52).

VOLK CUP for best out-and-return: 68 miles at 27 m.p.h. by G. H. Stephenson (London Gliding Club) in a Slingsby Sky during a triangular flight from Lasham on August 1st; U.K. Speed record for 100-km. triangle.

CALIFORNIA IN ENGLAND TROPHY for longest distance by a woman pilot: 134 miles by Mrs. Anne Burns (Surrey Gliding Club) in an Eon Olympia from Lasham to Ternhill on June 5th; British National and U.K. Local Women's Distance records (described in SAILPLANE & GLIDING, February, 1956, p. 10).

DOUGLAS TROPHY to the Club putting forward three flights by three different members in club aircraft, aggregating the largest cross-country milage: Surrey Gliding Club, for flights from Lasham by J. Brock, 132 miles to Shawbury on June 5th; W. A. H. Kahn, 111 miles to Exmouth on July 26th; and D. C. Kerridge, 144 miles to Plympton on July 26th. Runner-up: Bristol Gliding Club with 378 miles aggregate.

Record Homologated

BRITISH NATIONAL ABSOLUTE ALTITUDE: H. C. N. Goodhart on May 12th, 1955, at Bishop, California, 37,050 ft. (11,392.8 metres) in a Schweizer 1-23 (described in SAILPLANE & GLIDING, October, 1955, p. 108).

Instructors' Schools

The Council of the British Gliding Association recently agreed that Member Clubs who had among their instructors a B.G.A. Categorised Instructor who was a member of the Instructors' Panel could apply to become a B.G.A. Approved Instructors' School. The Surrey Gliding Club has been appointed No. 1 Instructors' School.

Snowdonia Centre

The Central Council for Physical Recreation state that arrangements can be made for gliding parties to make use of their Snowdonia Recreation Centre at Capel Curig when they have only small courses going on; charges are 18s. a head per day. Brochures from B.G.A. office.

Trailer Competition

The prize money for this competition has been allocated as follows: F. Foster, £7; J. V. Inglesby, E. C. Rigg and J. W. Lowman (joint entry), £3; Dr. K. E. Machin, 2s. 6d. An assessment of the entries will be published in the next issue.

National Championships

The Council regrets that these cannot be held in 1956 as no offers to organize the meeting have been forthcoming.

World Championships

These will be held at Saint Yan, Saône-et-Loire, and the French Aero Club gives the following dates: practice period, June 23rd-28th; opening ceremony, June 29th; competition period, June 30th-July 12th; closing ceremony, July 13th. Entries from each country are limited to 4 sailplanes, of which either one or two must be two-seaters, but this figure may be reduced if more than 60 entries are sent in. Entrance fees are 20,000 frs. per pilot and 15,000 frs. per team captain, and for the practice period 1,000 frs. per day will be charged.

EDITORIAL NOTE.—In this issue our centre pages are devoted to the British team entered for the World Championships. In this feature, which has been composed by Mr. Godfrey Harwood, the hope of success for Britain has been expressed symbolically by the arrangement of the portraits in a "V" (for Victory) based on the silhouette of the Slingsby Skylark III which is likely to be used by most of the British competitors.

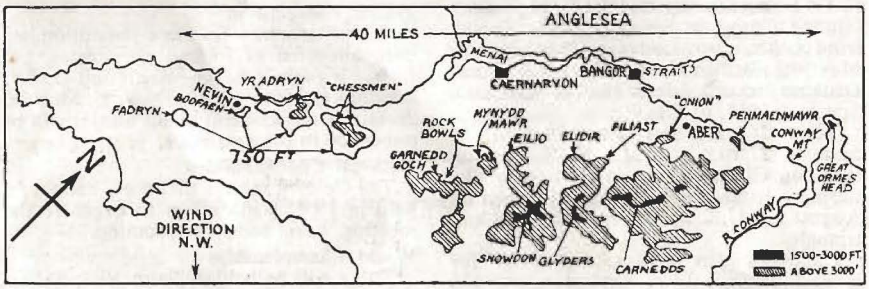
1955 Cross-Countries

The accompanying map should have been included in our last issue to illustrate the article "Hill Bound" by W. E. Crease on page 12. It shows the various hills and mountains used on his purely hill-to-hill flight of 80 miles on September 14th last year. Starting from "The Onion" (Moel Wnion), he flew south-westwards to Fadryn, then back along the same course and eastwards to Conway Mountain, returning finally to "The Onion". In the map, the spelling of Anglesey is our mistake; the shaded high ground is 1,500-3,000 ft. high, and the black is above 3,000 ft.

In the map of Great Britain on page 8, some important cross-countries were overlooked among the vast number collected for insertion; "Bill" Crease himself made a 70-mile flight to Camphill from his home (near K. Blake's landing place).

From the Bristol Gliding Club at Lulsgate on May 7th, Tom Parkes flew 72 miles to R.A.F. Benson and Mike Hodgson 68 miles to Culham, both places being south of Oxford (Kidlington is north of it); and on May 21st, Derek Stowe flew 50 miles from the same club to Seaton, Devon, which is on the coast E. by S. of Exeter.

Tony Deane-Drummond flew from Lasham to Exeter, about 110 miles, on the same August day as one of Frank Foster's flights; and there has, we believe, been a flight from Cambridge to Oxford. Other flights are one by M. Stather Hunt from Coventry to Oxford, and a Silver C cross-country by Godfrey Harwood from Lasham to Knockholt, Kent, in August.



CORRESPONDENCE

THE FAUVEL TAILLESS SAILPLANE

Dear Sir,

I have read Mr. Yates's letter under the heading Correspondence in the February issue of SAILPLANE & GLIDING.

I have always been the first to recognize the right to criticize others, as long as the critics base themselves on correct objective facts. In the case in question, Mr. Yates's informant, whatever his nationality might be, was ill-informed. The official inquiry has established that the facts were as follows:—

The release had functioned quite normally and the glider at first flew in a straight line *after* the release, before turning.

The glider did not perform a spin (*vrille*) but a spiral dive (*spirale piquée*).

CH. FAUVEL.

72, Boulevard Carnot, Cannes (A.-M.), France.

Sir,

STARTING BEFORE NOON

In the last issue, Mrs. Anne Burns in her excellent article attributes the saying "No record flight has ever been made from Lasham starting before noon" to me.

Whereas I cannot remember making this statement, I would like to point out that it is no longer true, as numerous flights resulting in broken records started from Lasham before noon this year—notably the Welch/Irving crossing of the Channel.

However, I am certain that most pilots in this country do start their long flights far too late, thus losing the invaluable half hour or so at the end of the day. Unfortunately this is almost invariably due to the fact that should they land back on their site after an abortive cross-country attempt, they are forced to take their place at the end of a long queue.

WALLY KAHN.

33c, Eccleston Square, S.W.1.

LIMITED CLASSES FOR CHAMPIONSHIPS

Dear Sir,

There has been a considerable amount of discussion recently concerning a limited class for gliding contests. I should like to offer a simple solution to the many problems raised.

I suggest that, if we be not blinded by science, the only thing that matters is wing-span. I shall attempt to silence the protesting voices later; first let me be constructive. There should be not one only, but at least three classes of sailplane based on wing-span, namely; "Twelve metres", "Fifteen metres" and "Over fifteen metres". International and National contests should be held with these classes in rotation, thus stimulating design in each class, yet giving time for development.

This simple scheme has one great advantage. It is easily administered, which cannot be said for many of the plans put forward previously. There are, however, many other favourable points. The classes themselves are already partly in existence, and proved reasonable. Ever since pre-war times, sailplanes have grouped round fifteen and eighteen metres span, and today we have the Skylarks II and III where the Olympia and Weihe used to be. The Twelve-metre group is less easy to find, but is represented now by the Schweizer 1-26 and several recent German designs.

To those who argue that limiting wing-span is not enough, I reply that in the smaller classes the wing-span restriction puts an effective upper limit on weight, costs and performance, which is what we are after, while to those who advocate a single class, I answer that this would tend too much towards stagnation and we should not prevent larger machines from being built and tested in contests just because they are expensive.

Many people have suggested limiting weight, but it seems to me that the weight of any given glider is largely a reflection of the materials used in its construction. If we use high-tensile steels or even titanium for the spars, weight will fall but costs (both capital and crashery) will soar. Similarly, tests of rigging time and trailer size, I feel, miss the mark. The expensive, heavy Weihe is in Mr. Wills's own words excellent from the rigging point of view, while the cheap, light Scud of his earlier acquaintance would surely not pass his "fifteen minute" test. This is a matter of thought in the design stage, and has little to do with costs. Similarly, by multiplication of parts, and the associated expensive metal fittings, quite large gliders can be made to fit into small trailers. A Horten IV made of titanium and aluminium, with a three-piece wing, would quite possibly fulfil all these conditions.

On the other hand, while it is true that a small sailplane can be quite expensive, it will never cost as much as a larger one, and the wing-span is the limiting factor for all practical purposes. It is possible that highly expensive twelve-metre span machines could be built, with all the flaps and gadgets necessary to improve the performance, but even if it were proved that such complicated machines have any real advantage in the rough and tumble of contests, the situation would still be an improvement on the present, where all the flaps and gadgets are being applied to large aircraft.

Finally, let us consider the history of the Skylark. When this type first appeared in 1953 it had a span of forty-five feet and a flying weight of 620 lbs. The slow-flying characteristics were evidently not satisfactory, so the wing area was increased. The result was not, unfortunately, a forty-five foot sailplane with a lower aspect ratio and slightly poorer performance, but another nearly fifteen-metre machine, the Skylark II. Now, in time for the international contest, we have the eighteen-metre Skylark III, which is a rich man's glider. Suppose, however, that the contest this year was to have been a "Twelve Metre Only" event! Should we not have, now, a twelve-metre span Skylark ready for production, and would not the potential market for such an aircraft be as great as that for the Schweizer 1-26 in the United States of America?

MARTIN SIMONS.

11, Porlock Road, Bush Hill Park, Enfield Middlesex.

GLIDING CLUB STATISTICS FOR 1955

(as shown by annual returns sent by clubs to the British Gliding Association)

Gliding Club	*Aircraft including private*	*Launches*		*Hours*		*Cross-country miles*		*Members*	
		On club site	*By club gliders*	*On club site*	*By club gliders*	*From site*	*By club gliders*	*Flying*	*Non-flying*
AIR TRAINING CORPS ..	—	—	95476	—	7194	—	—	—	—
BRISTOL	7	7107	7107	707	707	1168	928	105	40
CAMBRIDGE UNIV... ..	5	2688	3261	310	743	456	1684	160	—
COVENTRY	6	5428	5333	790	766	1016	920	76	11
DERBYSHIRE & LANCS. ..	15	7033	4976	1362	754	938	1218	180	174
LASHAM CENTRE*	21	18712	17189	3071	2304	19014	2998	450	150
LONDON	10*	8341	7771	1935	1381	1695	1455	—	—
MIDLAND	11	5470	3734	2271	1716	2126	180	150	36
NEWCASTLE	8	2210	1860	217	172	—	—	72	118
OXFORD	8	3839	3520	415	312	68	—	61	—
SCOTTISH G.U.	9	5029	4965	342	331	184	184	71	16
SOUTHDOWN	5	2142	2218	302	356	82	282	79	51
YORKSHIRE..	15	1704	1614	712	627	18	18	42	95
R.A.F.G.S.A.*	*	15082	15082	1389	1389	—	—	*	—
R. NAVAL G.S.A.:—									
EGLINTON	—	414	414	23	23	—	—	—	—
ARBROATH	3	715	715	35	35	—	—	—	—
LEE-ON-SOLENT ..	5	1820	1820	139	139	—	—	41	—
LOSSIEMOUTH	2	2505	2505	226	226	—	—	—	—
BLACKCAP	—	135	135	4½	4½	—	—	—	—
CULDROSE	2	122	122	7	7	—	—	18	—
BRAMCOTE	2	1661	353	108	4	—	—	15	—
ABERDEEN	7	662	662	—	—	—	—	30	2
BLACKPOOL & FYLDE ..	3	1125	1125	90	90	—	—	27	200
COLL. OF AERONAUTICS. ..	3	863	1037	84	117	—	26	28	1
HANDLEY PAGE	3	396	581	30	50	12	12	20	—
ISLE OF WIGHT	3	643	643	50	50	—	—	38	—
ROYAL ENGINEERS.. ..	2	701	701	48	48	—	—	46	—

* Lasham Gliding Centre includes the following clubs: Surrey G.C., Army G.C., Imperial College G.C., Polish Air Force Association G.C., and Crown Agents' G.C. London Gliding Club's figure for aircraft does not include privately-owned machines. The Royal Air Force Gliding and Soaring Association included the following clubs in 1955: Middleton St. George, East Midland, Feltwell, St. Athan, Little Rissington, Biggin Hill, Lyneham, Andover and Scampton; its total membership was given at the December annual meeting as "over 600", with 47 aircraft.

UP AND DOWN

Three Diamonds Each

Forty-three of the world's sailplane pilots have earned all three diamonds for distance (500 km.), height (5,000 m.) and goal flight (300 km.). In the latest batch of 13 confirmed by the F.A.I., Nos. 31 to 37 are all Polish, including one woman, Wanda Szemplinska (No. 32). Then come three French, R. Fonteilles, P. Lepanse and J. Rouchette, Hans Nietlispach (Switzerland), Nicholas Goodhart (Gt. Britain) and Othmar Schwarzenberger (Switzerland); the last two made their altitude at Bishop in California. The number of three-diamond badges held in each country are now: Poland 18, France 15, United States 6, Switzerland 2, Britain and Germany 1 each.

History Repeats Itself

When the first British primary glider "flew" at Detling aerodrome in Kent on February 23rd, 1930, as related in our issue of last December, "the roads were crammed with motorists, cyclists and pedestrians—a positive Derby Day traffic jam." A quarter of a century later, with Air Training Corps operations in full swing at Detling, "So big an attraction has the gliding been that the County Council was contemplating making an order prohibiting the waiting of vehicles on the main Sheerness to Maidstone road near the airfield, because of traffic hold-ups," according to the *Evening Standard*; but, on hearing that the gliding school is to move, "the roads committee is recommend-

ing that the order be not confirmed for the time being."

* * * *

Coupe "Survol"

This cup, for the longest flight of the year in a Fauvel AV-36 flying wing, is awarded for 1955 to L. Saucède for a flight of 119 miles in Algeria. Runner-up is Frank Matthews, of Canada, with 100 miles covered at 55.9 m.p.h. average. In Canada the type received a Certificate of Airworthiness last August on the ground that it conformed to the British requirements (Section E); and in the same month comparative performance trials were flown by Bill Riddell in an AV-36 and Paul Schweizer in a 1-26, after simultaneous tow to 3,000 ft. by a Tiger Moth in stable air. At 28-30 m.p.h. the Fauvel had the lower sink; at 40-60 m.p.h. the sinking rate of both was identical; in circling, the Fauvel flew slower with less sink and therefore performed smaller circles, M. Fauvel writes.

* * * *

Wave Flights in Flying Wing

In Canada, A. W. Riddell has climbed to 3,000 m. (9,843 ft.) in a Fauvel AV-36, using a wave. At the Saint-Auban centre in France, on January 26th, one pilot reached 5,500 m. (18,045 ft.) in an AV-36, and in the same machine (No. 12) M. Vrille obtained his Gold C altitude leg with a climb to 15,420 ft., following this up next day, with the help of oxygen, by earning a diamond for a climb to 7,000 m. (22,966 ft.). Another recent wave flight in an AV-36 was by the Tour du Pin pilot, M. Enselme, who climbed 12,303 ft. (from a winch launch) to 14,239 ft. a.s.l., only breaking off the climb for lack of oxygen. M. Fauvel adds that a year ago another AV-36 pilot, M. Lafargue, outclimbed a Breguet-901 by 200 metres in a St.-Auban wave, exceeding 5,000 metres (16,404 ft.) "dans des conditions atmosphériques amusantes."

* * * *

French Altitude Flights

A local altitude record for the Dauphiné was established on January 12th by the pilot Schneider, a student aged 21, who climbed to 20,010 ft. in an Air-102 over the Grande Serre massif during a flight from Grenoble. From the same place on the same day, M. Brande, a Paris watchmaker, climbed in a Breguet-900 to 16,080 ft.—*Les Ailes.*

How to get "SAILPLANE AND GLIDING"

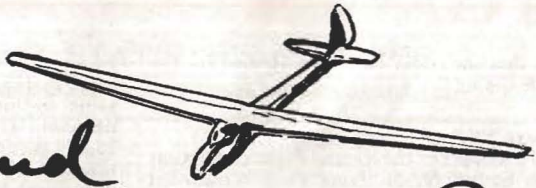
"Sailplane & Gliding" can be obtained in the U.K. at all Gliding Clubs, or send 2/8d. for it or better still, 15s. for an Annual Subscrpition to:—The British Gliding Association, Londonderry House, 19, Park Lane, London, W.1. Back issues are also available, price 2/8d. post free. Enquiries regarding bulk orders, 12 or more copies, at wholesale prices, should be made to The British Gliding Association.

OVERSEAS AGENTS

AUSTRALIA:	Stockists: Hearn's Hobbies, 367, Flinders Street, Melbourne.
NEW ZEALAND:	F. M. Dunn, c/o 51 Stapletons Road, Richmond, Christchurch.
SOUTH AFRICA:	The Aero Club of South Africa, P.O. Box 2312, Maritime House, Loveday Street, Johannesburg.
CENTRAL AFRICA:	Maurice Pike, P.O. Box 492, Salisbury, S. Rhodesia.
U.S.A., CANADA & OTHER COUNTRIES:	Please apply direct to British Gliding Association. Single copies 2/8d. or 15s. annually. (50 cents or $3.00 annually).
SCANDINAVIA:	Hans Ellerstrom, S:t Johannesgatan 2, Malmo, Sweden.

Green Leather Cloth Binder, taking 12 issues (2 years): 15s. post free from B.G.A. Will also bind your B.G.A. Personal Pilot Logbooks.

Club and Association News



Now that Spring is here we expect that our contributors will have no difficulty in finding more than enough news to fill this section of the magazine, and thanks are due to all those who have so regularly dug up news during the comparatively lean winter months. Spring is also the time when contrasts of light and shade make for better pictures, and we hope the Clubs will not be backward in sending in prints for reproduction.

GODFREY HARWOOD,
Club & Association News Editor.

The Kronfeld Club

THE Wednesday evening talks and films are proving increasingly popular and we never have less than 50 people attending. In fact, when "Sling" spoke on his Gliders from T-1 to T-42, there were 70 people in the Lecture Room.

With a deep-freeze installed, our range of food is increasing and we can now offer hot sausage rolls and cornish pasties.

Our General Meeting is on April 25th, and we hope that as many people will come along as possible to give their support and produce new ideas.

Any queries as to the membership or other information please address to the Honorary Secretary, The Kronfeld Club, Basement, 74, Eccleston Square, S.W.1, or telephone TATe Gallery 8740 any week-day evening after 7 o'clock.

April 4th—Lecture on Ultra Light Flying, by the Coventry Group.
11th—Old films by Lesley Cody of "Wilbur Wright", "Cody", "The First Circuit of Europe".
18th—"The Shape of Sailplanes" by B. S. Shenstone of B.E.A.
25th—Kronfeld Club GENERAL MEETING—with films.
May 2nd—Lorne Welch—B.G.A. Slides.
9th—Dr. R. S. Scorer—"On Cumulus Clouds" with films.
16th—"Now it can be Told"—Air Ministry film about the Underground Movement in France during the War.

JINJA (UGANDA)

FOR financial reasons the Jinja Gliding Group has been dissolved, and is being reconstituted as the ENTEBBE Gliding Group. We are in the final stages of completing a Slingsby T.31, with only the doping to be done. This represents work over a period of four years by the two working members, totalling about 2,000 man-hours. This club is the first in Uganda and on the Equator, and we hope soon to accomplish our first launch by auto-tow on a 5,000-foot runway.

A.H.L.P.



Have you thought of buying a German Sailplane?

Write to me and I shall be happy to give you all the help and advice you need.

WOLF HIRTH, Nabern-Teck, West Germany

ARMY

AFTER the wonderful year of 1955 when two of our members broke records and our Chairman, Col. Deane-Drummond, not only gained his Diamond "C" Height leg but also came second in the National Gliding Championships, we look forward to the 1956 soaring season with high hopes.

Unfortunately, Tony Deane-Drummond has been posted to Cyprus with his regiment and it is doubtful whether he will be able to take his place in Britain's team for the World Championships later this year.

Although we have welcomed many new members, we are still open to any Regular Soldiers or members of the Territorial Army. Since sharing the flying facilities of the Surrey Gliding Club at Lasham, we are able to offer seven days a week gliding to all comers. Contact the Secretary of the Army Gliding Club at R.M.A., Sandhurst, for details of membership.

W.K.

AUSTRALIAN NAVY

EARLY in December, 1955, we took delivery of our first real sailplane, the Wolf Hirth "Lo 150". Flying it in the Australian "decentralized" Championships our Chief Instructor, Tony Goodhart, covered about 1,300 miles cross country in 55 hours' flying time.

Also in December the R.A.N. Gliding Association agreed a contract with the Australian Naval Board to teach eight Cadet-Midshipmen to fly. The contract was completed in 8½ days, during which our T-31 made 475 flights. All the cadets got their "A/B" certificates and two obtained "C" certificates.

Official approval was obtained to enter a Naval team in the Australian Championships and, during the first fortnight of January, six members spent a very pleasant though warm ten days (95°-100° each day) with our Grunau and the "Lo 150" at a R.A.A.F. Station near Wagga Wagga. All but one of the members had learned to fly during the previous four months only, and four of them had only "B" Certificates. However, round Wagga Wagga all the fields are virtually grass aerodromes, and 5 "C's", 5 Silver "C" heights and 3 Silver "C" distances were achieved without mishap.

During the first six months of operation, with only the T-31, we managed 1,400 flights and twelve members have gone solo. With the addition of the Grunau and "Lo 150" to our fleet, our target for our first full year is 3,000 flights.

A.G.G.

Midland Gliding Club Ltd.

The Long Mynd · Church Stretton · Shropshire

Britain's finest Gliding site for Thermal Slope and Wave Soaring—2375 hours flying in 1954.

First class clubhouse and facilities.

Club Fleet of Sailplanes includes:
TWO DUAL CONTROL TWO SEATERS,
TWO PREFECTS,
TWO OLYMPIAS AND SKYLARK.

Catering—Dormitory Accommodation for 50

Annual Subscription £5.5.0. Entrance Fee £2.2.0. County Membership (*over* 100 *miles from site*) and members of other Clubs £4.4.0. *Entrance Fee* £1.1.0.

New members welcome. *All particulars from* Sub. Sec. P. A. Macnaghten, 16, Bittell Road, Barnt Green, Worcs.

BLACKPOOL

IT must be quite a considerable time since we took it upon ourselves to relate Club activities in these columns. The Club has, however, remained quite active although there has been nothing of particular interest to report.

During 1955 we operated on 47 days and carried out 1,125 launches—the larger proportion of which were, unfortunately, in our T-21b, as we experienced considerable difficulty in finding somebody to do the C. of A. on our Kirby Cadet until the middle of the Summer. We have done our best to make up for the lost time, but the test flying of new Hawker "Hunters" is not conducive to the setting up of launching records. Aircraft not fitted with radio may not fly when the Air Traffic Control light is blinking, so frustration can be of a high order.

Squires Gate Airport can be a very busy place indeed at week ends, and it is not uncommon to see a queue of aircraft waiting by the runway control van for permission to take off. As most of these aircraft are doing nothing more than flying round the Tower, it is not long before they are chasing each other back for another load of passengers. Fortunately, there are short lulls but only

for a few minutes, so, in order to take the maximum advantage of this we have fitted an additional cable drum and ancillary equipment to our winch in the hope that we may be able to squeeze in as many extra launches as possible when the aerodrome traffic permits.

We have recently taken delivery of an Eon "Baby", so have at last something more interesting and reasonably soarable for our Cadet-bound pilots to fly. Aero towing is also available to our more advanced Members.

Needless to say, we are always very pleased indeed to see members of other Clubs who are on holiday in this district. Our Clubhouse, situated close to the main entrance of Squires Gate Airport, is in the hands of a full time Steward and a hearty welcome is extended to all.

J.S.A.

BRISTOL

WITH the Summer and our move to Nympsfield rapidly approaching, and with so many things to have ready in time for both, flying at Lulsgate is now at a minimum, confined to T-21 circuits. After its six months absence we just HAVE to fly the T-21, work or no work!

A "planning and production" group has been formed which meets in Bristol fortnightly to discuss the progress of the work on hand and to make the best use of the usual small band of keen types. At present four aircraft are undergoing C. of A's., and there is a grave danger that some of them will practically disappear under lashings of red paint since somebody suggested brighter colouring for ridge flying! The T-21 Open Trailer and the Club Universal Closed Trailer are both about half complete, with the new two-drum winch in the same state.

The hangar at Nympsfield is not yet complete, but areas of ground in the region of the hangar and barn have been bull-dozed level. Lack of finance has forced the Club to shelve, for the present, its plans for a new clubhouse building, and the original barn-into-clubhouse and workshop scheme has been resurrected.

The move from Lulsgate will be a gradual one and may be something like this: End of February or beginning of March—hangar completed; flying starts with Olympia and two seater converting more advanced pilots to the site. April: Clubhouse habitable but requiring decoration and furnishing by club members, site conversion for less advanced pilots, training flying continuing at Lulsgate. At Whitsun we should be transferred and ready for the start of the course season at the beginning of June.

This year we intend to run 16 courses in June, July, August and September, with a break of one week—August Bank Holiday week—which will be a Club Camp Week. The Course Members, as in previous years, will be accommodated at a nearby country hotel.

Being rather remote from the Kronfeld Club it is necessary for the Club to arrange meetings of its own throughout the Winter. So far we have had very interesting talks and films from Commander Nick Goodhart and Alan Yates, and an evening of Gliding films and slides provided by the members. Our annual dance will be in March followed by the A.G.M.—which always proves to be a good night out when the serious business is completed.

At last the Club's Flying Statistics are to hand and as would be expected after the

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summer we had last year, there has been a general increase in everything. Total launches for 1955 were 7,110 and flying hours 710 (1,750 launches and 200 hours more than 1954), the summer courses contributing 2,530 launches and 177 hours. 1,168 miles were covered on 23 cross-country flights, the mileage being more than double the previous best. On the certificate side the Club has gained 43 "A/B's", 10 "C's", 5 Silver "C" legs and 1 Silver "C" completed.

The Club is now wondering what Nympsfield will produce; "C's" and five-hour legs should come a lot more quickly and easier than in the past, and less and less will we hear in the bar that "so and so cheated—he did it on a ridge!" A.B-P.

CAMBRIDGE UNIVERSITY

DECEMBER and January are, of a necessity, rather lean months for us, not only because of the weather, but mainly because with the University members gone down, there is no one left for weekday flying. However, with term started again training is well under way on every afternoon that flying is possible, even if there is snow on the airfield.

Right at the end of last term, four days of concentrated flying were done and Gabriel went solo. The winds were quite strong at times over this period and "Bluebell" kited up to 2,500 feet several times. Sunday, February 10th, was quite a good day here and two more ab-initio pupils, John Griffiths and Pat Eyres, went solo for the first time, a good effort considering last term's lack of flying days. On this day also Peter Neilsen, whilst taking a lady passenger for a "joy ride" managed to find sufficient lift to stay aloft for 13 minutes—probably a question of necessity being the mother of invention!

The Skylark trailer which Ted has been building is now almost complete, and we hope it will be on the road in time for our March camp, which we are again holding at the Mynd, thanks to the hospitality of the Midland Club. We have also been given a hut on the airfield at Marshalls and with a bit of fettling we hope to turn it into a presentable clubhouse for members.

On Saturday, February 18th, the club held its annual dinner in Cambridge and we were honoured to have among our guests (paying or otherwise!) such famous names as Yvonne Bonham, Frank Irving, Doc Slater, John Furlong and Hugo Trotter who brought along several of his "inmates" from Lasham. Entertainment was provided by several people: Ken King read his own version of a Gliding A.B.C. in which he tells us "G stands for gold (also g stands for 32 ft. per sec. per sec.)" Alex read us a speech from a very well known (among gliding circles) cabinet minister, and Doc Slater ended up with a recital on his whistle which included bag-pipe music and, of course, Eine kleine Nachtmusik. Altogether it was a very enjoyable evening and we hope for many similar occasions in the future.

D.M.S.

COLOMBO

THE Colombo Gliding Club has just been formed, with P. Samarakoon as Secretary. Hitherto all gliding in Ceylon has been done by the Ceylon Air Force, but the Czechoslovakian firm "Motokov" brought the "Pionyr" two-seater training glider into Ceylon, together with a "Trener II" plane for a demonstration of gliding and soaring. Ray Wijewardene, who did some gliding just after the war in England, mostly at the Cambridge Club, is now the holder of Ceylon's Civil Gliding Licence No. 1. The Club hopes to commence instruction shortly, when negotiations with the Civil Aviation Department have been completed.



Ray Wijewardene and P. Samarakoon of the Colombo Gliding Club about to take off in a "Pionyr" brought from Czechoslovakia for demonstration.

CROWN AGENTS

THE "Social Evening" at Millbank on January 16th was a great success, 54 members and friends being present. Notable Guests were Philip Wills, Sir Gilbert Laithwaite, and Sir Alfred and Lady Savage, also, as mentioned in the last issue, John Furlong, who so kindly loaned and operated his film apparatus.

The Club's flying membership this Season will be depleted by the loss of two keen members, the Treasurer, Basil Dove, who has been seconded for a tour of duty in Kenya, and Terence O'Leary who is being sent by his Department to maintain Commonwealth Relations in New Zealand.

J.E.G.H.

COVENTRY

THE enthusiasm for gliding in near Arctic conditions displayed by many Club members at this time of the year always comes as rather a surprise. If, in the course of duty, one were compelled to undergo rigours similar to those of the wintry flying field, one would indeed complain that the conditions were unsuited to even the lower orders of the animal kingdom; but in the name of sport—!

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The daily flying list for the T-21 has tended to set the pace on every occasion and even doing 70 launches in a day does not guarantee that all comers are satisfied. A welcome easing of the pressure came with our three first solos in mid-January: Reg. Smith on the 15th, John Greenway on the 21st, and Grace Tarver on the 22nd. Grace and her husband Ivor, who soloed last year, become the first husband and wife trained from scratch in the Club.

On January 22nd, the Viking having completed its C. of A., a fairly large batch of Tutor types were introduced to high performance flying. The upgraded pilots were: Ivor Tarver, Alan King, Doug. Cunningham, Lewis Glover, Peter Berthelsen, Norman Bell and Brian Gilbert.

Just over half way through February, this Club has done 500 launches and 50 hours. This is better than last year and is chiefly due to a fair enthusiasm for early starts and the frequent use of two winches. A small amount of thermal soaring has been managed, chiefly in the snow, and flights around 13 minutes duration have been recorded.

The social life of the Club is receiving rather more attention than hitherto, and there is evidence that many members would like more opportunities of meeting each other out of their polar equipment. A visit to the pantomime and buffet supper held on February 22nd, was attended by quite a large crowd and this year, for the first time, we have had to write and ask for more tickets for the B.G.A. Ball, the ten sent on approval being insufficient to meet the demand.

To conclude, the club's best wishes go to John Quick and Jill Abbott who will be wed before February is out, and who will then be moving into the London area but "will not be giving up gliding".

M.S.H.

CRANWELL

DURING the Summer of 1955, twenty officers and cadets attended a two-week camp held under canvas at Camphill. Each morning at 5.0 a.m. someone would get out of bed to see if the westerly ridge wind was blowing. On four mornings it was, and sufficient members left their beds to launch three pilots to do their five hours.

The party used all the clubhouse facilities of the Derby and Lancs. Club and was fed

by them, but used their own gliders (Kranich, Grunau, Prefect and Tutor), their own winch, and their own petrol brought in a Bowser. During the 12 days a total of 108 hours' soaring was achieved, and the original seven "C's" and two Silver "C" legs were increased to 18 "C's" and eight Silver "C" legs.

This camp set an example of initiative, keenness and sound administration, and as a result of a report sent in to the R.A.F. College authorities the gliding section has been awarded the Pye Trophy for the most ambitious and successful vacation activity last Summer. M.C.G.

DERBYSHIRE & LANCASHIRE

THIS Winter has not so far produced any spectacular flying conditions such as the wave, several years ago, in which George Thompson (now C.F.I. at Coventry) reached 16,000 ft. None-the-less there has been quite a lot of flying despite the Arctic weather, and we have escaped the really heavy snowfalls affecting much of the country. But severe cold we *have* had in plenty, and this, together with uncertainty about road conditions, has reduced regular attendance to a small band of hard- (and frost-) bitten enthusiasts. The year started well, with 52 training launches on January 2nd, and training has continued despite non-soarable North-easterlies on many weekends.

On January 8th there was a 25-30 m.p.h. wind, North, which occasionally backed briefly to N.N.W., and there were a few lenticulars; it was intensely cold. Preliminary sorties in the T-31 suggested the possibility of flying N. along the edge without loss of height, and Ken Blake in the Skylark II did so, and eventually found wave lift over the valley N. of the club, towards Ladybower reservoir. At 2,000 ft. the wind was about N. 50 m.p.h., and the canopy was icing-up inside. Through a hole in the clouds he reached 4,000 ft., but abandoned the climb when the hole filled up and came down with brakes out. (For the benefit of those who do not know Camphill, this caution is justified by the terrain, which is not suited to blind descents through low cloud.) Mick Kaye, John Tweedy, Graham Elson, L. R. Robertson, and Bill Elrington, all in Olympias, also contacted, with decreasing height as time went on, until Roger Dickson went to the spot and was eventually forced to land on the golf course. This day was notable chiefly because of the rarity of usable waves here in North winds; our best waves are usually in winds from West to North-west.

On January 15th there was hill-soaring in a W. wind, 1,200 ft. being reached. On January 22nd, with a W. wind starting at 35 m.p.h. but moderating later, there was a more typical Camphill wave. Mick Kaye in the club Skylark reached 3,600 ft. (all heights above take-off, which is 1,250 ft. a.s.l.), Graham Elson and Alec Baynes reached 3,400 ft. in smooth lift covering a wide area over Bradwell and towards Mam Tor; and when the wind dropped, becoming light and variable, wave lift persisted in this area, smooth and gentle, very like what has been described as "the evening thermal".

On February 5th, wind N.W., 25 m.p.h., cloud down to 300 ft. on the hill, Tweedy used a break in cloud to get to 2,000 ft. and Blake later got to 1,500 ft. These details will show that winter flying here is not without its rewards. There was training flying on February 12th, and again (between snow showers) on the 18th and 19th. The 18th was a disappointment for the fifty or so people who had come to hear a talk by Philip Wills; he and Lorne Welch failed to reach their goal, presumably through unfavourable weather conditions in the deep South.

The committee, as usual, makes Plans for The Future. (It would be interesting to have statistics for all Gliding club committees for the year; hours talked, number of plans launched, goals achieved, incidents involving personal injury etc.) These include the provision of two more fixed winch installations, one at the N. and the other at the S. end of the field. The "Gliding

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2. June 17-23.
3. July 1-7.
4. July 8-14.
5. July 22-28.
6. July 29-Aug. 4.
7. Aug. 19-25.
8. Aug. 26-Sept. 1.
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A.H.B.

KETTERING & DISTRICT

OWING to weather conditions and the state of the Aerodrome, we have done very little flying for the last week or so. However we have been working on the Clubhouse, which we have made into a Lounge, Workshop and Office-Store. We have also now commenced repairs on the Grunau Baby. Frank Pozerski has constructed a new Elevator and our President, Tom Phillips, is working on a new rear section of the Fuselage.

We have six ab-initios under training in various stages, and we are hoping to get further new members and better weather, so we can advance their training.

D.V.P.

LONDON

THE weather during January and February prevented a very large amount of flying, but we have pressed on with training whenever it has been possible. We are very pleased to announce that S/Ldr. John Furlong, D.F.C., M.B.E., has been elected President of the Club, and "Johnnie" Walker, on his retirement from the Club, has been elected a Vice-President.

On February 1st Ray Stafford-Allen joined us as Manager, and we all wish him many happy years at Dunstable. In our workshops, that tower of strength, Noel Quinn, has rejoined our staff.

The Club expects to take delivery shortly of a new Skylark II, and we now have three two-seaters in service—two for ab-initio training and one for soaring instruction and for hire to qualified pilots wishing to take their friends of either sex for a ride. Lines may thus be shot in the air instead of—or as well as—in the Bar!

The small soaring meeting held at Easter will be reported in the next issue. It has been suggested that as there are no Nationals this year, this Club might hold an informal soaring contest late in July or early in August. The outcome of this idea will depend on the interest shown, so pilots likely to take part or assist in other ways should write to Dunstable as soon as possible.

The Club's Annual Dinner will take place on April 14th. Ab-initio course dates are:—May 7th to 12th; May 28th to June 2nd; June 11th to June 16th; June 25th to July 7th; July 16th to July 28th; August 13th to August 25th; Sept. 3rd to Sept. 15th; Sept. 24th to Sept. 29th; Oct. 1st to Oct. 6th. All dates are inclusive.

P.F.

MIDLAND

THE Club celebrated its 21st birthday at the annual dinner held at the Long Mynd on January 1st. The Chairman, R. L. Neill, praised the untiring efforts of the founder members, particularly the late Espen Hardwick, who successfully flew gliders which by present day standards were virtually uncontrollable. He described how the early "ab initios" were pushed off the edge with little real air experience, and contrasted this with the modern system which gives pupils 6-8 hours dual instruction before going solo. We are proud of the fact that dual instruction in gliders started at the Mynd years before anyone else thought of doing it.

There was little flying in late December, therefore the total of hours flown has not increased much over the last notes, the final figures being about 70 hours less than in 1954. However, a big increase in the number of Silver "Cs"—11 in all—is very welcome, also the unique achievement of one Gold "C" during last year.

Flying in 1956 has got off to a good start. A change of policy means the use of the Prefect for first solos instead of the Tutor,

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and several week-ends in January produced good flying. February 4th was exceptionally good, with a 20-knot W.N.W. wind and a picture-book wave system. One huge roll cloud forward of the Mynd had a level top at 9,000 ft. A.S.L., and John Anstey and several other members reached up to 9,600 ft. Jack Minstall, a relatively new member, had a good start to his wave efforts by finding himself cut off by cloud while at 9,000 ft. in the Prefect and still climbing—with brakes out—at 5 ft./sec. Wisely, in view of his inexperience, he turned down wind to reach descending air, and landed successfully near Craven Arms after cloud flying with an inoperative turn and slip indicator.

J.H.

NEWCASTLE

THE Greeks may have had a word for what has been happening lately at Usworth, but no printable English word is available. In recent weeks the flying log has been very blank, due partly to the weather—which has treated us to a waterlogged field and a flooded hangar—and secondly to the fact that the Beaverette has been under repair, and the Tutor is now unserviceable since a recent accident on the airfield.

In an otherwise sombre picture there are however, two bright spots. Thanks to Andy Coulson and Jack Anderson, who spent two days of their Christmas holiday collecting it, the Olympia has now arrived, and a car has been purchased for use during the gipsy meetings to be held later this year. The modification of the ex-balloon winch is progressing very satisfactorily in the capable hands of Steve Bishop, who has made it roadworthy and removed it to his garage at Corbridge.

Another bit of construction which is under way at our town headquarters is the rebuilding of "Bloody Mary's" wing tip by the syndicate. The table tennis fans are highly annoyed, as the wing has been parked in the only room big enough to take it—yes, you've guessed it—the table tennis room.

The gipsy meeting Committee now awaits replies to the circular recently issued to members. Unfortunately the Forestry Commission did not find it possible to allow the Easter Meeting to be held at Rothbury as was first proposed, and it is hoped to hold it at Greatham Airport near West Hartlepool for experimental flying at Hutton Moor. The Teeside Flying Club has been approached for aero-tows by their Tiger Moth, which should dispose of many of the transport problems. By the time these notes appear, it is hoped that the weather will have permitted a happy Easter meeting for all.

L.A.C.

OXFORD

AS with most pastimes, gliding at Oxford these last few weeks has been restricted by the weather. However, despite these conditions (or should one say, because of them?) David Woolley soared the Tutor for fourteen minutes and qualified for his "C" certificate.

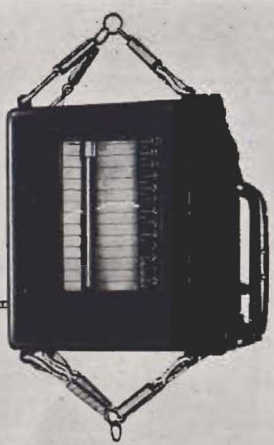
Training continues along with other activities, the latter applying particularly to the various "private owner" syndicates in the Club. The mysterious manner whereby the signal lamp battery keeps running flat suggests that some are working overtime to prepare machines and trailers for the spring.

The trip down to Lasham with Anita Schmidt's Grunau proved a valuable guide towards improvements in the Club G.B. Trailer, now nearly complete, and for that matter to the tow car, which now relies on six cylinders instead of two and a half and the help of a passing cyclist to negotiate the steeper gradients.

We have said goodbye to the T.31, which has been de-rigged ready for shipment to New Zealand. Those members who had perhaps more than their fair share of circuits in it will no doubt extol its virtues to any lesser types prepared to listen. We have also lost the services of Ray Stafford Allen and wish him good fortune at

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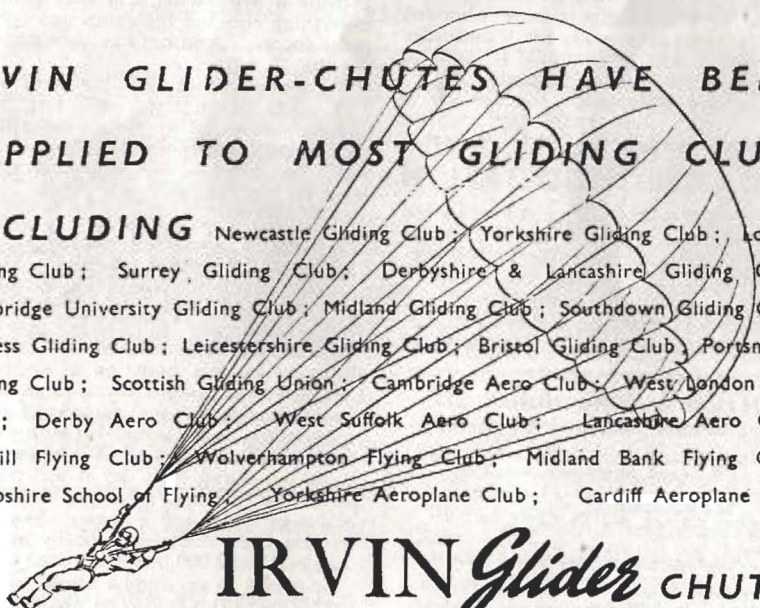
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IRVIN *Glider* CHUTES

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Dunstable. In his place, Eric Stow has taken over the responsibilities of ground Engineer.

Meanwhile, those of us who are not tied by office hours, are managing to beat the weather men by some mid-week flying and we are pleased to see that our University membership is building up again.

D.W.H.R.

PERKINS

THE general formation of the Club is nearly complete, and we hope to start gliding soon. Our three gliders, two Cadets and a Tutor are being inspected and painted, and work is also nearly complete on a winch from Dunstable, which is of single drum type, but is being made capable of conversion into a two-drum winch later.

We have suffered a set-back in the refusal of the various Ministries concerned to permit flying at Westwood Aerodrome, priority having been given to the use of the land for agriculture. There is another ex-R.A.F. aerodrome which might be available or large fields within a five-mile radius of Peterborough may have to be considered.

Some of our members have obtained valuable experience with the Cambridge Club, and a debt of gratitude is owed to J. Hulme, C.O. of the Cambridge A.T.C. for assistance rendered.

ROYAL NAVAL GLIDING & SOARING ASSOCIATION

1955 has proved a much better year for the Association than 1954—the total number of launches increasing almost five-fold. Despite the continued lack of equipment in the Associaton those at R.N.A.S. Stretton have persevered, and the Blackcap Gliding Club joined the other six clubs late in the year. They operate with a Cadet I, a Primary and a stock-car—gliding in the raw indeed! As yet it has proved impossible to start a club at R.N.A.S. Anthorn.

The number of launches achieved by the clubs appears low (5,515 launches; 463 hours), but it must be remembered that gliding can only be squeezed in when airfields are closed at weekends and in the long summer evenings on weekdays. The only thing of which there is no shortage is keenness.

The Association again provided two T.31s, a Cadet I and a Primary for 36 Cadets from the Royal Naval College, Dartmouth, to learn to glide at R.N.A.S. Bramcote during the Cadets' Summer leave period. About 1,300 launches were achieved in 23 days and most of the Cadets achieved their "B" licences.

As in previous years the Midland Gliding Club tolerated some of us at the Mynd during the Summer, and all on the camp who had not got their "C's" got them one day by falling off the end of the wire into a wave which the M.G.C. had never seen before! Unfortunately the club could not provide a West wind, but they provided everything else and the camp was voted a great success. Another has been arranged for this Summer.

We welcome Nick Goodhart back to the U.K. after his most successful tour in the U.S.A.—successful we believe not only in the soaring sense, but in the service sense as well. No doubt he will be able to obtain leave for the Internationals! J.H.S.

SURREY, ARMY & IMPERIAL COLLEGE

THE year started well with Derek Goddard, our second full time instructor (and Chief Darts Instructor), obtaining his five hours in a Skylark at Harting on the South Downs. Shorter but of more interest was a C gained at Lasham on February 1st in thermal lift with a flight of 16 minutes, and as the T-21s were also staying up during that day it was not the thermal we have been storing in the back of the hangar since last Summer. Wave lift has also been discovered locally and the Eagle reached 2,000 feet over Alton in it.

We expect to see quite a bit more of the South Downs this Spring as, thanks to the generosity of Lord Cowdray, we are able to use a large field on the top of the Downs

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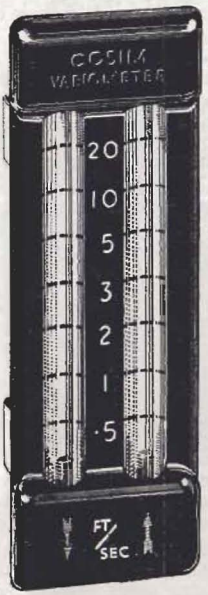
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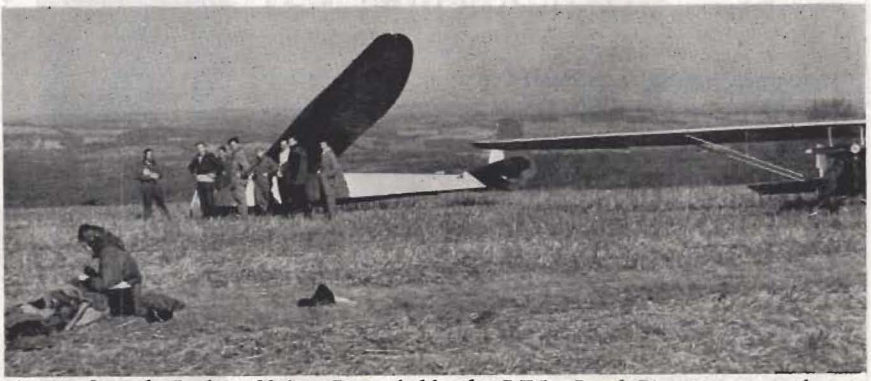
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just to the East of the Cocking Gap, South of Midhurst. It is large enough to aero-tow out of and on Sunday, February 19th, the Tiger and five gliders operated from there and Virginia Sweet, Bruce Sinclair and Ernie Smith, collected their five hours. Incidentally, this completes Ernie's Silver C after seven years of ceaseless endeavour!



A party from the Lasham Gliding Centre led by the C.F.I., Derek Piggott, seen at the new Slope-Soaring base at Cocking, near Midhurst on the South Downs, where launches can be made by aero-tow or winch. At the right the Slingsby 'Motor Tutor' which also visited the site.

The Club fleet is back to strength with the return of Red O from Elliotts, and with 4 Olympias, 3 Skylarks, 3 T-21s, the Eagle and Weihe, we are ready for the Easter thermals. We have also two Tiger Moths operational, their only drawback being that on good days we tend to be a bit short of tug pilots, so we have appealed to any pilots with sufficient power experience to join the Club if they want some free flying, albeit on the end of a rope!

With the steady influx of new members, the Committee has been seriously considering limiting the number of new members, so that the present ones do not get too frustrated. Although restricting membership is an unpleasant idea, it is forced upon us; because, much as we would prefer to expand, it is virtually impossible to do so until the Air Ministry allows us more than one month's security of tenure. With the intention of getting the present members more flying, we have put our Summer course fee up to 18 guineas for a week's course. This will, it is hoped, induce applicants to sign up for the Winter courses from October onwards.

At the moment, mid-February, we have no fixed plans for an Easter Expedition, though we hope to be represented at the Mynd, but it is pretty definite that we will take at least one Glider to Nympsfield at Whitsun for the official opening of Bristol's new site.

H.T.

SCOTTISH GLIDING UNION

ALTHOUGH members now appear each Sunday in startling and complex disguises, grotesquely muffled and duffled against Balado's bitter and insidious airs, business continues briskly with an average of 50 launches, which we consider good for winter flying.

Our final figures for 1955 set up records all round. In 109 flying days (35 soaring days) we recorded 5,018 launches for 339 hours. Non-flying days—(note this well, you sun-steeped Sassenachs)—two!

Our wave continues to be heavily stamped. The most exciting event in this department recently was a lecture by Dr. Scorer to the Met. Dept. of Edinburgh University on "Mountain Waves", to which all S.G.U. members were very kindly invited. The lecture included some remarkable time-lapse cloud films, which were almost as valuable as the priceless pearls cast before us by Dr. Scorer himself. The lecture was in such lucidly simple terms that it was hard to believe that the same gentleman is responsible for those horrifying complex expositions that one passes over so hurriedly in "Gliding". We deeply envy the southern Clubs their ready access to this splendid man.

One result of the lecture has been a spate

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of "research" aero-tows to immense altitudes whenever a long thin cloud appears in the sky.

David Hendry, after a 6,000 ft. aero-tow, found a strong lift at 2,500 ft., but had to leave it at 3,500 ft. because of approaching dark. Bill Adamson contacted wave on January 2nd from a 700 ft. winch launch, and reached the cloud at 3,200 ft. before the lift disappeared. The Olympia and the Krajanek, on their way down from aero-tows, also soared briefly.

The Club Christmas Party was as uproarious as ever and proceeded merrily amid shrieks, songs, sounds of breaking glass, and even occasional explosions. The Parker Trophy went once again to Andrew Thorburn for his cross-country to Kelso (65 miles) and the Boyle Trophy to John Paterson for his 3,400 ft. gain of height in a cold front. Guests at the Party included a strong and uproarious representation from the Buchan & District Gliding Club, a small but very enthusiastic group, who fly on Crimond Airfield.

We are hoping to organise an expedition to Oban at Easter, taking with us the Krajenek and the Tiger, and possibly the Olympia.

Continuing uncertainty concerning our future at Balado remains the dominant factor in the affairs of the club.

In order to safeguard this year's series of courses arrangements are in hand for transfer to an alternative airfield site, which, although not suitable for club use, is satisfactory for a small group living nearby. The course dates for this year are:—

7th-14th April, 30th June-7th July, 14th-21st July, 28th July-4th Aug., 11th Aug.-18th Aug., 25th Aug.-1st Sept.

D.H.

SOUTHDOWN

In spite of the low temperatures in the early months of this year, flying continued. For much of the time a strong north-east wind made very favourable conditions for soaring, especially during February when four members—Laurie Wren, Keith Fuller, Peter Random and Ian Agutter—qualified for their "C" certificates.

With the approval by the local Council of the plans, the new aircraft hangar is now definitely moving towards a concrete reality. The lease of this site is now in the hands of the Solicitors, and work will commence as soon as possible, or in other words, as soon as the legal formalities are complete.

As for the future, it is hoped to run a Course for non-members in August, and further details will be released later.

Heartiest congratulations are extended to Chris Hughes—until recently our C.F.I.—and Denise Brown on the announcement of their engagement.

H.H.

YORKSHIRE

There is little to report from Sutton Bank this time. Since the beginning of December we have done very little flying indeed, and in January our hardy residents were snowed up several times. A few members, whose enthusiasm is warm enough to overcome almost any snowdrift, still find their way to the Club each weekend whatever the weather, and we have taken advantage of the lull in flying to overhaul the winches, beaverettes, etc. This work has progressed steadily in spite of the cold and uncomfortable working conditions. The winches never once let us down last year, and this was no doubt largely due to the fact that they have received regular and expert attention from our maintenance team.

We are also very pleased indeed that we had no accidents to report in 1955. Although for three months—June to August—we suffered most unfavourable weather from a soaring point of view, nevertheless the number of hours flown in 1955 was double that of 1954, April and September being the best months.

New members, with or without experience, are still very welcome. Our plans for the new season, which is just getting under way, include the continuation of ab-initio training and more advanced training and cross-country flying. A canopy has been made for a Tutor as a step towards the conversion of pilots to the Kite II. With the help of some of our members who are sacrificing their own leave and in conjunction with the C.C.P.R., we are organising five-day camps which provide a good introduction to gliding for non-members as well as an enjoyable holiday, and efforts are being made to bring groups of members together on special training camps.

M.H.L.



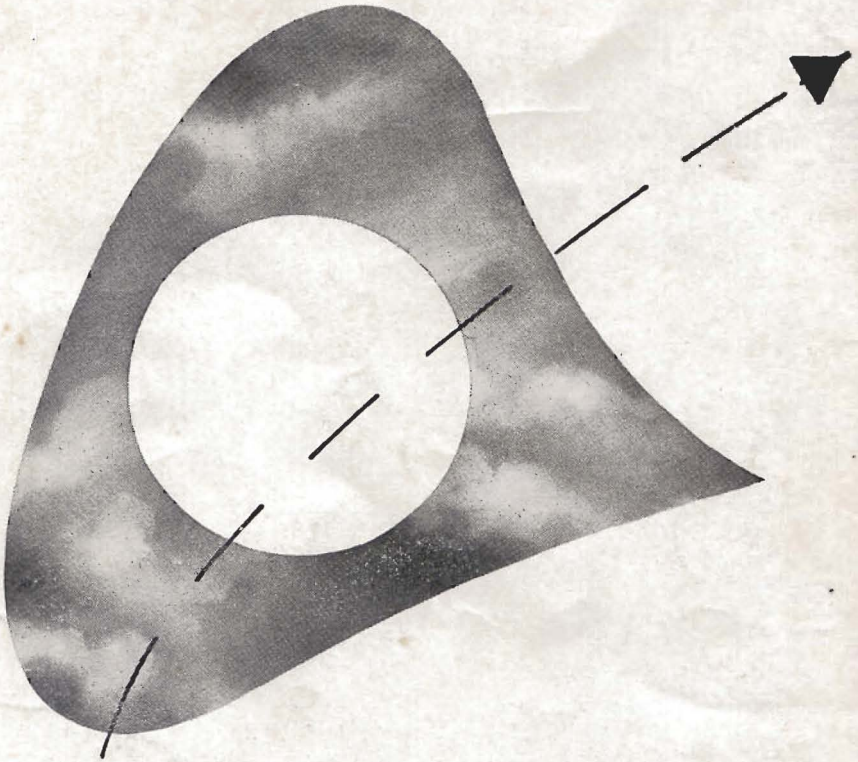
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