Sailplane and Gliding

3/-

June 1962



Including Championships Programme



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SAILPLANE AND GLIDING

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Cover Photograph.—Skylark 3F at the meeting at Omarama, taken the day after the World Record flight by Dick Georgeson. The mountain on the right is the one on which the accident to Matthew Wills occurred. Both events are described in this issue.

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PIONEERS OF BRITISH GLIDING

1962 Nationals

THE 1962 British National Gliding Championships are, for the first time, being held at an aerodrome belonging to the Royal Air Force, and this is indeed a sign of the times. For over the past few years the Royal Air Force Gliding & Soaring Association has waxed mightily, and this year quite a large proportion of the entry will be their aircraft and pilots.

Let no one think that this is an official entry in the sense that it is paid for by the State. For, like the civil clubs, R.A.F. gliding is largely sustained by the enthusiasm and hard work of its Association's members. And if, from the nature of their job, they do not experience the main difficulty which keeps back the expansion of civil clubs—the shortage of sites, they have instead one even greater and insuperable drag on expansion—the inevitably peripatetic character of their membership. For every club depends on a hard core of a few skilled and enthusiastic members, and if, for example, its Chief Flying Instructor is suddenly posted to Aden, his succession is a hard problem to solve in a hurry.

Anyway, here we all are at Aston Down, an airfield high up on the Cotswold hills, in beautiful country liable to be bounteous in its thermals. The number of entries is likely to be slightly less than in 1961, not because there are less people wishing to fly (quite the reverse), but because we feel the 92 aircraft that flew last time verged on the maximum which could be efficiently handled, and if we had not been so fortunate with the weather the last Championships might well have been vitiated.

This year we also expect to have, as on previous occasions, foreign entries flying *hors concours*, particularly from Poland, with examples of their new aircraft which created such a sensation in the last World Championships in Germany.

We hope they come and fly, because we also expect to have our latest types flying — the 15-metre Olympia 463 and the 18-metre Skylark 4 (a further development of the Skylark 3 which won the last World Championships), and a comparison between the most refined and sophisticated practical sailplanes of the 20th century will be invaluable. For we hope to see our new aircraft flying in the 1963 World Championships in Argentina, and if we can measure their performances now against these splendid Polish aircraft we may learn a lot.

Who will represent us in Argentina will be largely decided at this meeting, for team selection is of course largely decided on the results of individual performances in National Championships. Some of our visitors at Aston Down may not realise that we are one of the leading nations of the world in this branch of aviation, in spite of the fact that we are up against many countries where gliding is largely subsidised or even wholly run by the State. Nevertheless, there will be around half a dozen pilots flying at Aston Down who are potential World Champions—two who are ex-World Champions—and the competition will be as keen and straight as the blade of a sword.

Leistungs-Segelfliegerabzeichen

by J. C. Neilan

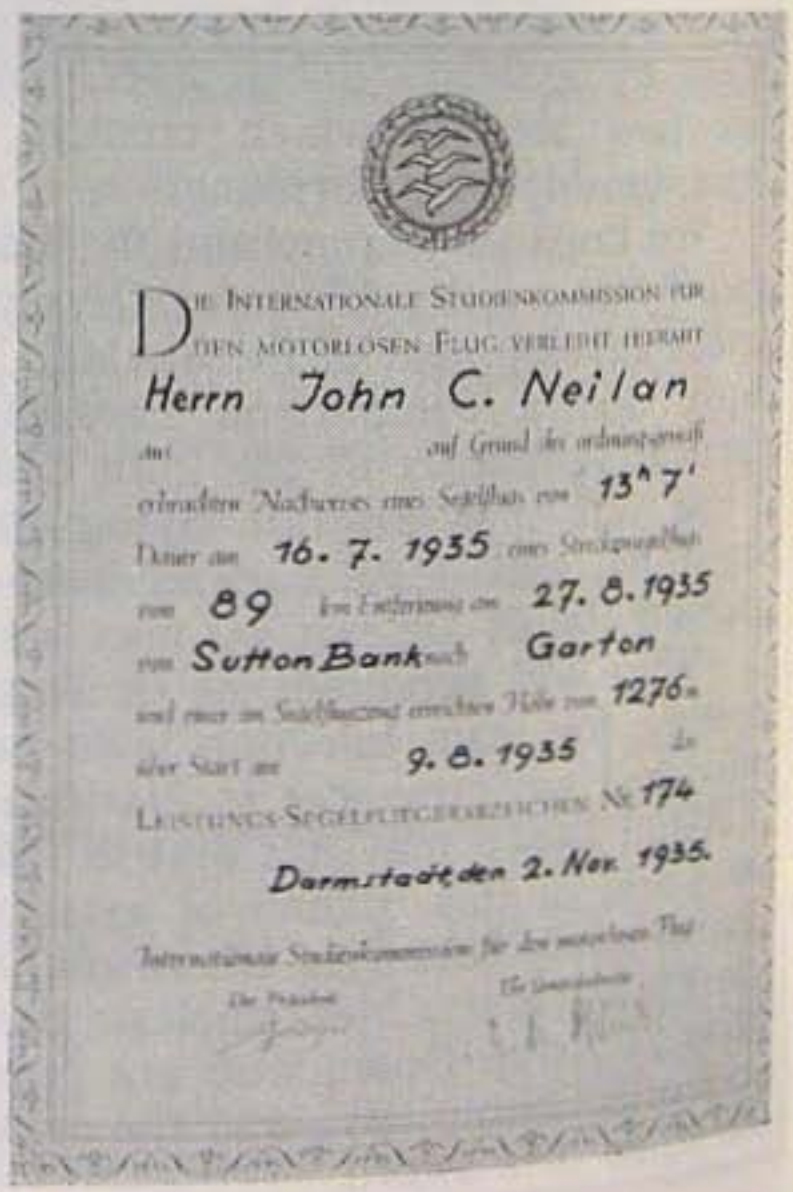
HANGING framed in a dark corner of my hall is my International Silver C Certificate, a document drawn up in German and having the above impressive title. Rika saw it one day and asked me to "write it up", and that is the reason I have to go back to 1935 for the flights which follow. I will say nothing of how it took another twenty-two years to get to Gold C standard, except that I have always been a bit slow to learn.

The height flight was not remarkable in any way, and was not the first time I had gained enough height, but the first on which I had suitable barographic evidence. The duration flight is reasonably interesting, however, as it also was the official British Duration Record for four years. It so happened that I had qualified myself for a flying job, but had not as yet got one, and what better (and cheaper) way of gaining more experience and having a lot of fun than to camp for a week or two at Sutton Bank? Harold Holdsworth, the club's resident engineer, used to launch me in the Professor, using a car to extend the bunjy. Holding back was by any convenient mole-hill or clump of heather, and the upwind wingtip was rested on a beer crate, the launch being diagonal to the edge of the hill to save Harold from going over. A bit dicey by modern standards, but we were lucky and got away with it.

One day I woke up to find the west side of my tent bulging inwards, and the east side bulging outwards After a minute or two I translated this into a decent soaring wind on the west slope, and the possibility of having a stab at Laver's duration record of about 12½ hours. I suppose it must have been about six o'clock or so, and so far as I can remember Harold reacted without a murmur to my demands to be launched at as unreasonable a time as could be thought of. By 08.15 I was in the air with my pockets full of chocolate and apples, a bottle of fizz stowed under the seat, where I was quite unable to reach it, and a couple of barographs ticking away.

At first lift was mediocre and fairly rough, and 400 feet was the average height, but around ten o'clock some ragged cloud made things more interesting. This developed into strato-cumulus which often added to the normal hill-lift. By flying straight out from the hill into wind by compass I was able to reach a maximum height of 2,000 ft. in cloud on occasions. Not having blind-flying instruments, it was necessary to keep straight or I might have got into a mess. During the afternoon there was quite a lot of help from cloud lift, and the average height was maintained at 1,000 feet; but by tea-time I was down to "scraping" at a few hundred feet, and had to keep my wits more about me. By this time, although I was sitting on two cushions, one of which was by Dunlopillo (I still have this — my "13-hour" cushion), I was getting distinctly achey and fidgety, and was also conscious of being immensely bored.

I very nearly boobed near the end by landing too soon. I did not know it, but my watch that day decided to go into top gear. I knew I had broken the record,



DIE INTERNATIONALE STUDIENKOMMISSION FÜR DEN MOTORLOSEN FLUG VERLEIHT HERRN

Herrn John C. Neilan

auf Grund des ordnungsgemäß erbrachten Nachweises eines Segelfluges von 13^ 7' Dauer am 16. 7. 1935 eines Streckensegelfluges von 89 km Entfernung am 27. 8. 1935 von Sutton Bank nach Garton und einer im Segelflugzeug erreichten Höhe von 1276 m über Start am 9. 8. 1935 das

LEISTUNGS-SEGELFLUGZEUGABZEICHEN Nr. 174

Darmstadt den 2. Nov. 1935.

Internationale Studienkommission für den motorlosen Flug

Der Präsident — Der Generalsekretär

and had a great desire to land and stretch my limbs a bit. Luckily determination got the better of me, and I decided to hang on till 14 hours were up. When they were, I did a few beat-ups to attract Harold's attention so that he could witness the landing, and landed. By two barographs and by Harold's watch I had been up 13 hours and 7 minutes. It was enough. Everyone else thought so too, for it remained unbroken for four years, and after the next one they decided to abolish duration records because they don't prove anything, except possibly enthusiasm and luck.

The distance flight was also a reasonably noteworthy flight, as it was the longest distance done in Britain that year, and therefore won the Wakefield Trophy. Although I had managed to land a job in Aberdeen since the duration flight, I was lucky enough to be permitted to take time off for "The Comps" in which Sling had invited me to fly his brand-new Kirby Kite. This was only just ready in time, and had undergone the bare minimum of test-flying, and had not had the opportunity of showing its soaring abilities.

With only three short cross-country flights, totalling just 31 miles, I didn't really expect to win anything at all, especially against such competition as that of Philip Wills and Kit Nicholson; but luck was on my side. The Kite was delightfully easy to fly, and it had a variometer, which in those days was something not often seen except in cockpits owned by pundits.

I was winch-launched straight into a good thermal, which lifted me up to 3,300 ft. above Sutton Bank, so I set course down wind, which was blowing towards Bridlington. Kit got away in the same thermal a few minutes later, but I didn't see him after leaving it. In actual fact he flew much further than I did, but he meandered a bit too much, and lost the opportunity of at least equalling my distance by turning back to land at R.A.F. Catfoss. I wonder how many points have been lost in competitions by giving in to this urge to land on an areodrome rather than in a field? Near Malton I found another thermal, which took me up to 4,000 feet. The last thousand of that climb was in cloud in a gentle circle, the Kite having no blind-flying instruments; but she was so steady in circling that I just let her go on until no more lift was forthcoming, then tried to straighten out on south on the compass, in which direction a compass is almost as good as a turn indicator.

After coming out of cloud I continued coastwards until within about three miles of it, then turned parallel to it. Catfoss was within reach, but I then got another small thermal which took me past it, and fields being plentiful and good for landing, I went on, leaving the choice of landing field until the last moment. I then chose one just upwind of a road along which I could plainly see telegraph posts. I duly dived at the wires, pulled up over them, and landed nicely in the field, and then discovered that there weren't any wires anyway. Either they hadn't yet put them up, or else, more likely, they had taken them down and put them somewhere else.

The distance turned out to be 89 kilometres, and another fifteen years were to pass before I could exceed this distance. The Kite, by the way, sold for £145 in those days — happy days!

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A New Two-Seater

by the Bedford Sailplane Design Group

THE Bedford two-seater project started in the summer of 1957 when the usual discussions in the bar at Twinwood revealed a strong feeling that the sailplane we would most like to have would be a two-seater that was pleasant to fly, comfortable, and had a good all-round performance so that we would get more airborne hours. We knew of no such aircraft. Someone said, "Let's design our own". Everyone else said, "Idiot". Next day everyone else said, "You know, that idea about doing our own . . ."!

We reckoned that the thing could be built for £1,000-£1,500 and would take 3,000-4,000 hours to design. There was of course a little voice inside which whispered "double it, you fool", but then we could hardly listen to that as it would have meant abandoning the project. It was easy; if the four of us (John Johnston, "Joe" Caiger, Ken Moore, Harry Midwood) put in only about 20 hours a week the job would be done in about a year.

A fairly determined man (we have now found!) can manage about 15 hours a week for up to three months. For periods of a year or more, 2 to 5 hours a week, average, is not bad going. The net result of all this is that the design has not only taken a dreadfully long time to mature, but would never have been completed at all had not Ken Pearson (Supreme Furniture Co. Ltd. and Northampton Gliding Club), Peter Street (Peak Sailplanes Ltd. and Derby & Lancs) and Bernard Thomas and Alec Baynes (Derby & Lancs) separately provided the means to enable us to employ Messrs. Aviation & Engineering Projects Ltd. to complete the outstanding work, mainly fuselage.

Having decided to go ahead, we did a number of design studies to investigate the effect of variations in span and aspect ratio, and wing section, on the performance and cost. An arbitrary top limit of 60 ft. was applied to the span for ground-handling and storage reasons. It soon became apparent not only that it was necessary to go right up to 60 ft. to achieve the sort of performance at low speeds that we were looking for, but that this would not cost significantly more than the 54 ft.-span study we had used as a starting point. A side-by-side seating arrangement seemed to have all the advantages: equal visibility for both pilots, ease of conversation and interchange of maps, coffee, etc. The effect of the fuselage on performance, surprisingly, is not very significant, and the difference between a side-by-side and a tandem two-seater neither here nor there.

Although it would have been great fun to play with new methods of construction, such was beyond our means, so the low empty weight that is a feature of the project had to be achieved by doing careful detail design, and comprehensive investigations instead of making the usual conservative guesses.

The glider was designed generally to meet the B.C.A.R. semi-aerobatic category. It was felt, however, that the ailerons would probably be light enough to tempt pilots to use them at somewhat higher speeds than called for there, so the extra case of full ailerons at top speed was also covered.

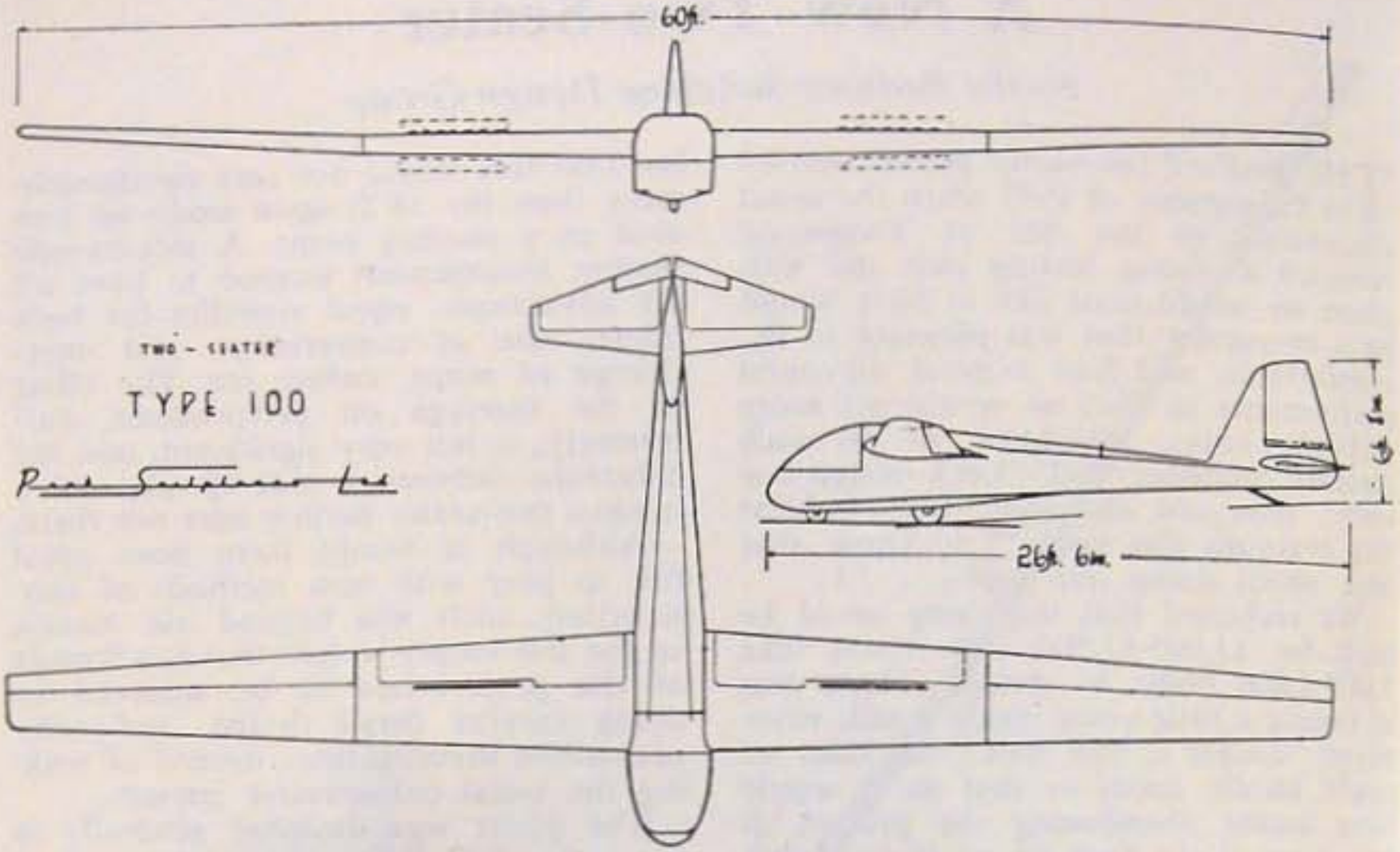
The landing requirements are just about impossible to meet if the usual arrangement of skid and wheel is used. They can be met, however, if a small-nose-wheel is used instead. This is also lighter, and we think should prove more satisfactory operationally. After all, skids were abandoned for powered aeroplanes around 1914!

An all-moving tailplane with anti-balance tabs was a natural choice, the Group having previously coped with the

— V. G. —

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aerodynamics and had some development experience. The advantages are reduced drag, since the tailplane is always at the correct angle; the ability to achieve fairly readily the optimum handling characteristics; and a possible slight weight-saving.

A glider fuselage cries out to be made in steel tube, and when Peak Sailplanes, who have suitable manufacturing facilities, entered the field, a decision was quickly made to adopt this method. The design of this fuselage has been the responsibility of Messrs. Aviation and Engineering Projects Ltd. Not only is the steel tube structure lighter, but it is generally easier to repair. Standard repair schemes, using bolts, exist to enable an aircraft to be kept serviceable.

After looking at it all ways round we concluded that it was impossible to achieve a cockpit canopy of this size that was satisfactory in every respect. Either it was liable to blow disastrously open in a wind, or was too heavy, or access was poor, or it was made up of lots of fiddly bits, or visibility was restricted. . . . We have settled for one that slides forward, with a small section folding back. We hope it works.

One of the big headaches was deciding whether to have the wing high or low. If it is high, the pilot cannot see behind; if it is lowered enough to see over, there is a danger of a wing-root separation causing loss of performance. Finally we decided that, at whatever cost, it was imperative to have adequate rearward visibility. This meant a shoulder wing, and a few tests in a wind tunnel at Cranfield enabled us to change the design from one that gave a walloping breakaway to one that should be satisfactory.

The design work is now just about finished, except for the odd checking and things that have to be sorted out on the shop floor. It will be good, being able to spend a lazy evening without having it spoilt by a feeling of guilt!

Two prototypes are at present being built, one by the Supreme Furniture Co. at Northampton and the other by Peak Sailplanes at Chapel-en-le-Frith. Both should fly this summer, and if successful, each firm is intending to produce the aircraft.

DATA

Span	60 ft.
Length	26 ft. 6 in.
Height	6 ft. 8 in.
Design Maximum weight	1,050 lb.
Aspect Ratio	15
Estimated best glide ratio	40 knots
at speed of	29.5 : 1
Estimated minimum sink	2.3 ft./sec.
at speed of	36 knots
Stalling speed	32 knots

Argentine Championships

Joe Ortner, who won this year's Argentine National Championships with his Skylark 3F, has kindly translated the following account of the meeting, which, he says, he is sending to SAILPLANE & GLIDING *"as it will reach corners of the earth which are rather difficult for us to reach individually, and it will give the whole world gliding movement an idea of what they can expect at the next World Championships" to be held at the same site.*

WITH his brand-new sailplane José (Joe) Ortner won the 12th Argentine National Championship, held this year in Junin, between cold front and cold front. The cost of his sailplane was compensated by the satisfaction of having won the best National Championship held for some years. With his Skylark 3F, Ortner — who experienced the joy of winning the Championship during the years 1954, '56, '58 and '60, continues to be the "brainy" pilot of old, and as "scratch" was a headache for many of his competitors.

The Federación Argentina de Vuelo a Vela received tremendous help, both technical and financial, from the Air Ministry. It has been also given a foretaste, for Junin and for the rest of the country, of what is to happen in a year's time, when Junin is to become the site of the next World Gliding Championships under the auspices of the F.A.I.

The Opening Ceremony took place under the early morning threat of a cold front which obliged everyone to secure their gliders. Hossinger returned to the hands of the Director of the Championship the band of Argentine National Champion which he had won last year.

Twenty-eight competitors participated, according to their placing in the Argentine Ranking List, and although there were several Grunau Babys, it was grand to see that the high-performance sailplanes were this year in the majority, and it is hoped that this will be the last championship wherein Grunau Babys are allowed to participate. Seven tasks were flown, but as two were cancelled, five only were given marks, and of these five the first three were really "big".

Unfortunately there proved to be a difficulty in retrieving due to the fact that there were not sufficient tow-planes available at that time. This imposed a



Left to right: Vice-President of Argentine Aero Club; Director of Civil Aviation; Joe Ortner; Secretary of Cordoba Gliding Club.



Line-up at Junin on the opening day.

tremendous job on the tow-plane pilots, who finished the Championship completely exhausted, and it was necessary to shorten the last two events so as not to overdo things. With the decline of the length of the tasks, things were easier for the Grunau Babys, as they had the benefit of a handicap.

Thus the first task was set — a race over a dog-leg of 186 km. — Junin-Bragado-Mercedes. The thermals were widely spaced, and a number of pilots fell short on the second leg. Only those who got away early reached the goal; they were C. Anderson of Tandil, the winner (Sky 34), Casais (Sky 34), Macarron (Skylark 3) and Ortner (Skylark 3F).

The next two tasks, on 17th and 18th January, were Out-and-Returns, the first to Pergamino, 168 km., and the second to Chivilcoy, a similar distance. Both proved too difficult, as no pilot was able to complete the tasks. Due to the interpretation of the regulations, these two tasks were cancelled, although on both days Hossinger was the pilot to cover the longest distance, with Ortner and Macarron in second and third places respectively on both occasions.

On the 20th January, with the recovery of energies — and the gliders — the second valid task of the Championship was given — Free Distance. The weather report given by Scutary, the met. man, was "bang on". Strong north wind, good thermals, and plenty of cumulus clouds took the high-performance sailplanes and a good group of Grunau Babys to distances of over 300 km. Towards evening, reports began coming in of the various landing places, and the balance showed a new Argentine Free Distance Record of 560 km. flown by Hossinger, who crossed nearly all the province of Buenos Aires to land in Pedro Luro on the bank of the River Colorado. Ortner and Macarron covered distances of 522 and 512 km. respectively. Rafael Frene and Francisco Aparicio made the best distances of the Grunau Babys — 295 and 290 km. respectively.

Triangle Day.—The early morning did not seem to indicate a good day, especially for a speed event. Notwithstanding this, Scutary was fighting hard to avoid being burnt alive, and his witchcraft proved successful. Conditions improved and a 100-km. Triangle over the course Junin-Irala-Quirno Costa-Junin was declared as the task for the day. Cloud streets appeared, and Hossinger won the task in 1 hr. 50 min. Actually Penna was the first to get back to Junin in 1 hr. 45 min., but, due to the handicap, he had to hand over the first place to the World Champion. The fastest

machines flown by well-trained pilots completed the triangular course of 103 km. — six of them in all: Hossinger, Ortner, Casais, Penna, Vega and Macarron was the final order of this task.

Fourth Contest Day, 24th January.— Another dog-leg Goal Flight from Junin, passing over Colon, with the finishing point at Venado Tuerto, was declared, a distance of 165 km. This event was won by Berreta, and he was followed by Casais, Hossinger, Frene, Ortner, Minuzzi, Mendiburu, Zurborn, Penna, Lopez and Macarron, with a total of 15 pilots completing the task.

On the last day of the Championship, 26th January, an Out-and-Return of 170 km., from Junin to "9 de Julio" and back, was declared the task. Hossinger once again showed his quality and won this final task. His closest followers were Ortner, Berretta and Casais, and with a larger separation in the marking, Minuzzi, Vega, Macarron, Penna and Alvarez. At the prize-giving, Ortner was once again in possession of the band of Argentine National Champion, and it was mentioned that he was a champion in the even-numbered years. The prizes were truly magnificent, and the Championship ended in the usual manner — "ducking" the champion and followers into the pool of the Junin Gliding Club aerodrome.

Mr. Ortner adds: The balance of the Argentine Championship was that the Argentine distance record was broken, several pilots were able to get their Diamonds for free distance and goal flights, and others got their Gold Altitude — Vega 3,600 m. and Penna 4,600 m.

FINAL RESULTS

Pilot	*Sailplane*	*Points*
1. Ortner, J. S.	Skylark 3F	4424.9
2. Casais, J. O.	Sky 34	4267.2
3. Macarron, H.	Skylark 3	4122.6
4. Hossinger, R.	Sky 34	4029
5. Berretta, R.	Meise	3473
6. Zurborn, C.	Meise	3293.4
7. Vega, C.	Skylark 2	3254.4
8. Rodriguez, Ponce	Baby 2	3009
9. Frene, R.	Baby 2	2982
10. Mendiburu, E.	Baby 2	2964
11. Penna, J. C.	Skylark 3	2960.5
12. Minuzzi, J.	Sky 34	2769
13. Aparicio, F.	Baby 3	2670
14. Lopez, E.	Baby 3	2416
15. Alvarez, E.	Sky 34	2411.1
16. De Poli, A.	Meise	2340.7
17. Anderson, C.	Sky 34	2310.5
18. Barreira, R.	Baby 3	1865.5
19. Urbancic, L.	Baby 3	1701.2
20. Michelli, A.	Baby 3	1398.1
21. Troteyn, D.	Meise	1364
22. Fernandez, N.	Baby 3	1212.5
23. Horrocks, L.	Ala Volante	1181.5
24. Rissolo, C.	Baby 2	1044
25. Alonso, E.	Baby 2	956
26. Navarro, J.	Meise	755.3
27. Kauf, A.	Baby 3	573
28. Callegari, E.	Baby 3	—

They Flew Primaries

by Redwing

WHY?—Because they had nothing better to learn on. But there was a great deal of fun with primaries, with very much good physical exercise too, when bungy launching was used.

It was a thrill indeed in early flights —installed on the simple hard seat, safety-belt tightly buckled, head back against the pad, right hand lightly holding the stick top, left hand grasping the seat bottom as a reassurance of solidity, and to check a panic-stricken two-handed clutch of the control—when, after "WALK . . . RRRUN" . . . already quivering like a live thing between the brawny grip of the "holder back" at the rear and the rapidly increasing pull of the elastic rope stretching with the straining run of the four or five-a-side crew, the machine suddenly tears from the rearward restraining clutch and leaps forward, and steeply up, in a breath-stopping surge of swift, near silent, climb. The big ring falls clear of the open hook. The speed gradually slows, and for a fleeting moment there is a wonderful peace. The stick goes forward —"Keep 'er whistling and she's safe. Head back on the pad and look forward." The ground rushes up quickly, the stick lightly but firmly held till the grass blades show, then level off and

skim fast through the nodding stems, down to the whispering short grass, down to a smooth toboggan run on the turf. Skids were unsprung so one quickly learned to land smoothly—or else!

I well remember my first flight even now—though the year was 1934. There were green fields in Handsworth, on the outskirts of Birmingham, in those days, and on a grassy hillside some twelve of us were gathered from near and far. Some for the first time—mine. We touched and gazed at our gleaming Dagling Primary and presently, one by one, the "experts" showed how. We newcomers were quite content to soak in the atmosphere, to retrieve and launch, and to listen to each successive pilot tell of his—to us—hair-raising venture into space.

Suddenly the instructor beckoned me: "Here, sit in and see if it fits you." Nothing loath, I did so, trying the controls and fastening the belt to feel the part as near as possible. A wing rocked —"Correct that!" The tail swung— "Correct that!" A wing moved again, and for a few minutes I was kept busy trying to correct induced movements in what I hoped was the proper way.

"Ever flown?"

"No."

"Well, there's nothing in it, you will find. Just do what you've been doing now, and keep 'er whistling in the glide."

Sheer Panic!—What, me? Just like that! I couldn't possibly get it up and down again, and immediately I started to say so, firmly. But to no avail. Firm hands re-positioned me in the seat and re-buckled the belt. My knees would have rattled like castanets—but they were too far apart.

"Hold back the tail!—Hook up bungy!—Stand clear!—WALK . . ." Oh, heavens, this was it! Why did I come today? . . . "RRRUN" . . . and I just ceased to register thoughts at all as with an appalling surge (it seemed) the machine leapt into the air. Hours later the ground seemed to rush at me and I must somehow have levelled out—it was quite unthinkingly—for with a smooth, swishing run along the turf, the Primary came to rest and dropped on a wing-tip. I was down! And intact! My first flight! Too dazed even to feel thrilled at that moment.

A hearty slap on the back shook me to reality.

"Hey, you're a dark horse, aren't you? Congrats! Have another flight."

"Another flight? Not me, it's next man's turn now."

But it was no use, and the procedure was repeated. This time consciousness returned on the glide, and perhaps that is why the landing was not quite of the same standard, being termed "passable". Thought processes recovered in the walk back, this time, and with no possibility of further flights that day, I was able to express enjoyment and keenness, etc., quite safely!

The first of many, many, more such rides, progressing from hand launching to car-stretched bungy launch, to winch launches of 1,500 feet or more—and they were the most thrilling and pleasing of all. With no cockpit surround, and the wing above one's head, it really imparted a bird-like sensation never experienced in closed cabins.—Yes, I know—it *was* draughty—the glide *was* steep—turns *were* poor. But on a nice day we enjoyed our rides thoroughly. We were fledglings, and the air was now ours too!

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The Skylark 4

ALTHOUGH still bearing the name of Skylark, the "4" is virtually a new design. Many new features have been incorporated, and these, together with those that have been well tried on the "3" series, make this a sailplane with eight years' continuous development behind it. Performance, handling and appearance have all been improved to a point where they should ensure the continual unrivalled success of Slingsby's in the 18-metre Class.

The most striking features of the machine are its compact low lines and generally clean appearance; the height at the wing joint is, in fact, 9 inches lower than on the "3's". This is the first Slingsby machine since pre-war days where the wing has been faired directly into the fuselage; the clean lines of the fairing have been made possible by the extensive use of fibreglass. The Perspex canopy is large and of good aerodynamic shape.

Although the machine is low, the cockpit is in no way cramped even for the largest pilots. The reduction in height has been achieved by slightly reclining the pilot and careful design of the controls. The new seating position is by no means extreme and has already received favourable comment for its comfort. The rudder pedals and seat back are adjustable, and a pilot of almost any size can be accommodated without special packing.

The wing is almost identical in appearance to the "3" except for the modified root where it fairs into the fuselage lines, but in fact the main spar has been strengthened and the ailerons redesigned. The alterations to the main spar were necessary to meet the latest strength requirements for the dive-brake-open case at high speed. The ailerons are of larger span and lower chord and produce a high rate of roll with low control loads; these were first tried with success on the small batches of 3G's which were the final aircraft made in the "3" series.

The most fundamental alteration to the wing, and the one that provides the increase in performance, is, however, the change in aerodynamic design of the outer panels. This has involved the use of a new tip section and the removal of all aerodynamic twist, resulting in improved performance at all speeds, but particularly at the higher end of the range. A feature of the "3's" was the downward deflection of the tips at high speed; flying the "4" at 108 knots there is no noticeable change in the wing tip position.

Structurally the "4" is a direct development from the "3's", but certain new features can be noticed. The fuselage



Nicholas Goodhart in the cockpit of the Skylark 4. Another photograph of the machine appears on page 138.

nose in particular is an interesting component, as it is now moulded in fibreglass as a detachable item, back to frame 2, and certainly forms the longest fibreglass component made by Slingsby's.

The Perspex canopy is made by a new moulding process in place of compressed air-blowing previously used. This allows a transparency to be made that fairs in perfectly with the lines of the aircraft and which also has optical properties of a very high standard.

Slingsby Sailplanes Ltd. claim that the Skylark 4 is the product of many years of continuous development starting with the Skylark 1. The new machine certainly has the appearance of a highly-developed sailplane, and the favourable comments of the pilots that have flown the prototype would seem to show that the "4" is well able to continue the unrivalled success of the Skylark series.

Long Mynd Easter Rally

GOOD FRIDAY was flyable with a W.S.W. slope wind from which, with a little thermal help, a few competitors set off down wind in the hope of exceeding *X*, the minimum scoring distance of 10 miles, on a Free Distance task; four were thought to have done so, but only two really did, so there was no contest. Next day the Mynd was in cloud and rain.

SUNDAY, 22ND APRIL.—Race round an elongated Triangle: 26 miles N.E. to Weeton Aston (short of Stafford), 47 miles S.S.W. to Shobden (nr. Leominster), 20 miles N. to Long Mynd. A west wind on the Mynd started up a cloud street which helped many people along the first leg and gave lift to 9,000 ft. a.s.l. Then a subsiding inversion pushed the cloud tops nearly down to cloud base, though the thermals kept going somewhat erratically, and enabled six competitors to get all the way round.

Ric Prestwich, who took the first launch at 11.15 a.m. (B.S.T.), waited around till 11.59 before crossing the starting line, took 40 minutes to Weeton Aston, and finished the course by 3 p.m.; his time of 3 hr. 1 min. was the shortest of the day and gave him 1,000 points. Charles Green took 45 minutes to the first turning point but another 45 minutes before he was out of sight of it again; his final climb to gain enough height to finish was an exciting sight through binoculars, and distracted attention from Humphrey Dimock, who suddenly appeared skimming low over the landing field. He made second best time of 3 hr. 49 min., and Charles Green third best with 3 hr. 57 min.; but two Skylark 2's benefited from their 10% bonus and followed Prestwich in the scoring list; Bob Swift with 4 hr. 6 min. and Ron Rutherford with 4 hr. 28 min.; Ken Blake made it in 4 hr. 22 min.

MONDAY, 23RD APRIL.—Race round a 100-km. Triangle of very different shape: 26 miles E.N.E. to Cosford, 10 miles S. to Halfpenny Green, 26 miles W. to Long Mynd. These airfields are respectively N.W. and S.W. of Wolverhampton, and the short leg was against a light to moderate wind. An inversion halved the

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height of the convection layer compared with yesterday.

Ted Shephard was the only one to get round, and even he was only declared the winner after much discussion by the Stewards on whether he rounded Half-penny Green. As fewer than 60% of competitors scored, he earned only 860 points. Dimock, landing 14 miles short, took second place. In over-all scores Capt. Shephard and Major Evans led with 1,331, Lieut-Cmdr. Dimock was second with 1,302, and Prestwich and Tim Corbett third with 1,083½.

On this day Tony Adams, who was outside the contest, took a club Olympia 60 miles to Portmadoc on the Welsh coast; he followed the valleys, getting thermals from their flanks, without venturing over the mountain tops.

TUESDAY, 24TH APRIL.—Task: Out-and-Return to Tilstock, 31 miles to the N., and back; total 62 miles. Again an inversion, and some of the cumulus spread out over Wales.

Good clouds formed along the Mynd but suddenly ceased at both ends; so after leaving its northern end, dry thermals had to be sought for. Shrewsbury, half-way there, brought quite a few pilots down.

Humphrey Dimock won the day and therewith the whole contest. His last good thermal, from a bonfire south of Shrewsbury, was his best. Ted Stark was unable to climb out of Church Stretton Valley and missed the finishing line by 3½ miles; so was Ritchie Pick of the Yorkshire Club, with a Swift, who came down 4¼ miles short. A. E. S.

FINAL RESULTS

	Pilot(s)	*Sailplane*	*Daily Points*			*Total Points*
			1	2	3	
1.	H. R. Dimock	Skylark 3F	852	450	1000	2302
2.	J. Evans and		471	—	578	
	E. G. Shephard	Skylark 3F	—	860	—	1909
3.	R. H. Prestwich and		1000	—	—	
	T. Corbett	Skylark 3B	—	83	731	1814
4.	C. Green	Skylark 3F	840	242	374	1556
5.	E. E. Reeves	Olympia 2	587	0	765	1352
6.	R. Rutherford	Skylark 2	879	0	439*	1316
7.	H. U. Midwood	Olympia 2	487	0	800	1287
8.	B. R. Wright and		—	19	—	
	R. B. Swift	Skylark 2	907	—	290	1216
9.	R. C. Pick	Swift	412	0	800	1212
10.	E. Stark	Skylark 3F	209	83	756	1048
11.	K. W. Blake,		805	—	—	
	B. Jefferson and		—	242	—	
	A. H. Baynes	Skylark 3B	—	—	0	1047
12.	R. Griffiths	Olympia 2	0	0	800	800
13.	G. A. Thompson	Skylark 2	211	266	47	524
14.	B. B. C. Watson	Sky	192	0	96*	288
15.	M. P. Seth-Smith	Skylark 2	182	0	91*	273
16.	K. Mansell and		0	—	47	
	M. Randle	Eagle	—	184	—	231
17.	D. J. Clark	Olympia 2	0	0	0	0

*For the purpose of the Mynd Cup only, pilots unable to compete on the last day were credited with the average of the previous two days' scores.

Glider Mail by Wave Lift

THE accompanying photograph is of a letter sent by Adam Zientek of Bielsko, who writes :

"Herewith I send you a friendly greeting from the opening of the World Ski Championship at Zakopane in the Tatra. During these festivities two sailplane postal flights were carried out, and this letter will be carried on one of these winter flights. If the foehn wind should arrive and spoil the joy of the winter sport enthusiasts, then for the same reason one man — the pilot — will seize his opportunity, for the Tatra Wave can lift one to gigantic heights."

A postcard has also been received by the same mail from Irene and Roman Zabiello, of Leszno; they write that they suppose this is the first sailplane mail which has made use of wave lift, and they are almost certainly right.



The Legend of Jim and the Advert

HAST heard, my children, the legend of Jim and the Advert? Thou hast not? Then clear thy crude slip indicators and hearken to my words.

Jim (all hail to his name) is a member of the committee of a club of late flowering. Forthwith, this club has been flying for a mere two summers, and things, alas, do not always happen as they should, as in the abode of the gods at Lasham; nor at Dunstable, or the Mynd of fabulous length, and divers other places. Jim (oh, how well he has our interests at heart) did see in a paper of the trade sort one advertisement which read "For Sale—Glider; for details and photograph apply Box No. —". Oh joy, oh bliss, oh Skylark 3F for thirty bob.

Jim (oh wise and efficient one), knowing full well that our fleet was not of sufficient size to satisfy the angry demands of divers members on summer afternoons, did summon scribe and send by first camel and carrier pigeon for these details and photograph.

And behold, there was wailing and



gnashing of teeth, for nobody, be they serfs of the two-seater, esquires of the Tutor, or even they who wear the accolade of the three birds, nor yet even they of whom we speak in low tones, for have they not a Silver C and need only bow at the mention of the name of "Wills", and not grovel as lesser mortals — none of these, my children, could understand the details nor recognise the type of glider.

And so, oh ye of puzzled mind, I ask, look well at this photograph and remember that things are not always what they seem—nor yet, strange though it may be, gliders not always gliders—and reflect on the fate of Jim (oh, impetuous one), who through his keenness became the undeserved recipient of jeers and laughter of the coarse kind.

U.C.M.

The Air League

THE award for the first time this year of the Robert Perfect Trophy and the money prizes which go with it have resulted in numbers of enquiries about the donors of the prize, who are the Air League.

The Air League has been in existence since 1909 and its purpose is to work for a national understanding of the importance of British Air Power.

One aspect of the British Air Power which the Air League regards as increasingly important is the encouragement given to young people to fly; the British Gliding Association, whose Chairman is a member of the Air League Council, has become one of the most effective means of getting young men and women to take an active interest in flying, and it is for this reason that the Air League decided to make the annual Robert Perfect Trophy award to B.G.A. clubs.

The Air League does, of course, interest itself in all aspects of British Air Power. It is active, not always publicly, in promoting the interests of British Aviation whenever an opportunity exists; and it believes firmly in the maintenance of a strong Royal Air Force, whose primary task is to provide the British contribution to the nuclear deterrent. Membership of the Air League costs only £1 per year, and this subscription covers the issue to members each month of the Air League's journal, *Air Pictorial*. *Air Pictorial* is, of course, on sale publicly, and is an important source of revenue to the Air League.

The Air League itself makes no profit, and is in fact registered as a Charitable Trust; the Secretary-General is Christopher Paul, who is also the B.G.A.'s Accident Analysis Officer, and whose continued activity in this increasingly onerous task is thanks to the Air League's own interest in helping the British Gliding movement wherever possible. The address of the Air League is the same as that of the British Gliding Association, and Air Commodore Paul will welcome enquiries concerning membership or any aspects of the Air League's work and organisation.

THE AIR LEAGUE.

The National Championships, 1962

FOR the first time the National Championships are being run by the R.A.F. Gliding and Soaring Association. The organising authority is, as usual, the British Gliding Association, and in addition the Bristol Gliding Club is assisting, particularly in the sort of work which needs local knowledge. Previously the R.A.F. G.S.A. have run Service and Inter-Service Championships, and are putting their experience to very good use this year.

The Championships are being held at R.A.F. Aston Down, in Gloucestershire, by kind permission of the Air Council. There will be no other flying activity on the airfield during the period, or the practice week beforehand. All operational facilities, accommodation, meals, etc., will exist on the airfield.

There will be 80 entries, 40 in each League, as well as a few visitors flying *hors concours*. These will include :— from Poland, S. Skrzydlewski, test pilot of the Polish Aero Club, flying a 15-metre Foka in League 1; and A. Heinzl and T. Evans, flying the Dublin Gliding Club's Ka-7 two-seater in League 2.

The entry will be decided by position on the National Rating List, all applicants being put in order according to their Rating number, starting from the top. League 1 will be composed of the 40 highest-rated applicants, and League 2 with the following 40. This gives a total of 80 gliders with 80 pilots. If entrants wish to fly more than one pilot per glider, they can do so provided that such pilots have a rating higher than 120— that is, 20% of the possible total. The pilot in the team with the highest rating sets the standard, and determines in which League the glider flies. Passengers, air crew or second pilots in two-seaters do not have to hold a rating.

There will be no change in the list of Tasks which may be set, although this year it is intended to give more Triangles and Out-and-Returns, even if the weather is marginal for them and a more "successful" task would have been a straight Race , or a Distance flight. The purpose of this policy is to reduce retrieving costs. The difficulty in setting closed-circuit flights in this country is that the average wind strength is higher than it is in a country well away from the sea. We have good thermals, but even these cannot overcome the restricting effect of a severely reduced ground speed. In headwind flying, the performance of the glider becomes more important, and the effective difference between types widened. For example: Downwind, a 1:30 and a 1:25 glider flown by equally competent pilots will arrive without much difference in timing. Against a strong wind, however, the 1:30 glider can still arrive, but the 1:25 aircraft will be incapable of doing so.

Since there is a wider range of aircraft performance in League 2, the policy of increasing the amount of closed-circuit flying will not be followed to the same extent as in League 1, as to do so would virtually put some competitors out of the running straight away.

There is one change in the marking system. The penalty for failing to reach the goal in races has been changed. Previously, when working out distance marks, the pilot was credited with his projected distance. Now he is credited with, in effect, the total length of the race less the radius, i.e., the distance from the finishing line. The consequence of this alteration is that pilots who land well off the track line will be more heavily penalised.

In all other respects the regulations and marking system are the same. Pilots will choose their own starting times. The value of the day will vary according to the percentage of pilots scoring on that day, and handicapping will apply in League 2 but not League 1.

One problem that has arisen since the Championships were decided upon is the new control zone at Lyneham, only a few miles S.E. of Aston Down. This goes right down to the ground, and is some 20 miles long by 10 wide. Although it is a VMC zone (visual met. conditions), it is not reasonable to set a Championship task through it, and unless permission can be obtained to enter the zone for this purpose, the contests may be severely restricted, particularly as regards Triangles.

ANN WELCH.

A Visit to New Zealand

by Philip Wills

1. MOUNTAIN RESCUE

I TOOK off from London Airport at 3.15 p.m. on 28th December, 1961. It had been freezing hard for days and I had just started one of my earth-shaking colds. The sun was setting in an icy and smoky haze. Kitty had to stay at home to cope with schools. I was off to New Zealand and Australia on a rushed business trip, with perhaps a little gliding on the side. It should have been a time of glad anticipation. I felt thick in the head and miserable as hell.

In those latitudes the fleet 707 nearly kept up with the sun. It had been about to set in London; finally it inched over the western horizon when we were over Newfoundland. It was still 28th December, 1961, when 18 hours later we dropped wearily on to the runway at Honolulu. Here a merciful airline decrees a 24-hour stop to give the confused and weary passenger time to try and catch up with himself, to accustom himself to having breakfast at dinner time and waking up when his whole being is insisting that it is time to go to bed. The attempt, though no doubt well meant, is a very partial success. At midnight on 29th December a small gaggle of somnambulists stalked into another merciless 707, and five hours later by the clock were decanted at Nandi, Fiji. It was 31st December — the conjuring trick of the International Date Line had seen to it that in my personal calendar there will never appear the date of 30th December, 1961.

An hour later we were sitting, our eyes on stalks, in a T.E.A.L. Electra on the penultimate leg of our flight to Christchurch. A brisk New Zealand air hostess came by handing out the daily newspapers. The first headline I saw — I found my neighbour giving me the disapproving glare of an Englishman who has caught one of his compatriots expressing emotion in a public place— "*Elderly glider pilot crashes on mountain* . . . Matthew Wills, aged 61, was seriously injured yesterday when . . ."

Cousin Matthew — elderly my foot! — great big burly Matthew, he may be 61 by the clock, but the clock, as I had recently been finding, can be a liar. But Matthew, with whom I was going to stay in his caravan at the gliding meeting at Omarama in the Mackenzie country near Mount Cook, had yesterday crashed in his Skylark 2 on top of a 5,000-ft. mountain. The Electra droned on at a miserly 400 m.p.h. towards New Zealand carrying one passenger who felt very miserable indeed.

At Christchurch I was met by Fred Dunn, who told me the story.

* * *

Matthew had been quite determined to attain the final leg of his Silver C before my arrival, by doing five hours on the mountain. This he certainly achieved, but not in the way he had intended. He had taken off on aero-tow at about 10 a.m., and near the top had become worried that he was being towed too near the mountain-side for comfort. He had therefore pulled his glider away from it, but as he was still tied to the tug this had turned the aeroplane's nose further in towards the hazard. Too late, the tug pilot had realised the dangers of the situation and had dropped his end of the rope. A moment later Matthew saw the mountain top rush at him. He too pulled his release and a second later the crash came. There was a stiff breeze blowing up the mountain and the Skylark's airspeed indicator was found stuck registering 70 m.p.h. Flying downwind, it must have struck at nearly 100. This particular mountain is wickedly steep and ridged up to within a quarter of a mile of the summit, but for the last stretch it is a gently rounded slope covered with rough brown tussock grass. Matthew found himself dazed but miraculously conscious, lying with the splintered wreckage all round him. The wind was cold, but the clear New Zealand sun blazed down from the dazzling sky. His back and his ankle hurt pretty badly and he put his hand to his forehead and it came down wet and sticky and red. The straps had broken on impact, and he had been hurled

through the perspex canopy, which had shattered and had gone some way to scalping him. He realised that something must be done if he was not to bleed to death; the central part of the fuselage was quite near and he managed to crawl round it and drag out the first aid kit. He got out the bandage and laboriously wound it vertically round his head and his jaw to hold his scalp in place.

After its release the tug pilot had landed at Omarama, but as soon as he had stopped his engine the realisation of what might have happened came to him; he rushed to the propeller and swung it again, took off and climbed full-throttle back to the point of release. He saw the wreckage, and Matthew, seeing him, gave him a wave. The Tiger Moth streaked away out of sight.

Now Matthew was attacked by a fierce thirst. After the blood he had lost, he realised the vital necessity of a drink. In the splintered cockpit of the glider, next to him, was a bottle of lime juice, but he was quite incapable of standing up to lean inside and get it. He picked up a piece of jagged wood under his hand and banged it against the plywood shell. At the second or third attempt it broke through with a crackling sound, and then occurred the second miracle of the day: the bottle of lime juice lay inside the hole he had made, unbroken. He dragged it out and took a long drink.

Now he had at best a long wait, so he managed to drag a spare coat out of the cockpit and painfully crawled under the remains of a wing, covered himself as well he could, and settled down to wait for rescue. A few minutes later the Tiger again buzzed overhead, but could see no sign of Matthew or of life.

* * *

Down in the gliding camp his friends had sprung to fierce action. New Zealanders know their mountains and they knew that it would require a major effort to beat time if they were to get their friend down to safety before nightfall. Bruce Gillies is fortunately one of the most experienced mountain rescuers in the South Island. All his instincts were to drop everything and lead a party in a wild dash up the mountain. All his training told him that he must stay at base and organise the others. He stayed, and in so doing undoubtedly saved Matthew's life.

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A first party of twenty men set off. It was impossible to make a straight attack up the west-facing slope because from the gliding site a steep ridge ran up to be interrupted by a chasm running athwart the mountain face. So the party set off by Land Rover round the south-western flank and then took to the climb from that direction. Dr. Ferner, carrying his bag, led the way. It is not every doctor that can climb a steep 5,000-ft. mountain in walking shoes and get first to the top, but Ferner did it, in 2½ hours. He found Matthew under the wing and in a couple of minutes realised he would have to be carried down. He diagnosed possibly a broken back, ankle and hip; he dressed the forehead as well as he could. Pre-arranged signals were laid on the ground and seen by the hovering Tiger. Matthew is a big man — he must weigh over 16 stone. Bruce had foreseen all this, and called up an aerial ambulance from Queenstown and in a short time a special stretcher had been dropped beside the waiting group of men.

The route by which they had come was far too steep and rugged for a descent carrying a heavy man on a stretcher, and a second one had been planned, descending the summit of a spur running down to the north-west. The party set off in this direction, but as soon as they left the relatively smooth plateau and started the descent proper they realised that four men on the poles of the stretcher could not possibly hope to carry the burden. A member of the party clambered back to the Skylark and with a saw cut out lengths of the wing-spar; they were lashed to the poles and with eight or twelve men carrying it the descent commenced.

The going was wickedly rough and some of the men's light shoes began to break up. The sun drained the moisture from them and thirst became an increasingly intolerable burden. Matthew had been given one injection of morphia, but refused a second, asking Dr. Ferner to keep it until the pain became insufferable.

The day wore on and complete exhaustion relentlessly stalked the rescue team. Finally they came to the end of the ridge they had been descending and saw that the last thousand feet consisted on each side of a nearly sheer shingle slope. It was utterly impossible in their exhausted condition to hope to get the stretcher, sliding and slipping down the shaly cliff to safety. All seemed lost. The little crawling beetle on the mountainside came to a despairing halt.

At that precise moment there came a hail from below and a second beetle appeared scrambling up the declivity. Bruce Gillies, foreseeing everything, had organised a second rescue team of some twenty men and sent it up to meet the first. Watchers below saw the two insects meet, coalesce, split up again. Over 10 hours after the accident, a weary but triumphant party of nearly fifty men staggered into the yard of Omarama Hotel, where an ambulance waited for the injured man.

Matthew has been deaf since birth, but he can communicate well enough. From his stretcher he pointed at his dusty, parched, exhausted friends standing round him, then at the door to the bar, then to himself. I suspect that with this single gesture of unselfish gratitude each one of his rescuers felt the ardours of the day had been adequately recompensed. As the ambulance disappeared in its cloud of dust down the road to

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Oamaru, they turned into the bar to have the drink which Matthew had offered them.

2. WORLD RECORD

BY 4th January my cold was on the mend, but one's ears do not like rapid altitude changes with a thick head, so I decided against going to the gliding camp, and instead motored down to Oamaru to see Matthew. He was coming along well, nursed by his wife Jan, and in excellent spirit. The day did not look anything special from the gliding point of view (at any rate, to my eye, unversed in the extraordinary atmospheric phenomena of New Zealand), and when I got back in the evening to my cousin's homestead at Irishman Creek I was astounded to hear the news that Dick Georgeson had broken the World Out-and-Return record with a flight in his Skylark 3F of 400 miles, from Omarama north along the famous North-West Arch to Hanmer and back again. God moves in a mysterious way—thank heavens for my cold, which kept me away, for if I had been there Dick would quite certainly have put me in his aircraft for a local flight, and the record would never have been achieved.

The glider site at Omarama is a huge, flat, brown glassy plain, near the head of a valley running out of the S.W. corner of the Mackenzie country. High mountains hedge it in to the west, south and east; to the north the valley runs round a spur of Mount Benmore into the oval Mackenzie basin, surrounded in its turn by a ring of mountains, snow-capped to the west and north-west.

But round Omarama itself the adjacent mountains are not quite high enough for snow in mid-summer, and seem to be made of crinkled brown velvet. In the evening the setting sun lights the sunward slopes to a living golden colour, and the shadowed sides become a true deep purple.

Along the eastern side of the field a small, straight brook of clear sweet water has been cut, and along the back of this is a single line of trees perhaps a mile long. The caravans and tents of the gliding folk are pitched in their shade. At their back the brown mountain springs steeply up into the sky.

On the morning of 4th January, 1962, the pilots were preparing for the day's flying. The conditions did not seem unusual, and Dick Georgeson was planning his flight, when a few minutes before take-off a telegram arrived for him from Fred Dunn in Christchurch reading "Arch to Mt. Torlesse occasional but increasing lenticulars northwards." For long Dick had planned a record out-and-return flight from Omarama along the front edge of this vast wave cloud to its known northern edge at Hanmer, 200 miles away, and back again. Fred's telegram provided the clue to possible success. Dick leaped into action.

His Skylark 3F was a machine specially built for the British Team at the 1960 World Gliding Championships in Germany. After this, I was due to buy it, but just then Dick wanted one, and I transferred my option to him. I have not regretted this, because in January, 1961, he achieved the World Gain-of-Height record with a climb of 34,300 ft. near Christchurch, and in January, 1962, this further World Record also fell to this formidable combination of man and machine.

His aircraft was ready, with two separate oxygen installations and all the equipment needed for a long flight at great altitudes. In fortunate New Zealand, the ether is not over-crowded as elsewhere, and an H.F. radio frequency is reserved for glider pilots. This gives a range of several hundred miles, and so it was possible for the pilot on this flight to remain in contact with his base through-



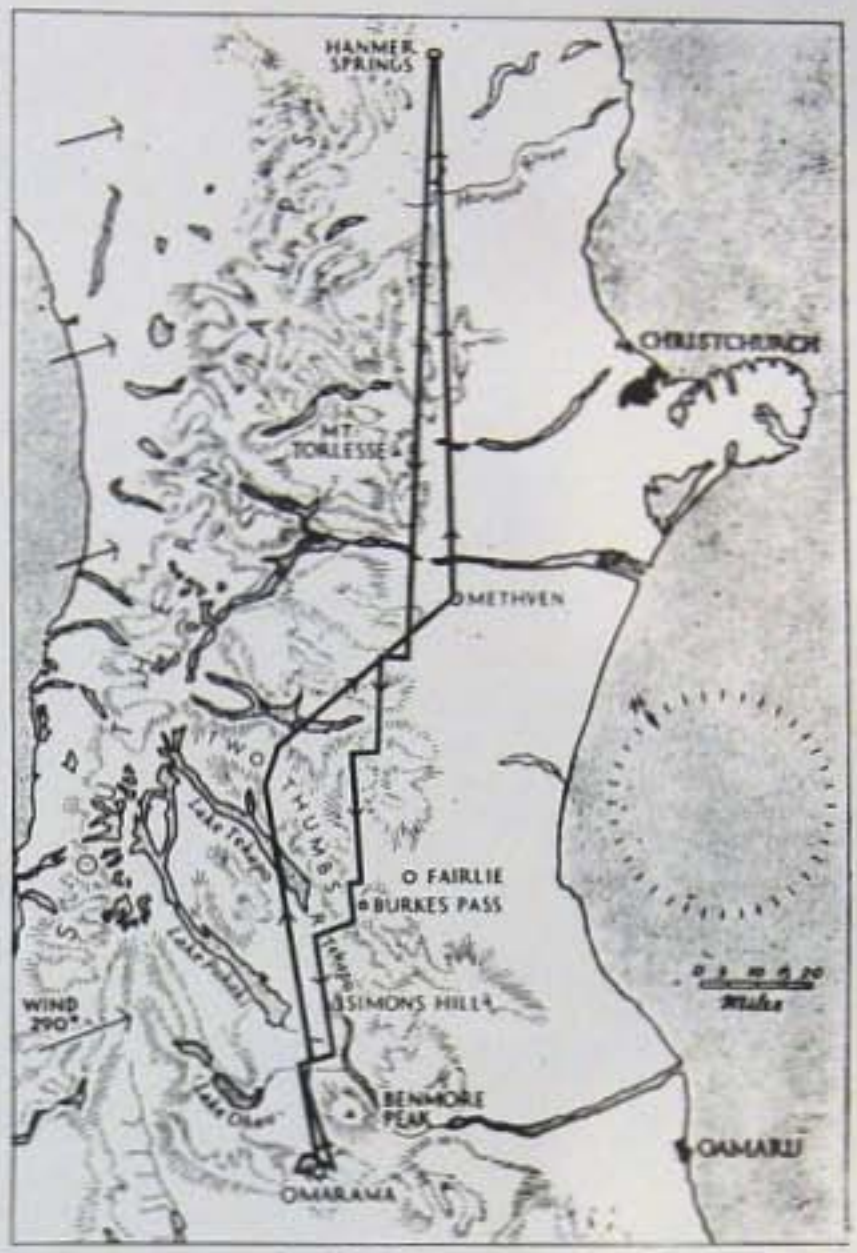
Wave clouds in the Mackenzie Country two days before Georgeson's record.

out, though at one point a second glider, airborne over Omarama, was used as an intermediate re-transmitter.

The most important preparatory task was to arrange for photographic evidence of his declared turning-point at Hanmer. Dick put a new film in his camera, which was then sealed. He then took a photograph of a blackboard having the message: "Ja. 4th, 1962, pilot S. H. Georgeson, Skylark 3F, course Omarama-Hanmer-Omarama". In his haste, he failed to wind on the film correctly, and only a small fraction of the right-hand side of this photograph materialised — but just enough to fulfil the requirements. On such small mishaps may a World Record hang! The subsequent photographs include three taken of the turning point at Hanmer and two final ones of the same blackboard taken that evening, thus locking the film within the time-space of that day.

Dick was eventually towed off at 11.05 hrs., and released 5 miles away at 3,000 ft. The main first problem on these wave-flights is usually to get up through the weak mixed thermal and wave lift to the critical altitude above which the wave takes firm hold of the air. This proved so difficult that on this day Dick alone succeeded and then only after nearly an hour's struggle. Finally, helped by radio advice from Bruce Gillies, who was also struggling in a Skylark 2, he found himself quite suddenly in the typically smooth lift of a wave at 6,500 ft. west of Benmore mountain, climbed rapidly to 14,000 ft. and set off northwards. The three beautiful lakes of the Mackenzie Basin, Ohau, Pukaki and Tekapo, showed up well between the formations of cloud, but all the New Zealand Alps to the west were completely blanked out. In these conditions it was hard to locate lift, but if it became weak, he first turned and flew into wind for a time, and if this failed, he would circle and be carried downwind until he was brought back into the rising part of the wave.

At 20,000 ft. over Irishman Creek he called Bruce Gillies again, who said he was still struggling over Benmore, and then flew on into the never-never country of the Two Thumbs. The wave formation was completely jumbled in this area and the country below absolutely inhospitable. Wind direction was 290° and the



course around 030°, so he decided to do a long glide down-wind to the first of the series of lenticular clouds reported in Fred Dunn's telegram. Sure enough, he found it, over Methven, and at 18,000 ft. ran into smooth wave-lift again.

Now over 100 miles away, he called Bruce Gillies again—Bruce had struggled up to 14,000 ft. and then lost it all again and sounded frustrated in the extreme, but full of encouraging words. He called Christchurch Airport and got clearance to pass through Red I, the airway to Australia, and eventually reached the Hurunui River at 25,000 ft. Ahead he could see the end of the arch and beyond it a low-down sheet of cloud covering the whole northern end of the island. It looked quite possible that Hanmer was just too far north to be visible from above; if it was under this cloud it would, of course, be quite impossible to photograph the turning-point, and the whole enterprise would be vitiated. But fortune (aided by experience) smiled, and the turning-point was just short of the cloud sheet. There seemed no chance of covering the last 25 miles, as the air was clear, but extraordinary luck continued and a lenticular tongue formed

under his starboard wing and kept pace a little ahead of him — a guardian angel leading to his goal.

Two-and-a-half hours after getting away, he photographed Hanmer, having travelled 200 miles — a startling average speed, aided by a favourable wind component and the increased ground-speed achieved at the great altitudes at which he had been flying. The inside of the cockpit was a veritable icebox and he had to prise open the window with his finger-nails to see where he was and to take his photograph. He tried to call up Bruce Gillies again, and also Stewart Cain, who was flying the Eagle. He got no reply, but gave his height and position in case they were still receiving him (which they were).

The return journey was, of course, much harder, with the wind now adverse. Unless he maintained between 80 and 100 m.p.h. he seemed to make little headway; the downdraughts between the waves were up to 3,000 ft. per minute, so in spite of his great altitudes, a single mistake could have had him on the ground in a few minutes. At the southern end of Lees Valley, he again called Christchurch control for clearance. A T.E.A.L. Electra was climbing out to 24,000 ft. By now the Skylark was at 28,000 ft., so obviously the Electra was in no hazard.

He was beginning to feel the need for food. On a flight a few weeks before he had taken a thermos-flask of hot coffee, but the low pressures at altitude had caused the cork to lift, and the coffee had frozen solid and hence been useless. So on this occasion he had taken a bottle of lemonade and some sandwiches. Both were useless — the lemonade a mass of ice-crystals and the sandwiches triangles of frozen rock. In the rush of the take-off he had not put on his full kit and the combination of cold and hunger began to present a serious hazard. The sun shining through the canopy keeps one's body warm enough, but not the feet, and after the loss of all sensation in one's feet, there is nothing to warn whether or not frostbite has set in.

About now, at an altitude of over 28,000 ft., he began to feel decidedly odd; he found himself busy trying to call Omarama, but on the Christchurch tower frequency. His previous experience immediately led him to suspect anoxia, and a glance at his blue finger-nails confirmed the suspicion. He grabbed the oxygen valve and found himself turning it the wrong way — to the "off" position. The shock of this realisation aroused him; he turned it full on, took several deep breaths, then opened his air-brakes and dived down to 25,000 ft. and promptly felt better. Investigation showed that his oxygen mask was not fitting tightly, having lost much of its elasticity in the cold.

Six hours after take-off he was over Staveley. The cirrus arch was now above him, cutting off the sun, and the cold was intense. He found himself rubbing first one leg and then the other, muttering "The cruel cold, the cruel cold". This kind of flight can be a solitary experience, for the sky is so vast and one is so insignificantly embedded in it.

Now he had to move to the west, upwind, and so leave the comforting line of the wave he had been following for over 100 miles. He dived into wind, found the next wave at 18,000 ft. and repeated the manoeuvre a second time. At 18.00 hours he was half-way across the Fairlie Basin at 13,700 ft. In most

THE BRITISH GLIDING ASSOCIATION

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parts of the world this would indeed be a comforting height, but not in these great wave systems. He thought of abandoning the record attempt, running comfortably along the wave and landing at Timaru with his 500 km. easily in the bag. But World Record winners are made of sterner stuff than that. He rejected the temptation and, although there seemed no visible support to the south, he set off on course and arrived over Burke's Pass at 12,000 ft. At 10,000 ft. over the Tekapo River he encountered unmarked and entirely unexpected lift and for the first time in the whole flight realised that there might be a chance of success.

At 19.00 hours he was past Simons Hill at 12,000 ft. and had only to make a final up-wind dog-leg into just one more wave, when he could turn along it and it would lead him back to his starting point. Marking its position was a roll-cloud, that indication of the violent turbulence that frequently underlays wave systems. The Skylark crept up behind it, and suddenly the thrashing came. The aircraft bumped and banged, wings veering and clawing the insane air. His camera hit the cockpit roof with a bang magnified by the cramped size of the cockpit.

But Dick was ready for this; he put up his speed to the maximum permitted in rough air, and suddenly was through it and at 8,000 ft. found himself rising, swiftly and smoothly. At this moment he knew he had won the day.

It was now 19.30 hours. He had eaten nothing all day and was feeling cold and sick. But he reached Omarama at 10,000 ft. and touched down shortly afterwards with all the camp surrounding the aircraft. Since they had heard his transmissions throughout the entire flight and there had been silence for the last half-hour, the excitement when he landed victoriously can be imagined.

Bruce Gillies expressed his mixed emotions of congratulation and frustration by seizing Dick and ducking him in the creek, whereupon the entire camp threw themselves on Bruce and reciprocated the operation. But Bruce put himself to rights the very next day when in the high wind and almost total cloud-cover he set off and triumphantly achieved his Gold C in his Skylark 2.

These were great days.

The R.A.F.G.S.A. Easter Qualifying Contest

by Wally Kahn

THE R.A.F. Gliding and Soaring Association held its Easter Contest from 14th to 23rd April at the R.A.F.G.S.A. Gliding Centre situated at Bicester Aerodrome some 12 miles north of Oxford. The purpose of the Competition was to give pilots a chance to better their position on the rating list, to select the Nationals Competition pilots and to give as much practice to all of them as possible.

The ground organization was run by the G.S.A. Chairman, Group Captain Roy Goodbody. Sqdn. Ldr. Norman Maygothling was Chief Ops. Officer, Flt. Lt. Brian (BeBe) Sharman was in charge of Tugs (Chipmunks and a Tiger Moth) and Master Pilot Ken Poole acted as Chief Marshal (and barman). Those two splendid Met. men, Peter Deeks and Laurie Davies, forecast for most of the time. The task-setting was done by David Ince and Wally Kahn.

The weather was almost disastrous. The first (practice) day proved to be the day of days when Alf Warminger flew 500 km. Most crews were still arriving and only a few pilots set off on 300-km. attempts. The only one to make it was C.P.O. Holding of the Royal Naval G.S.A., who landed at his goal (Perranporth) in a Skylark 2. "They treated me like a pundit when I landed," he said afterwards, "that is, until Warminger arrived from Norfolk — then I became just another Gold Distance!" Such is Gliding. It was ever thus.

SUNDAY.—Weather foul. Task: fettling.

MONDAY.—Weather foul. Task:

fettling.

TUESDAY.—Weather forecast marginal and fluky. Non-contest task, goal race to Duxford, 50 miles. Only Joe Croshaw made it; no one else scored.

WEDNESDAY.—Weather foul. Task: stick pins into task-setters.

THURSDAY.—Weather forecast again marginal and fluky. As the wind was southerly, we again set a non-contest task: Free Distance, excluding an arc which enclosed the Birmingham Control Zone. David Cretney flew 100 miles, George Coatesworth 65 miles, and a whole gaggle 45 miles or under. Waste of a day as it turned out — explanations follow at the end of this great work.

FRIDAY.—Weather foul. Task: stick more pins into task-setters.

SATURDAY.—Weather foul. Task: hang Met. men (this day they went home).

SUNDAY.—Weather (from Wally Wallington by phone from the Mynd) glorious. Task: Out-and-Return race to Netheravon; distance, 104 miles. Wally forecast 4/8 Cu at 3,500 feet, tops 6,000, occasional 10,000 feet. Actual 0.00001/8 Cu at 4,400 feet, tops 4,400 feet. (Met. forecasting is not an exact science.) Very hard work, struggle, struggle, fumble, fumble. Thirteen made it, including three "cooking" Olympias. John Williamson arrived home last (he had two false starts and landed back before finally getting away), clearing the hedge at minus two feet, landing down wind. The day before, he had given a lecture on final glide computers: "I have built into the device a safety factor of 500 feet." Boy, that computer sure is a crazy mixed-up kid. My computer is better: target above the nose — undershoot; target below the nose — overshoot, or stall! Tony Deane-Drummond first, John Willie second.

MONDAY.—Weather foul. Task: Out-and-Return race to Pershore, 84 miles. Wally Wallington forecast 4/8 cover (cirrus), weak thermals and 15-knot winds from the south. By first take-off (12.00 hrs.) we had 8/8 cover, 15-knot winds easterly. Wonderful. All you need is one weak thermal, stay with it and drift downwind to Pershore at 15 knots. John Willie first off — stays up. Marvellous. Next few guys come straight down. Next batch stay up — everybody stays up. Struggle, struggle, some land, some nearly land and — Hey Presto — get half-way and the cloud cover disappears. Reach turning-point. Write down markers and time. Point nose into wind, eat sandwich. Relax. Look out of cockpit and what do we see? The turning-point is upwind of us! Cor! Whoopee thermal! Circle. Look out. What do we see? Turning-point a long way up wind. Down with the nose, up with the sink and what do we see? Eight-mile traffic jam in Evesham (very near—vertically). Big struggle home. The Dean and John Willie make it (of course). David Cretney two miles short, Wally Kahn five miles short. The others strung along the route (both directions). End of contest.

So much for the flying. Now for the other. The Rating Scheme is hell! Numerous aspects of the scheme came to light; but, as we want to discuss them with the B.G.A. Flying Committee first, I will not elaborate at the moment. It is sufficient to say at this stage that if the marks gained at Regional Competitions affect pilots' entries into the Nationals, then minimum standards for weather, task-setters, etc., will have to be laid down. In addition to this it would appear to be nonsense that League One pilots flying in Qualifying Competitions in handicapped machines should receive a bonus which affects their Rating position when in fact League One pilots do not receive any handicap in the Nationals. Won't some mathematical pundit please devise some other rating scheme?

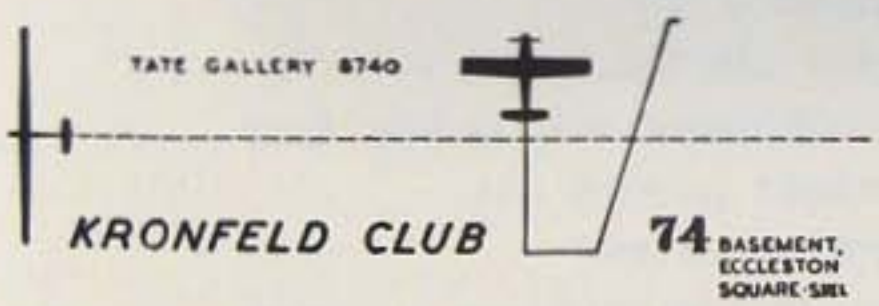
Finally, I pity Met. men; their job is impossible; they are told when they learn to be forecasters that they must never make the cardinal error of looking out of the window. However, Wally is undoubtedly the best one we have and I would recommend Peter Deeks to all gliding folk as someone who is jolly good and understands our problems. The conditions we had, however, made life impossible for them and with "Lows" sitting around England like Ban-the-Bomb sitters in Trafalgar Square.

One of the fairly obvious lessons learnt from Bicester is that if any pilot wants to get into the Nationals, he must get himself an 18-metre glider or a laminar-flow 15-metre if he wants to get fairly high marks.

RESULTS

Name	Aircraft	1st Day (handicapped)	2nd Day (handicapped)	Marks (handicapped)	Position (handicapped)	Marks (unhandicapped)	Position (unhandicapped)
Dean-Drummond	Oly 419	1,000	1,000	2,000	1	2,000	1
Williamson	Oly 419	998	993	1,991	2	1,991	2
Kahn	Skylark 3B	869	725	1,594	3	1,594	3
Cretney	Oly 419	832	750	1,582	4	1,582	4
Gough	Ka 6	928	619	1,547	5	1,407	5
Dawson	Oly 2B	841	525	1,366	6	1,139	6
Hanneman	Oly 2B	904	330	1,234	7	1,029	7
Ince	Oly 460	868	14	882	8	802	10
Coatesworth	Oly 403	840	13	853	9	853	8
Delafield	Oly 2B	848	0	848	10	707	12
Crowshaw	Skylark 3B	846	0	846	11	846	9
Innes	Skylark 2	765	0	765	12	695	13
Dunn	Skylark 3F	745	0	745	13	745	11
Warwick-Fleming	Oly 2B	192	346	538	14	448	16
Kearon	Skylark 3B	223	288	511	15	511	14
Kurylowicz	Oly 2B	151	346	497	16	413	17
Bayley	Skylark 3F	183	275	458	17	458	15
Chandler	Gull 4	0	420	420	18	350	18
Austin	Oly 2B	0	330	330	19	275	19
Bacon	Eagle	94	0	94	20	85	20
Newall	Oly 2B	0	30	30	21	25	21
Loveland	Oly 401						
Eldridge	Oly 2B						
Pickles	Oly 2B						
Spottiswood	Oly 2B						

Did not score.



FOLLOWING the success of the pre-soaring series of lectures and in response to requests, the Club hopes to run, during May and early June, a short series of four lectures on elementary meteorology. These will take place on Monday evenings, and further details may be obtained from Mrs. Bonham, 14, Little Brownings, London, S.E.23 (Tel. FORest Hill 9390).

The fifth Exhibition of Aeronautical Paintings and Drawings will be held in the Club from 14th-23rd November. Now is the time to start painting and drawing and enter your exhibit in the competition, which is run in conjunction with the exhibition. Further details and entry forms from the organiser, Mrs. Bonham.

The Photographic Competition, which the Club hopes might become a permanent feature, is being organised by Jill Walker, and it will be held from 3rd-12th October. The competition will be divided into two sections, i.e., black and white and colour, and the rules will be published shortly. C.T.

Diary of Lectures and Film Shows
Wednesday evenings at 8 p.m.

June 6. Colour films, "Carrier Action off Korea," "Countdown for Polaris."
" 13. Informal reports on the Nationals and film.
" 20. (Provisional) Talk on Aircraft Braking.
" 27. "Desert Victory," actual film of Rommel's defeat in Africa.
July 4. Talk by the National Champion in each League. (Members are invited to bring slides.)
" 11. Leslie Howard, David Niven and Rosamund John in "First of the Few".

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British Gliding Association

NATIONAL GLIDING CHAMPIONSHIPS 1962

R.A.F. ASTON DOWN, GLOS.
(By permission of the Air Council)
2nd-11th JUNE

ORGANISED BY THE R.A.F. GLIDING AND SOARING ASSOCIATION
and the
BRITISH GLIDING ASSOCIATION

To be opened by THE SECRETARY OF STATE FOR AIR
THE RT. HON. JULIAN AMERY, M.P.
at 12 noon on Saturday, 2nd June

OFFICIALS

STEWARDS: Mrs. C. Orde, E. J. Furlong, B. A. G. Meads, F. N. Slingsby, Lt.-Col. D. H. Tapp

CLERK OF THE COURSE: Mrs. Ann Welch

CHIEF MARSHAL: Flight Lieutenant A. Ross

DEPUTY CHIEF MARSHAL: Squadron Leader E. Morris

CHIEF CONTROLLER: Squadron Leader N. Maygothling

I/C SCORERS: R. Harper

CIVILIAN TUG MANAGER: L. J. Brock

R.A.F TUG FLIGHT COMMANDER: Flight Lieutenant B. Carroll

I/C OFFICIAL OBSERVERS: A. Speechley

DISTANT MARSHAL: R. Bishop

TASK SETTER: Mrs. Ann Welch

METEOROLOGISTS: C. E. Wallington, P. G. Wickham

I/C TIMEKEEPERS: Kathleen Ramsdale

PRESS OFFICER: P. Hutchings

OFFICER COMMANDING R.A.F.: Group Captain R. R. Goodbody

OFFICER IN CHARGE ADMIN.: Group Captain P. A. Cooper

CAMP COMMANDANT: Squadron Leader D. Barrett

CIV. ADMIN. LIAISON OFFICER: Flying Officer D. King

EQUIPMENT OFFICER: Flying Officer J. B. Ashall

SECRETARY, BRITISH GLIDING ASSOCIATION: Miss Frances Leighton

The Organisers wish to thank the many helpers not listed above who have given up a great deal of time, or are devoting their annual holiday, to making the Championships a success.

Soaring Weather

MANY people seem to think that in order to stay up in a glider there must be a wind blowing, and that the stronger the wind the easier it is to soar. This is only true for soaring along a hill. The soaring in these Championships is done by using thermal upcurrents, and it is not necessary for the wind to blow at all.

Thermal upcurrents are bubbles of air which get warmer than the air surrounding them, and sail upwards like invisible hot air balloons. Air which is lying over towns, villages and cornfields warms up more quickly than the air over woods and lakes, and as it warms it expands, becomes lighter and more buoyant, and starts to rise. These bubbles of air go on rising until they have cooled down again to the same temperature as the surrounding air, or until they come up to a layer of air which for some reason is warmer than the air below it—such a layer of air is called an "inversion".

If the thermals are composed of moist air, they will form cumulus clouds, which make very useful signposts for the glider pilot, quite apart from the fact that he can climb up into the cumulus and gain extra height.

The glider pilot flies across country by finding these thermal currents and circling round and round in them while they carry the glider up.

At the top of each thermal the glider pilot stops circling and flies towards his destination, looking for another thermal in which to circle up again. If he fails to find one, he will have to land and the flight is at an end.

The glider pilot can, of course, fly down wind, across wind, or into wind as he wishes, but as with a little boat trying to go against a strong tide, it is seldom worthwhile trying to fly a glider against a strong wind or a gale, as it will take many hours to go only a few miles.

All the flights in these Championships will be made using thermals and cumulus clouds. Usually in England the height of the base of the cumulus at this time of year is between 3,000 and 5,000 feet, and it is possible to use them from about 10 a.m. to 7 p.m. if the conditions are good.

Some Random Facts About Gliding

MOST people know how an aeroplane flies; that the wings support the aircraft, while the power of the engine pulls it along. A glider flies in exactly the same way, except that instead of an engine the glider uses the pull of gravity to provide the forward speed to enable it to go on flying. As long as the glider goes on gliding downhill, it continues to fly and be controllable. Clever design enables the gliding angle to be flat, so that the glider can go a long way while only coming down very slowly. A gliding angle of 1 in 30 means that from 5,280 ft. up the glider in still air will fly 30 miles before reaching the ground.

Fewer people, however, understand about soaring. When a glider flies into air that is rising, it is carried bodily upward, although it is still flying at the same speed and attitude that it was previously. The glider will rise, or soar, whenever the air in which it is flying is rising faster than the glider is gliding down.

Gliders cost between £500 and £1,800 each. Very roughly the cost works out at £2 per lb. weight. Ordinary cars cost about 5s. per lb. weight.

Notes on Aircraft

Size. Most single-seater gliders are between 45 and 60 ft., while two-seaters are between 55 and 60 ft.

Weight. The Empty weight ranges from about 350 lb. for the small single-seaters to over 800 lb. for some of the two-seaters. These weights are comparable with those of medium-sized motor-cycles and three-wheeled cars.

Materials of Construction. All the gliders are made of wood. This is usually spruce, with birch or gaboon plywood covering. The skids are made of ash. The wings, and in some cases the fuselages, are covered with a light cotton fabric, similar in texture to a man's handkerchief: this is made taut with a cellulose dope. Fibre glass is being used more and more in gliders, particularly for cockpits and interior fittings. Eagles and Skylarks have fibre glass noses.

Performance. Unlike most vehicles, where the performance is associated with how fast they will go, the important aspects of a glider are how slowly it will descend through the air, and at how flat an angle it can glide. The best gliders descend about 120 feet per minute, while some of the less streamlined aircraft have a "sinking speed" of about 200 feet per minute. The Skylark 4 and Olympia 419 probably have the best gliding angle, about 1 in 32. That of the two-seater T-21b is about 1 in 20.

Instruments. Most gliders are equipped with parachutes and such instruments as Air Speed Indicator and Altimeter, which record the height, and a sensitive climb and descent gauge called a Variometer. Some gliders are fitted with oxygen and radio.

Colour. Gliders are painted bright colours because, besides looking attractive, it makes the aircraft easily visible and thus reduces the chance of collision.

There are about 5 foreign-built gliders flying in the Championships.

AWARDS AND PRIZES

1.—The 1962 British National Championships will be the pilots (P 1) of the Open and Standard Class Gliders in League 1 which amass the greatest number of points during the competition; provided that if the top glider in either class scores less than 80 per cent of the winner's points there will be no champion in that class.

2.—The winner of Leagues 1 and 2 will be the entrant of the gliders which amass the greatest number of points during the competition in each League.

3.—A prize will be awarded to the best team entry in League 2.

4.—Prizes will be awarded to the first three competitors in each League.

5.—Additional prizes may be announced by the Organisers.

NATIONAL GLIDING CHAMPIONSHIP AWARDS

THE KEMSLEY CUP	To the Gliding Club whose glider has the highest placing in either League 1 or League 2.
THE LONDONDERRY CUP ...	To the winner of the individual championships in League 1.
THE L. DU GARDE PEACH TROPHY	To the winner of the team championships in League 1.
THE FURLONG TROPHY ...	To the winner of the individual championships in League 2.
THE FIRTH VICKERS TROPHY	To the winner of the team championships in League 2.
THE EON CUP	For competition among entrants of whichever type of British-built glider is numerically the strongest in both Leagues, awarded to the entrant of the glider of that type having the highest placing in either League.
THE SLINGSBY TROPHY ...	For competition among entries of whichever type of two-seater glider is numerically the strongest in both Leagues, awarded to the pilots of the glider of that type having the highest placing in either League.
THE PAN AMERICAN TROPHY	To the British National Champion Standard Class.

YEARLY AWARDS

The following Cups and Trophies are also open to Competition by British Nationals for the year ending 31st December for flights starting in the U.K. :—

DE HAVILLAND CUP	For the greatest gain in height.
MANIO CUP	For the longest goal flight, made either : (i) in a straight line, or (ii) dogleg of not more than three legs.
WAKEFIELD TROPHY	For the longest flight, made either : (i) in a straight line, or (ii) in a broken line of not more than three legs, of which all but the last leg must be at least 80 kms.
VOLK CUP	For the longest goal and return flight.
SEAGER CUP	For the best two-seater performance.
DOUGLAS TROPHY	Awarded to the Club putting forward three flights by three different Club members in Club aircraft, aggregating the largest total cross-country mileage.
CALIFORNIA IN ENGLAND TROPHY	Awarded to a woman pilot for the longest flight.
FRANK FOSTER TROPHY ...	For the fastest speed round a 100 km. triangle.
ROBERT PERFECT TROPHY ...	Awarded to the Club with over 50 flying members with the highest proportion of B.G.A. categorised instructors to flying members.
PILCHER TROPHY	For the longest goal flight to Lord Braye's Estate, Stanford Park. Lord Braye has announced, with regret, that no further flights should take place until notice is given that they may be resumed.

THE
Bristol Gliding Club Pty. Ltd.

(Member of the British Gliding Association)

NYMPSFIELD, Nr. STONEHOUSE GLOUCESTERSHIRE

Telephone: ULEY 342

The Club is comprised of a group of people of all ages and many occupations who have been brought together by their enthusiasm for the sport of gliding. Many of them reside in or near Bristol; others live quite close to the flying field, but some travel from places as far as Cardiff and Bournemouth.

We can offer members full facilities, including a fine Club House with bar, kitchen, restaurant and dormitory. The aircraft fleet includes two Slingsby two-seaters for training plus Prefect, Swallow, Olympia and Skylark 2. A Tiger Moth is operated for Aero Towing.

HOW TO JOIN THE CLUB

Applications for annual membership should be sent to:

The Honorary Membership Secretary, Bristol Gliding Club Nympsfield, Nr. Stonehouse, Gloucestershire

Enquiries regarding the Summer courses should be sent to the Hon. Course Secretary at the same address. It is advisable to book early in the year. Short-term membership matters are dealt with at the Club.

HOW TO REACH THE CLUB

The entrance to the Club's field is on the B.4066 road from Stroud to Dursley, some four miles from Stroud. Bristol No. 63 buses (Dursley—Cheltenham) pass the gate approximately every two hours.

Entries in LEAGUE ONE

Contest No.	*Pilot(s)*	*Glider*	*Entrant or Owner*
1	P. A. Wills	Skylark 4	Private Owner
3	A. Coulson	Olympia 460	Private Owner
4	W. A. H. Kahn	Skylark 3B	Private Owner
8	G. H. Stephenson	Skylark 3F	Private Owner
9	C. A. P. Ellis	Skylark 3	London G.C.
10	P. M. Scott	Olympia 419x	Private Owner
11	B. J. Davey, R. T. Cole	Eagle	Private Owner
16	J. G. Croshaw	Skylark 3B	R.A.F.
18	C. Green	Skylark 3F	Private Owner
19	Anne Burns	Skylark 3B	Private Owner
20	D. D. Carrow	Skylark 3B	Private Owner
33	K. R. Aldridge, D. W. Corrick	Skylark 2C	R. H. Perrott & Ptns.
36	R. A. Mann	Skylark 4	Private Owner
42	D. A. Smith	Skylark 3B	Private Owner
44	A. H. Warminger	Olympia 419	Private Owner
45	R. E. Dunn	Skylark 3F	R.A.F.
52	E. G. Shephard	Skylark 3F	Army G. Association
60	D. M. Kaye	Eagle 3	Private Owner
65	H. S. Mettam, Rika Harwood	Skylark 3B	Private Owner
67	G. E. Burton	Skylark 3B	R. Prestwich & Ptns.
72	A. J. Deane-Drummond	Olympia 419	Army G. Association
73	N. W. Kearon	Skylark 3B	R.A.F.
75	H. C. N. Goodhart	Olympia 419	H. C. G. Buckingham
86	J. S. Williamson	Olympia 419	R.A.F.
90	G. Coatesworth	Olympia 403	R.A.F.
100	D. H. G. Ince	Olympia 460	Elliott's, of Newbury
139	P. G. Burgess	Skylark 3G	Private Owner
150	H. R. Dimock	Skylark 3F	Private Owner
160	D. B. James	Skylark 3F	Private Owner
161	C. Bentson	Skylark 3F	Private Owner
175	A. W. Gough	Ka 6	R.A.F.
177	M. C. Fairman	Skylark 3	Private Owner
180	J. D. Jones	Skylark 3F	Private Owner
181	A. D. Piggott	Olympia 463	A. Schmidt
190	E. Stark	Skylark 3F	Army G. Association
200	J. S. Fielden	Skylark 3	Private Owner
205	F. D. Cretney	Olympia 419	R.A.F.
233	J. L. Bayley	Skylark 4	R.A.F.
266	F. J. Irving A. J. Stone	Skylark 4	Private Owner
Hors Concours.			
	S. Skrzydlewski	Foka	Polish Aero Club

Entries in LEAGUE TWO

Contest No.	*Pilot(s)*	*Glider*	*Entrant or Owner*
2	I. Paul	Skylark 2	Dr. Kiloh & Ptns.
12	P. Goldney, J. A. Evans	Skylark 2	Army G. Association
13	G. W. Mackworth-Young, R. E. F. Smith	Skylark 3G	Private Owner
14	R. H. Perrott, G. F. Fisher	Olympia 2	Bristol G.C.
34	R. D. Dickson	Gull 4	Private Owner
37	J. B. Jefferson	Skylark 3B	Private Owner
40	T. A. McMullin	Olympia 2	Private Owner
41	R. Rutherford	Skylark 2	Private Owner
48	R. I. Tarver, A. Findon	Olympia 463	F. Wright & Ptns.
55	G. S. Neumann, R. G. James	Eagle	Cambridge Univ. G. C.
58	S. M. Morison, F. W. L. Shepard	Eagle	Army G. Association
68	R. T. Willbie	Skylark 3B	Private Owner
70	H. N. Gregg, M. S. Hunt	Skylark 3B	Private Owner
71	B. Thomas, J. Tweedy	Sky	Private Owner
74	G. McA. Bacon	Eagle	R.A.F.
78	P. E. Collier, A. O. Sutcliffe	Skylark 2	Bristol G.C.
81	D. W. Stowe, P. R. Philpot	Skylark 2	Private Owner
89	A. S. Loveland	Olympia 401	R.A.F.
91	A. Doughty	Jaskolka	Private Owner
96	P. Minton, R. Martin, C. Mingo	Eagle	Imperial College G.C.
103	G. T. Collins	Skylark 3F	Private Owner
113	J. R. Chandler, P. Dawson	Olympia 2	R.A.F.
115	A. Pickles, A. Eldridge	Olympia 2	R.A.F.
132	J. D. Spottiswood	Skylark 3B	R.A.F.
146	K. Newholme	Skylark 3F	R.A.F.
147	D. Kerridge, A. Purnell	Skylark 3F	Surrey G.C.
148	C. Wills	Skylark 2	Surrey G.C.
165	I. W. Strachan	Skylark 3B	R.A.F.
168	D. C. Snodgrass	Skylark 3F	Private Owner
173	M. Bird, D. M. Riddell	Skylark 3F	Private Owner
176	V. C. Carr, D. Cunningham	Skylark 3B	Coventry G.C.
179	R. Stafford Allen, R. Conant	Eagle 3	London G.C.
187	G. R. Whitfield, A. Alexander	Olympia 460	Cambridge Univ. G.C.
196	R. G. Procter, J. E. Torode	Bocian	R.A.E. G.C.
201	K. W. Blake, H. U. Midwood	Olympia 2	Private Owner
207	P. Hanneman, D. F. Innes	Skylark 2	Fulmar R.N.G.S.A.
210	F. A. O. Gaze	Ka 6	Private Owner
222	L. Kurylowicz, E. Jerzycki	Mucha Standard	Polish A.F.A.
231	J. Delafield	Olympia 463	R.A.F.
Hors Concours.			
	A. Heinzl, T. Evans	Ka 7	Dublin G.C.

INTERNATIONAL GLIDING RECORDS

Single-Seaters

DISTANCE	R. H. Johnson (U.S.A.) 535.2 miles (5.8.51)
HEIGHT GAIN	P. F. Bikle (U.S.A.) 42,303 ft. (25.2.61)
ABSOLUTE ALTITUDE	P. F. Bikle (U.S.A.) 46,267 ft. (25.2.61)
GOAL FLIGHT	M. Veretennikov (U.S.S.R.) 443.7 miles (18.6.60)
GOAL AND RETURN	D. Georgeson (New Zealand) 400 miles (4.1.62)
100-KM. TRIANGLE	M. Veretennikov (U.S.S.R.) 69.2 m.p.h. (6.5.60)
200-KM. TRIANGLE	R. E. Schreder (U.S.A.) 66.98 m.p.h. (6.8.59)
300-KM. TRIANGLE	R. E. Schreder (U.S.A.) 60.14 m.p.h. (7.8.59)

Multi-Seaters

DISTANCE	V. Ilchenko & G. Petchnikov (U.S.S.R.) 515.6 miles (26.5.53)
HEIGHT GAIN	L. E. Edgar & H. E. Klieforth (U.S.A.) 34,425 ft. (19.3.52)
ABSOLUTE ALTITUDE	L. E. Edgar & H. E. Klieforth (U.S.A.) 44,255 ft. (19.3.52)
GOAL FLIGHT	V. Ilchenko & passenger (U.S.S.R.) 377.7 miles (18.6.60)
GOAL AND RETURN	H. Zydorczak & passenger (Poland) 321.7 miles (6.7.59)
100-KM. TRIANGLE	V. Ilchenko & passenger (U.S.S.R.) 59.71 m.p.h. (13.7.60)
200-KM. TRIANGLE	H. C. Ross & H. E. Jensen (U.S.A.) 50.64 m.p.h. (12.8.58)
300-KM. TRIANGLE	H. C. Ross & P. E. Wilson (U.S.A.) 51.17 m.p.h. (13.8.58)

BRITISH NATIONAL RECORDS

British National records can be set up by citizens of the United Kingdom in any country. The following single-seater British National records were set up overseas: Distance, France; Absolute Altitude, U.S.A.; Goal and Return, South Africa; 300-km. Triangle, Australia.

	Single-Seaters	Multi-Seaters
DISTANCE	G. A. J. Goodhart 384 miles	L. Welch & F. G. Irving 254 miles
HEIGHT GAIN	G. J. Rondel 29,100 ft.	A. D. Piggott & B. Whateley 15,240 ft.
ABS. ALTITUDE	H. C. N. Goodhart 37,050 ft.	
GOAL FLIGHT	H. C. N. Goodhart 360 miles	W. A. H. Kahn & J. S. Williamson 194 miles
GOAL AND RETURN	D. Burns 353 miles	F. A. O. Gaze and Rosemary Storey 170 miles
100-KM. TRIANGLE	A. J. Deane-Drummond 47.5 m.p.h.	D. B. James & D. Marshal 35 m.p.h.
200-KM. TRIANGLE	Anne Burns 49 m.p.h.	F. A. O. Gaze and Rosemary Storey 27.5 m.p.h.
300-KM. TRIANGLE	G. A. J. Goodhart 48 m.p.h.	

UNITED KINGDOM RECORDS

United Kingdom records can be set up by pilots of any nationality with flights starting from the U.K. All the following holders are U.K. citizens:

	Single-Seaters	Multi-Seaters
DISTANCE	H. C. N. Goodhart 360 miles	L. Welch & F. G. Irving 254 miles
HEIGHT GAIN	G. J. Rondel 29,100 ft.	A. D. Piggott & B. Whateley 15,240 ft.
ABS. ALTITUDE	G. J. Rondel 30,500 ft.	
GOAL FLIGHT	H. C. N. Goodhart 360 miles	W. A. H. Kahn & J. S. Williamson 194 miles
GOAL AND RETURN	A. J. Stone 222 miles	F. A. O. Gaze & Rosemary Storey 170 miles
100-KM. TRIANGLE	F. Foster 46.3 m.p.h.	D. B. James & D. Marshall 35 m.p.h.
200-KM. TRIANGLE	A. J. Stone 40.5 m.p.h.	F. A. O. Gaze & Rosemary Storey 27.03 m.p.h.

United Kingdom Records — continued

300-KM. TRIANGLE	H. C. N. Goodhart 41.2 m.p.h.	
100-KM. GOAL	D. Goddard 67.2 m.p.h.	D. B. James & K. O'Riley 60 m.p.h.
200-KM. GOAL	H. C. N. Goodhart 58.8 m.p.h.	J. S. Williamson & D. Kerridge 34.9 m.p.h.
300-KM. GOAL	E. A. Moore 57.4 m.p.h.	W. A. H. Kahn & J. S. Williamson 43 m.p.h.
500-KM. GOAL	H. C. N. Goodhart 56.4 m.p.h.	

WOMEN'S RECORDS: SINGLE-SEATER

International

DISTANCE	Olga Klepikova (U.S.S.R.) 465.5 miles (6.7.39)
HEIGHT GAIN	Anne Burns (U.K.) 30,000 ft. (13.1.61)
ABSOLUTE ALTITUDE	Betsy Woodward (U.S.A.) 39,994 ft. (14.4.55)
GOAL FLIGHT	Pelagia Majewska (Poland) 349 miles (30.8.59)
GOAL AND RETURN	Anne Burns (U.K.) 268 miles (9.1.61)
100-KM. TRIANGLE	Anna Samossadova (U.S.S.R.) 57.85 m.p.h. (27.6.60)
200-KM. TRIANGLE	Anne Burns (U.K.) 49 m.p.h. (11.1.61)
300-KM. TRIANGLE	Anne Burns (U.K.) 42 m.p.h. (8.1.61)

	British National	United Kingdom
DISTANCE	Anne Burns 325 miles	Anne Burns 282 miles
HEIGHT GAIN	Anne Burns 30,000 ft.	Anne Burns 16,750 ft.
ABSOLUTE ALTITUDE	Anne Burns 35,000 ft.	Anne Burns 18,400 ft.
GOAL FLIGHT	Ann Welch 328 miles	Anne Burns 194 miles
GOAL AND RETURN	Anne Burns 268 miles	Anne Burns 94 miles
100-KM. TRIANGLE	Anne Burns 37.3 m.p.h.	Anne Burns 37.3 m.p.h.
200-KM. TRIANGLE	Anne Burns 49 m.p.h.	Anne Burns 32.6 m.p.h.
300-KM. TRIANGLE	Anne Burns 42 m.p.h.	Anne Burns 27.6 m.p.h.
100-KM. GOAL	Rika Harwood 51.6 m.p.h.	Rika Harwood 51.6 m.p.h.
200-KM. GOAL	Anne Burns 42.3 m.p.h.	Anne Burns 42.3 m.p.h.
300-KM. GOAL	Anne Burns 39.7 m.p.h.	Anne Burns 39.7 m.p.h.
500-KM. GOAL	Ann Welch 41.45 m.p.h.	

DURATION RECORDS

These are no longer recognised. Some world records of historical interest, together with the last ones to be set up, are given below.

Single-Seater		Multi-Seater	
1911	O. Wright (U.S.A.) 9 m. 45 s.	1938	W. B. Murray & J. S. Sproule (U.K.) 22 hrs. plus.
1922	A. Martens (Ger.) 1 hr. 6 m.		
1922	A. Maneyrol (in U.K.) 3 h. 21 m.	1952	Carras & Branswick (France) 53 hr. 4 m.
1952	C. Atger (France) 56 hr. 16 m.		

ACKNOWLEDGEMENTS

THE generous assistance given by the following organisations, firms and individuals, whether by gift, loan or personal service, to further the success of this gliding contest, is hereby gratefully acknowledged.

The Air Council
The Air Officer Commanding in Chief, Flying Training Command
The Station Commanders
R.A.F. Little Rissington
R.A.F. South Cerney
Meteorological Office
Police
St. John Ambulance
Royal Automobile Club
Bristol Gliding Club

Learning to Glide

THERE are many different reasons why people start flying gliders. For some it is merely a cheap way to eventually flying aeroplanes; for others it is a means of getting into the air which is less noisy, or nearer their home than a flying club, or by which they can solo at 16 instead of 17. But for most people the reason that they continue to go on flying gliders is invariably not the often mundane one which prompted them to start. For gliding is a sport, which gets more fascinating the more skilled the pilot becomes. All cross-country flights, and soaring inside thunderstorms, can only be achieved by the pilot's own efforts. There is no question of just opening a throttle and pointing the aircraft in the right direction. All the lift the pilot needs must be found and used with skill and cunning, and at the end of every cross-country flight the pilot must choose a strange landing place, perhaps 10 miles away, perhaps 200, from home. The unexpectedness of gliding is one of its greatest charms.

A map of gliding clubs is given on another page, and for more detailed information about a particular Club you should if possible visit it one Saturday or Sunday, introduce yourself, watch what goes on, and perhaps have a ride in the two-seater.

It is impossible to estimate costs in advance, as this depends very much on how often you visit your Club, and how much flying you do. You will find out that many people enjoy this sport who have quite modest incomes, and as most of the work is done by members themselves, costs are kept down. For members coming from a distance most Clubs have bunkhouse accommodation. Many Clubs hold holiday courses during the summer where you can spend a week or a fortnight packing in the elementary lessons in as short a time as possible. The prices range from 12 gns. to 26 gns., depending on the length of the course, but this includes full board and lodging for the period, gliding instruction and flying charges.

When you first start you will be introduced to your instructor who will take you up for a short flight in a two-seater to see how you like it. The glider will be launched either by winch or car tow, and before the instructor releases the wire, you will probably have reached about 800 ft. in a steady, steep climb. After the launching wire has fallen away the instructor will adjust the speed to about 37 m.p.h., and will fly you on a wide circuit of the aerodrome. It will be easy for him to explain what is happening and what interesting landmarks to look out for, because the only sound will be the gentle whistle of the air past the glider.

After this flight your training begins in earnest. First you are taught the use of the controls, and how to fly straight, and make gentle turns, then how to take off and climb up, and how to make an approach and landing.

You will also have to learn stalls and spins, not because it is necessary for you to be able to do them, but because it is important that you learn to recognise how inadvertent bad flying can lead to stalling the glider, and what you must do to recover from a stall or spin should you still be so careless as to do one by mistake.

After a while you will be flying the glider from take-off to landing without much help from the instructor, and when he is finally satisfied that you can fly circuits properly, and are able to deal with such possible occurrences as the cable breaking on the launch, you will go on your first solo. From this point on, although you will have further dual flights to see that you do not get into bad habits, it will be up to you to put in as much practice as possible until you can fly the glider really well, and have learnt to find and use the lift that will carry you high above the gliding site, so that you can visit the clouds and fly for miles over the country.

You will find it very helpful to do some reading on the subject before attending a Gliding Course or joining a Club. Among the many books which may be obtained—and which are listed on page xi, for a general introduction to the subject we suggest "On Being a Bird" by Philip Wills (new edition, 7/6), and for the theory of gliding, "Elementary Gliding" by Paul Blanchard, 5s.

You should also read the sport's only

magazine, "Sailplane and Gliding," which costs 3s. 4d. per copy post FREE and is published every other month. In this you will find all the latest gliding news.

Copies of these books and all the others published are available from the bookstall on this site or direct from the British Gliding Association.

Books on Gliding

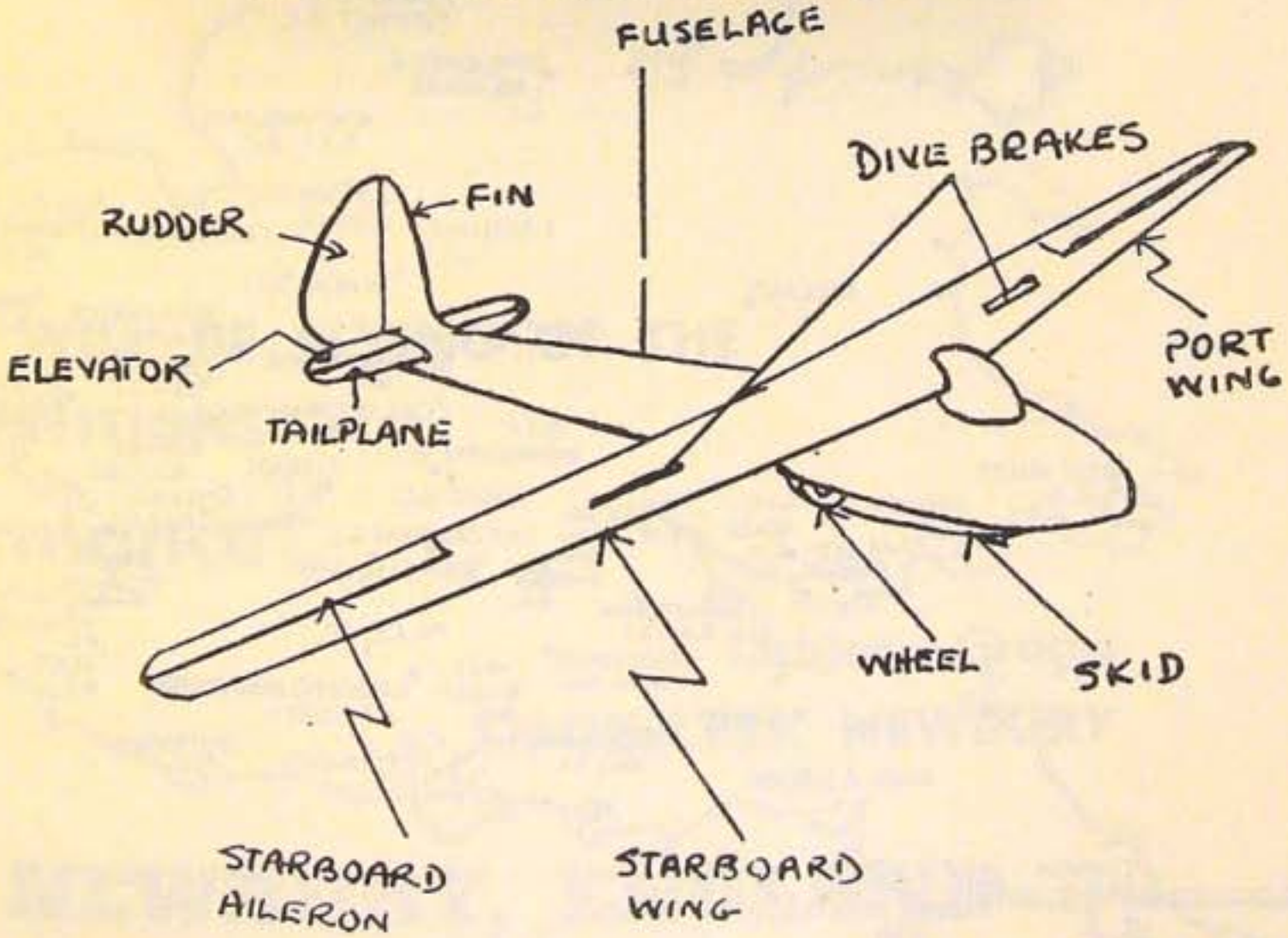
For the Beginner

On Being a Bird by Philip Wills **7/6** (New edition). A thrilling book both for the general public and the expert. It relates the life-time experiences of a glider pilot, and former World Champion.
Where no Birds Fly by Philip Wills **21/–.** Another exciting book!
Elementary Gliding by Paul Blanchard **5/–.** The perfect textbook for the beginner.
Beauty of Gliding by P. A. Wills **35/–.** A beautifully produced book, containing the finest gliding photographs ever taken.
Go Gliding by A. Welch and G. Denes **30/–.** For beginners, full of photographs.

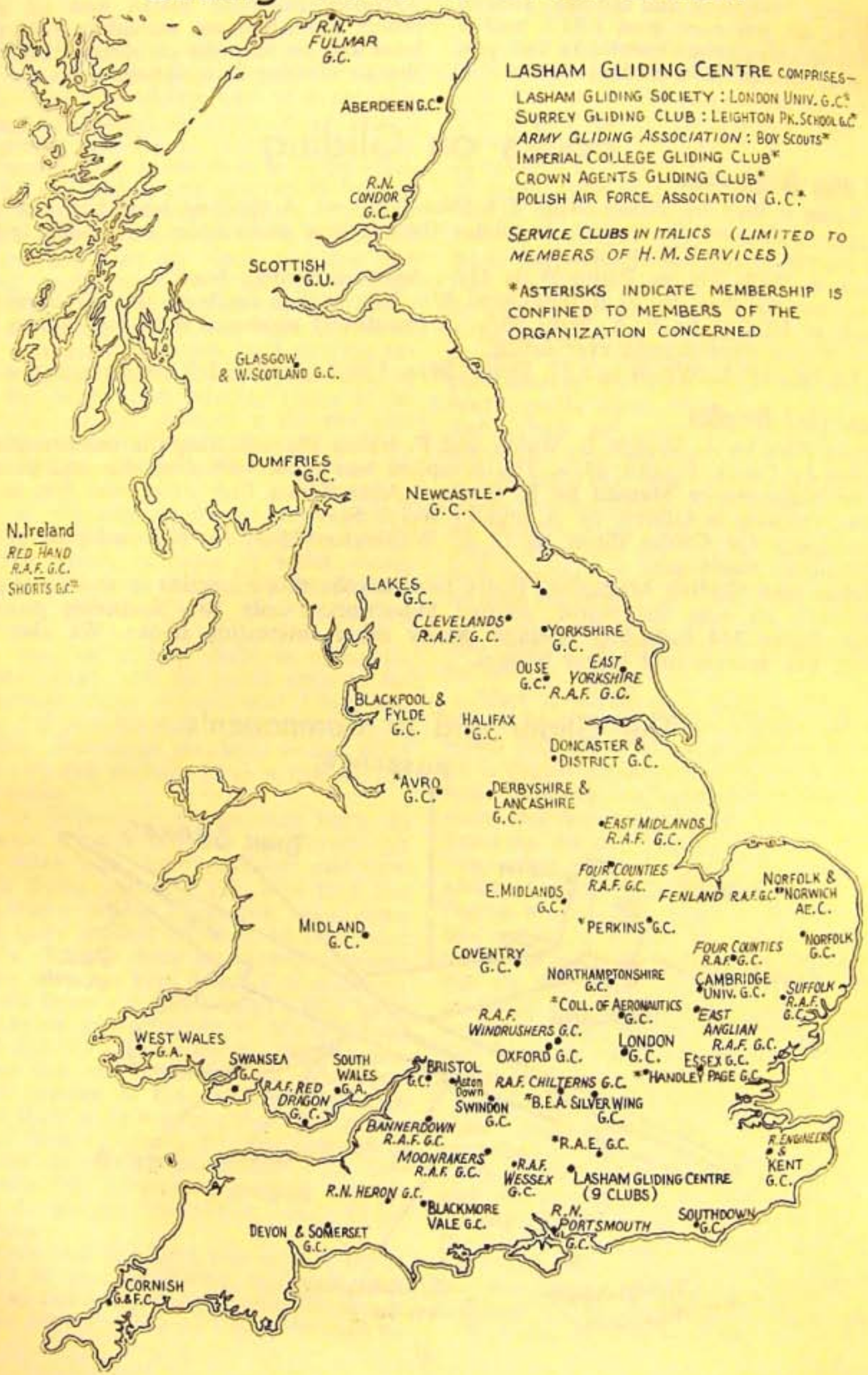
Technical Books

Soaring Pilot by A. Welch, L. Welch and F. Irving **18/–.** Soaring the modern glider.
Gliding by Derek Piggott **25/–.** The complete text book with diagrams and photos.
Glider Maintenance Manual by R. Stafford Allen **5/–.**
Flying Training in Gliders by A. and L. Welch **5/–.**
Meteorology for Glider Pilots by C. E. Wallington **25/–.** An essential part of the glider pilot's equipment.
Sailplane and Gliding Magazine. Every two months this magazine is sent to gliding enthusiasts all over the world. Annual Subscription only **20/–** including postage. Single copies **3/4** including postage. Many other interesting books. We also sell gliding ties, scarves and blazer badges.

The Glider and its Components



Gliding Clubs in Great Britain



LASHAM GLIDING CENTRE COMPRISES–

LASHAM GLIDING SOCIETY : LONDON UNIV. G.C.*
SURREY GLIDING CLUB : LEIGHTON PK. SCHOOL G.C.*
ARMY GLIDING ASSOCIATION : BOY SCOUTS*
IMPERIAL COLLEGE GLIDING CLUB*
CROWN AGENTS GLIDING CLUB*
POLISH AIR FORCE ASSOCIATION G.C.*

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Contest Marking: A PROPOSED MODIFICATION

by Sqn. Ldr. G. McA. Bacon

IT is suggested that the present B.G.A. Contest Marking System be modified to allot distance marks based on distance flown and not as at present distance flown $-X$ (the minimum scoring distance). At the same time Para. M4, Marking, General, should have added:

"4. Distance marks will only be awarded for flights which exceed X. For Distance Along a Set Line Tasks or for Race Tasks, X shall only be measured along the required line."

Objections to the present system are that distance marks are not in proportion to distance flown and that a large spread of marks can occur for a small difference in distance flown.

(a) *Marks not in proportion to distance flown.*—Several competitions are to take place this spring and marginal soaring is likely to take place on several days. It seems unreasonable that, if the best distance flown is 40 miles and X had been set at 20 miles, a flight of 30 miles should only earn half marks. On such a difficult day this flight could reasonably expect to earn the 75% of full marks as proposed.

(b) *Large spread of marks for small difference in distance.*—This failing was demonstrated in the 1961 National Championships when, on 19th May, League 2 was set a Free Distance Task, X being 15 miles. The best flight of 39 miles gained 900 points. Thus over 24 miles (39−15), points varied by 900—or 38 points per mile. Under these conditions landing position is critical, and because the 4-figure grid is only accurate to 1 kilometre (about $\frac{5}{8}$ mile), any plotting error gives a notable scoring error. There is also the safety aspect of pilots trying to stretch a flight by half a field because they realise it may significantly change their score. If the proposed system had been in use on this occasion, the 900 points would have varied over 24 miles, giving 23 points per mile — a reduction of 40% from the actual figure.

The present Contest Marking System has been well developed to find the best pilot. However, there remains an unjust allocation of points under this system if soaring conditions are poor. Since the establishment of the Rating System for pilots, many spring competitions are likely to be held to enable pilots who are not able to fly in National Competitions to improve their rating. As these competitions will probably take place in marginal soaring conditions, and also because, even during summer competitions, marginal days occur, the Contest Marking System should be modified to be fully effective in these conditions.

It is therefore recommended that the B.G.A. Flying Committee makes changes in Para. M4 of the Contest Marking System, as recommended above, and that these changes be implemented as soon as possible.

Comment by Lorne Welch

Giving marks in proportion to the distance flown would appear to be a logical method, but if no minimum distance is specified, competitors who have failed to soar will take another launch in the calm of the evening and do a straight glide in order to gain a few marks. Quite apart from anything else, this would not improve relations with the local farmers. It is therefore essential that no marks are awarded unless the glider covers a certain distance, X, which must be greater than the possible straight gliding distance.

The marking system proposed by Sqn. Ldr. Bacon, of giving marks in proportion to the distance flown, provided that this exceeds X, was in fact used for several competitions some years ago. It was changed because it was realised that it was in conflict with one of the basic

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principles of any satisfactory marking system; this is, that there should be no sudden step where a small alteration in performance will make a large difference in the score. Considering the example given in (b) in his letter where his proposed system would give 900 marks for 39 miles, a pilot who flew just over 15 miles would get 346 marks, but another who landed a few hundred yards shorter would receive no marks at all.

If *X* is kept fairly short, the present system is perfectly fair, since it awards marks in direct proportion to the distance soared, *X* corresponding roughly to the distance which can be achieved in a glide from the top of the launch.

However, keeping *X* short does have the disadvantage that a bad day on which no one flies much further than *X* can be declared a contest day. As in some ways this is undesirable, a possible improvement would be to leave the marking system as it is, but to state that a day is not declared as a contest day unless the required number of pilots fly at least twice *X*.

LORNE WELCH.

Swanton Morley Easter Rally

by I. W. Strachan

THE Rally was organised by the three Norfolk clubs, the Norfolk and Norwich based at Swanton, the Norfolk based at Tibenham, and the R.A.F. Fenland club based at Swanton. The B.G.A. contest marking system was used, and the Rally counted as an official Qualifying Contest.

THURSDAY, 19TH APRIL.—Task: Free Distance; *X* (minimum miles to score) = 20. Moderate southerly wind with 5/8 Cu, base 2,500 ft. at first, going up to 3,500 later and spreading out into up to 7/8 Strato-Cu.

The difficulty here was to work either round or across The Wash into Lincolnshire to take full advantage of the southerly wind. Most pilots found conditions difficult, but Mike Riddell did an excellent flight to near Sleaford in Lincolnshire to win the day. He worked round The Wash, as did Mike Gee, who landed near Wisbech. Alfred Warminger went to 7,700 ft. and struck off east, landing near Yarmouth.

First Day's Scoring Flights

Riddell	400	Hurst	36
Warminger .	130	Laurie	22
Gee	116	R. Harwood	11
Strachan ...	92		

FRIDAY, 20TH APRIL.—Task: Distance along a line through St. Bee's Head. *X* = 20. Strong southerly wind with 5/8 Cu, base 3,000 ft., with Strato-Cu patches later on.

The set line was well across wind and once more the problem was to cross The Wash. Pilots found it difficult to stay on track with the strong wind, and not enough scored to make it a Contest Day. Peter Scott and Mike Riddell landed at Snettisham, on track and as near The Wash as they could. Scott had to throw 3,000 ft. away because it wasn't enough to cross The Wash. Anne Burns was about 4 miles north of them at Heacham.

SATURDAY, 21ST APRIL.—Task: Race to Yarmouth (North Denes airfield). *X* = 15. Moderate southerly wind with 3/8 alto-stratus at first, increasing to 8/8 as a warm front approached. The day was declared No Contest at 3 p.m., when no one had gone away although launching had been in process since 11 a.m.

SUNDAY, 22ND APRIL.—Task: Pilot-Selected Goal. *X* = 20. Strong S.W. wind at first, slackening later to 10 kts., 5/8 Cu, base 2,500 ft., in streets, becoming 1/8 Cu, base 4,000 ft., later.

The weather turned out much better than initially forecast, and pilots making what seemed to be optimistic goals reached them quite easily. Siegfrid Neumann won the day by reaching his goal at Clacton airfield in the Eagle. Alfred Warminger did a similar flight to take the lead in the contest. Hugh Mettam also reached Clacton, having overflown his goal of Leiston. Riddell reached his goal at Martlesham airfield, as did Bill Reekie at Ipswich. Bob Ward,

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Denis Burns and Don Snodgrass at Leiston, Peter Scott and Malcolm Laurie at Aldeburgh, Peter Kevan (Gull 1 !) at Lowestoft, and a host of others at Great Yarmouth (N. Denes Airfield). Pilots overflying goals included Ken Brown to 18 miles W. of Clacton, and Strachan to Leiston.

MONDAY, 23RD APRIL.—Task: initially a local 100 km. Triangle, changed later to Race to Peterborough (Westwood airfield). $X = 20$. Moderate easterly wind set in during the morning, causing the change of task. Thermals were very weak due to a cirro-stratus layer with 8/8 alto-stratus between Marham airfield and Peterborough. Six pilots reached the goal after a nerve-racking couple of hours in the very weak thermals. Strachan used his 20% bonus to win the day, and the six pilots who reached Westwood gained enough marks to put them in the first six overall places. Pilots landing short included Doc. Tringham, Alan Goodfellow and Pranas Pozerskis near Wisbech. Not enough competitors scored to make it a "1,000 points day", the winner in fact getting 850 points.

Speeds to Peterborough

Pilot	*Sailplane*	*m.p.h.*
Anne Burns	Skylark 3	39.4
Riddell	Skylark 3	38.0
Scott	Olympia 419	35.0
Strachan	Olympia 2	32.0
Stephenson	Skylark 3	30.0
Warminger	Olympia 419	27.2
Snodgrass	Skylark 3	23.7

TUESDAY, 24TH APRIL.—The morning started with a light N.E. wind and 8/8 stratus from the sea. In view of the cloud it was decided not to set a task, so the closing ceremony and prizegiving was held at 11.30 to enable competitors either to get home early by road, or to soar part of the way if the cloud broke up. Alfred Warminger was ceremonially presented with a "Three Diamonds" (genuine!) badge after his 500-km. goal flight to Perranporth a week before the Rally, and in his closing address to the competitors, Alfred hoped that we would see many of them coming up to sample the Norfolk Nor'-Easters this season, and that an Easter Rally next year would be organised.

FINAL PLACINGS

	Pilot(s)	*Sailplane*	*Daily Points* 1	2	3	*Total Points*
1.	D. M. R. Riddell	Skylark 3	400	587	767	1,754
2.	A. H. Warminger	Olympia 419	130	909	665	1,704
3.	I. W. Strachan	Olympia 2B	92	507	848	1,447
4.	P. M. Scott	Olympia 419	—	597	735	1,332
5.	Anne Burns & D. O. Burns	Skylark 3	— —	— 502	782 —	1,284
6.	D. C. Snodgrass	Skylark 3	0	549	640	1,189
7.	G. S. Neumann & R. G. James	Eagle	0 —	1,000 —	— 0	1,000
8.	R. Barnett & K. Brown	Skylark 2	0 —	— 705	42 —	747
9.	Rika Harwood & H. Mettam	Skylark 3	11 —	— 699	0 —	710
10.	W. B. Reekie & P. Salmon	Skylark 2	0 —	672 —	— 0	672
11.	M. I. Gee & F. R. Ward	Skylark 3	116 —	— 502	0 —	618
12.	M. V. Laurie & J. M. Matheson	Skylark 3	22 —	582 —	— 0	604
13.	P. Pozerskis	Eagle	0	336	226	559
14.	P. D. Kevan	Gull 1	0	517	0	517
15.	C. R. Hurst & J. L. Smoker	Skylark 2	36 —	333 —	— 91	460
16.	E. A. Cunningham & R. Tringham	Olympia 2B	— 0	4 —	— 372	376
17.	B. Lastowski & E. Jerzycki	Olympia 2B	— 0	— 364	0 —	364
17.	S. B. Wills & D. H. Darbyshire	Olympia 2B	0 —	— 364	0 —	364
17.	P. Wilbur & R. Walker	Olympia 2B	— 0	364 —	— 0	364
20.	N. A. Brett	Skylark 3	0	303	0	303
21.	A. P. Goodfellow & A. J. Podolski	Olympia 2B	— —	— 0	289 —	289
*H.C.**	G. H. Stephenson & E. J. Furlong	Skylark 3	— —	— 303	688 —	991

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AT THE B.G.A. BALL. *Top left, Philip Wills with the guests of honour, Charles Brown and Fred Slingsby. Centre left, a delightful picture of Mrs. Slingsby congratulating Paul Minton on winning Lord Braye's Pilcher Trophy. Bottom left, a general view of guests arriving. Top right, John Phillips placing Peggy Miéville's landing marker at the Cross-Country Lucky Dip. Bottom right, Cabaret turn: The Editor with carillon of bicycle bells; Cliff Tippett assisting with volume control.*

O.S.T.I.V. Papers

THE following papers appeared in the OSTIV Section of the Swiss *Aero Revue*. The descriptions of sailplane types give comprehensive data such as are shown in the OSTIV publication "The World's Sailplanes".

March, 1962

B. S. SHENSTONE: "An OSTIV Guide for Sailplane Designers?" What form should such a Guide take, and should it include Data Sheets? The writer suggests that its initial use should be for "a trained aeronautical engineer without sailplane experience", i.e., a handbook rather than a textbook. Boris Cijan suggests the following sections: (1) progress in sailplane design, (2) aerodynamic design, (3) structural airworthiness, (4) structual design, (5) weight estimation, (6) handling and flight tests, (7) data sheets. Anyone with useful ideas on the subject is asked to write to: Boris Cijan, B.E.A. Engineering Base, London Airport, Hounslow, Middx., England, "using the English, German, French, Serbo-Croat, Czech, Polish or Russian languages, but please not Chinese or Finnish".

PIK-16 VASAMA: Finnish Standard Class sailplane with V-tail; one built; first flew 1st June, 1961. Controls are operated by push-rods and all control surfaces are mass-balanced. Performance at all-up weight of 280 kg. (617 lb.): stalling speed 62 km/h. (33.5 kt.); best gliding angle in 34.5 at 86 km/h. (46.4 kt.); minimum sink 0.59 m. (1 ft. 11 in.) per sec. at 73 km/h. (39.4 kt.); sink 1 m/sec. at 112 km/h., 1.5 m/sec. at 132 km/h.

XM-1-B: Tailless sailplane of "flying plank" shape, designed by James Marske of U.S.A. Span 11.6 m. (37 ft. 2 in.); no sweep-back, no taper; chord 1.4 m. (4 ft. 7 in.) throughout. Dihedral 1.5°. No aerodynamic twist. Elevons of 6.1 m. total span and 0.34 m. chord. Spoilers of 2.2 m. total span on under-side of wing at 45° chord; no flaps. Fin and rudder originally at each wing-tip, but now changed to a single central fin. Measured performance: minimum sink 0.89 m. (2 ft. 11 in.) per sec.; best gliding angle 1 in 24; stalling speed 56 km/h (30 kt.) with elevons level, 50 km/h. (27 kt.) with "90° flap deflection" (presumably meaning elevons vertically down). First flew, October, 1957.

RHJ-6 ADASTRA I: two-seater designed by R. H. (Dick) Johnson of U.S.A., who flew it solo at the 1960 World Championships in Germany and was placed 15th (see photograph, SAILPLANE AND GLIDING, August 1960, p. 235). Since then the "T" tail has been re-designed on more conventional lines. Span 17.65 m. (57 ft. 11 in.). Calculated performance, flown solo: best gliding angle 1 in 42.5 at 98 km/h. (53 kt.); min. sink 0.61 m. (2 ft. 0 in.) per sec. at 92 km/h. (49.6 kt.); sink 1.1 m/sec. at 138 km/h., 2.5 m/sec. at 184 km/h.; stalling speed 58 km/h (31.3 kt.).

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MORE ABOUT BJ-2

BJ-2 ASSEGAI: The new South African sailplane designed by Pat J. Beattie and W. A. T. John; first flew on 31st December, 1960. This machine was described and illustrated in SAILPLANE AND GLIDING for April, p. 112. The figures there given (taken from *Flug Revue*) are confirmed, except that all-up weight is given as 400 (not 380) kg., and wing loading 34 (not 32.3) kg/sq.m. The following additional information is also given:

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Ross R-6: A high-performance all-metal two-seater, designed by Harland Ross of U.S.A.; first flew in June, 1956. Span, 16.77 m. (55 ft.); dihedral 2.5°; aerodynamic twist −4°; two-spar wing; rib spacing 0.36 m. (1 ft. 2.2 in.). Weight and performance not given.

April, 1962

ES-57 KINGFISHER: designed by Edmund Schneider (chief designer of Grunau Baby) in Australia "as a cheap solo machine for the use of small syndicates or clubs. It can be trailered and launched with a car of 1,000 c.c. capacity." Wing built in one piece; span 10.5 m. (34 ft. 5 in.); spoilers on upper surface. Empty weight 107 kg. (236 lb.); all-up weight 195 kg. (430 lb.); minimum sink 0.99 m. (3 ft. 3 in.) per sec.; best gliding angle 1 in 21; stalling speed 54 km/h. (29 kt.). Seven built; first flew 1957.

EP-1: designed by E. A. Pascoe in Australia, this is a conventional sailplane of 11.25 m. (36 ft. 11 in.) span, with wings fabric-covered behind the main spar, upper-surface spoilers, and a single strut each side; dihedral 2°; aerodynamic twist 2°. Fuselage ply-covered. Weight empty, 85.8 kg. (189 lb.); all-up, 172.2 kg. (380 lb.). Measured performance: minimum sink 0.73 m. (2 ft. 5 in.) per sec.; best gliding angle 1 in 26. First flew, October, 1955.

ROHINI 1: Indian two-seater side-by-side trainer designed by S. Ramamritham. Wing span 16.56 m. (54 ft. 4 in.); straight taper, single strut each side, airbrakes above and below; flaps with max. deflection 10°. Calculated performance: minimum sink 0.85 m. (2 ft. 9 in.) per sec.; best gliding angle 1 in 28.2; stalling speed, normal 62 km/h. (33.5 kt.), with max. flap 56 km/h. (30 kt.).

SB-6: an 18-metre German high-performance sailplane with wide use of fibreglass and balsa in its structure and an Eppler laminar-flow wing section. Calculated gliding angle 1 in 43. (We hope to describe this machine more fully in a separate article.)

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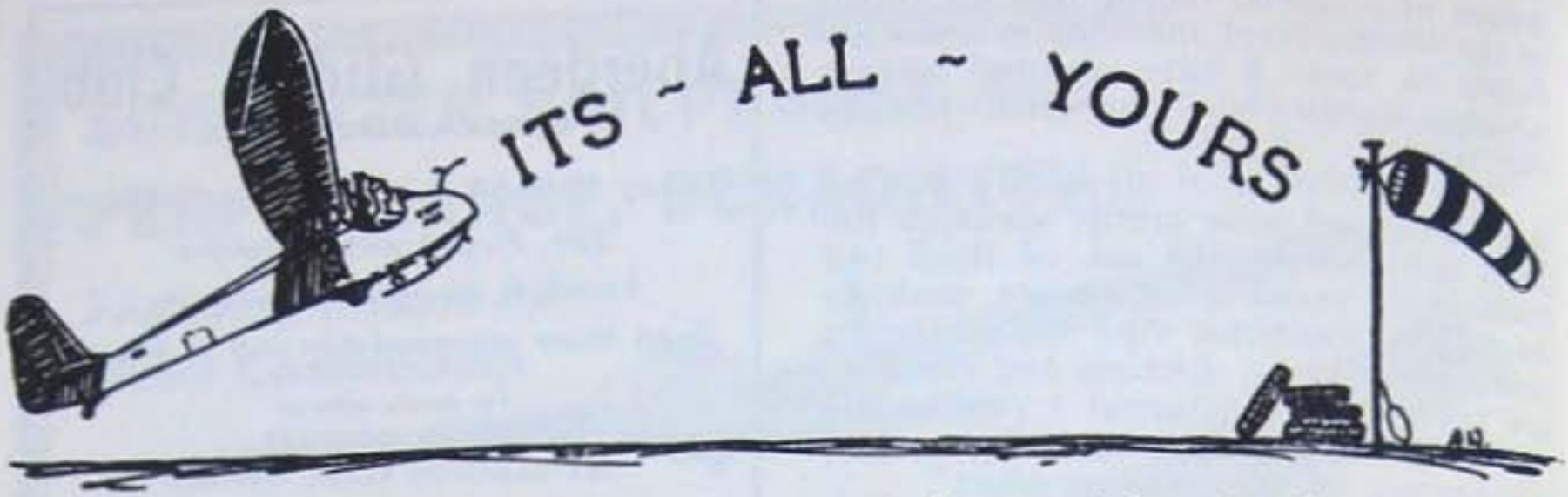
September 16th – 22nd

THE Scottish Gliding Union is co-operating with the Royal Meteorological Society in providing facilities for this course, which has been organised to provide an opportunity for a study of meteorological phenomena in interesting and attractive surroundings.

Accommodation is provided in the Clubhouse and is *not* dormitory type, but is in comfortable bedrooms with hot and cold washing facilities. Naturally the number of bedrooms available for this course will be limited, and latecomers may be advised to book in local hotels.

The cost of the course is £10 10s., including accommodation in the Clubhouse; if this is not available, then the reduced fee will be £3 3s., and the club can arrange accommodation at a local hotel, if requested. Course members are advised to bring with them footwear suitable for long wet grass, and warm, waterproof outdoor clothing.

The course will assemble at midday on Sunday, 16th September, and end at midday on the following Saturday. (Note that the dates are not as given in the previous SAILPLANE AND GLIDING.) Applications should be sent to the Secretary, Scottish Gliding Union, Portmoak, Scotlandwell, by Kinross, enclosing the fee or £1 deposit.



AERO-TOWING

IF only some tug pilots could realise the feelings of helplessness, fury and frustration that they are able to produce in a glider pilot in the course of a standard 2,000-ft. launch! You get towed miles out of reach of the club site, you are dumped downwind of the field, or else you wait fuming on the ground while the tug pilot takes his time ambling slowly back. It is not because he cannot fly, but simply because he is too uninterested or too idle to consider the purpose of the exercise.

Fortunately there are many good tug pilots, who do understand the problem, and their ability is recognisable as soon as they open the throttle. But those others!

Firstly, it is *never* necessary to go downwind of the landing area on a standard 2,000-ft. launch. It therefore follows that an ordinary circuit of the field with a glider on the back is a useless pattern to fly. Not only is 2,000 ft. reached downwind of the field, but the tug itself is then far too high to go straight in, and has to "go round again", adding to the cost, and wasting time.

Secondly, on an ordinary launch, the tug must *never* take the glider out of easy gliding reach of the landing field. The rope may break and the glider pilot be faced with a field landing for which he lacks experience. In hazy weather it is possible for the glider pilot—or even the tug pilot—to get lost, again with the quite unnecessary risk of an outlanding.

The job of the tug pilot is :

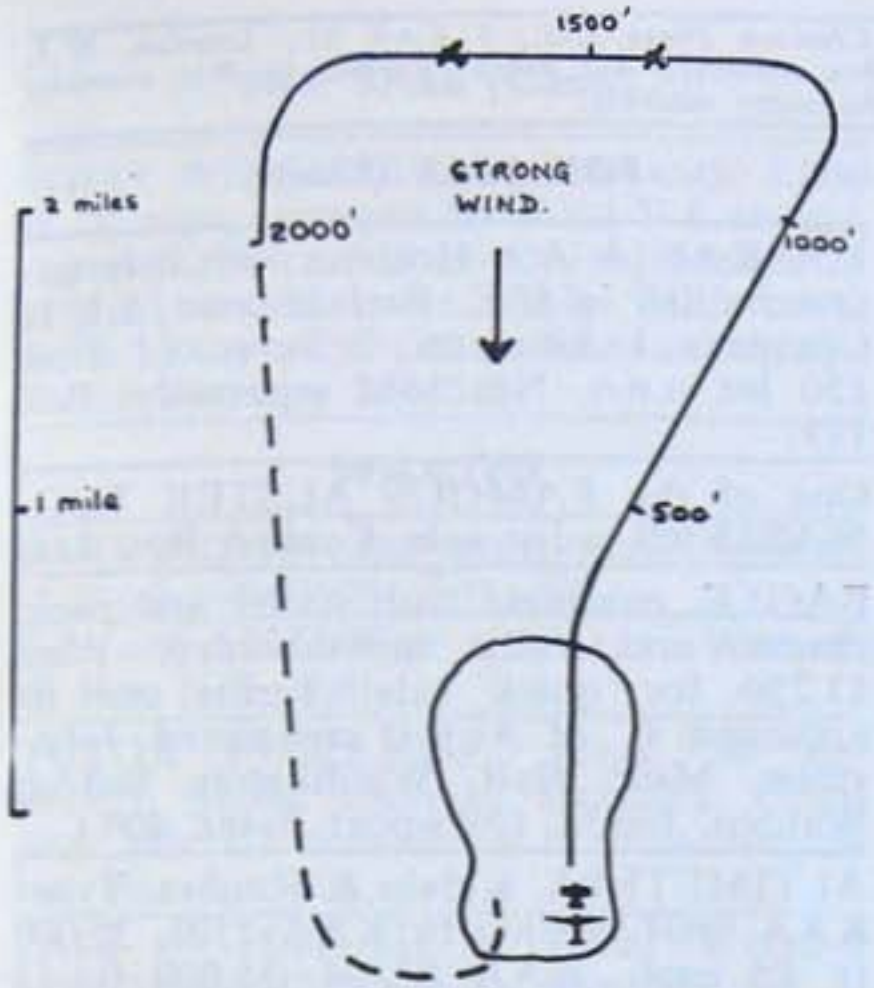
(a) to tow the glider as quickly and cheaply as possible to 2,000 ft., and leave it in such a position that the pilot has the maximum freedom of manoeuvre before having to land back. If he is a long way from base, much of the height must be spent in returning to a safe situation, and cannot be used for visiting cumulus, or doing aerobatics, etc. The position which gives this freedom is between ½ and 1½ miles upwind of the landing area, depending on the wind strength.

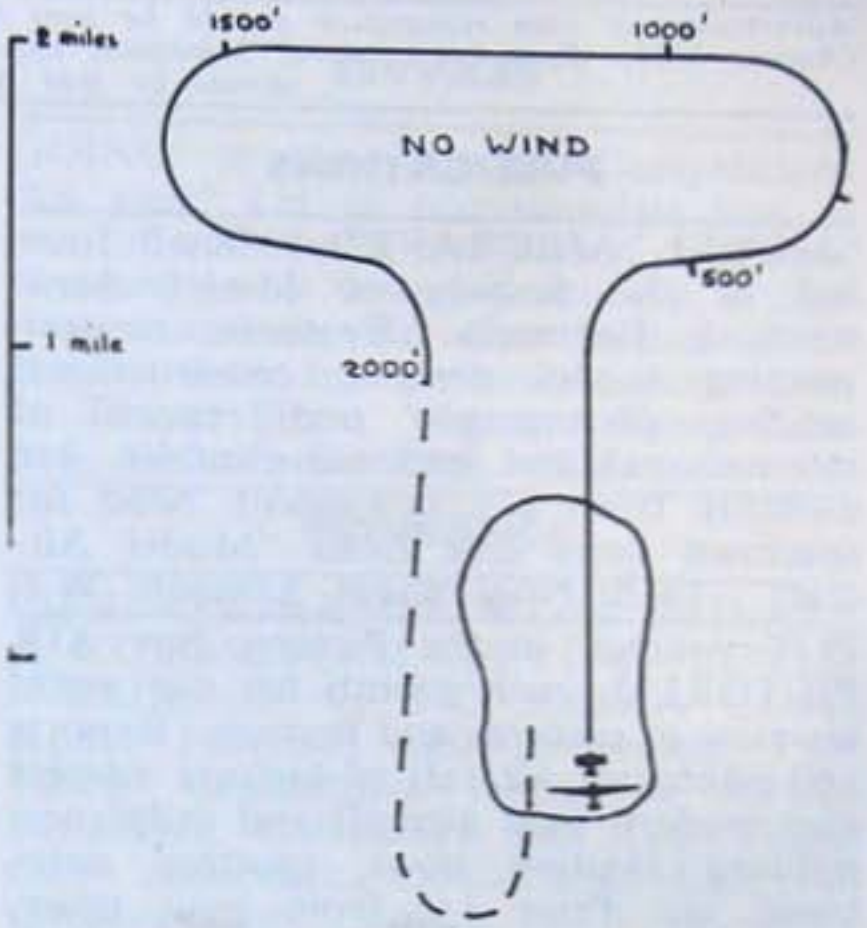
(b) to tow the glider in such a manner that its pilot has every opportunity to study the weather from the air, and release in a relaxed frame of mind ready to concentrate on soaring, etc. This means that the tug pilot should avoid unnecessary turns, fly accurately at the right speed, and not cause the glider pilot any anxiety as to what on earth is going on at the front end. Circling in thermals on tow is permissible only if the tug pilot knows that the glider pilot is experienced, and the thermal is very good. It is a waste of effort trying to circle in moth-eaten lift, with both aircraft merely floundering round in turbulence because they cannot circle tightly enough to find the core. The rate of climb is appreciably reduced when turning, due partly to increased loading on the aircraft, but chiefly to the less accurate flying of the combination.

(c) to return to land with the minimum delay.

There is a great deal to be said for ordinary 2,000 ft. tows to be carried out, in general, to a standard pattern. It, obviously, should be modified to take every opportunity of leaving the glider in lift, or to deal with other special circumstances, but the acceptance of a pattern is helpful to everyone, particularly in reducing collision risk if several tugs are being used at the same base. (It is essential in competitions for this reason.)

The most practical shape is something like a funnel. But, whatever happens, the tug will have to fly about 6 miles to





reach 2,000 ft. The tug takes off. When clear of the boundary, it turns a little to one side, 10-30 degrees, and proceeds a suitable amount upwind of the field. At this point it turns and flies across wind, making good a path at right-angles to the take-off, and all this time climbing as steeply as possible, consistent with not letting the engine bake. It then turns back, reaching 2,000 ft. facing the field, and waves the glider off. It should then dive, not merely glide, for home in order to get on the ground with the minimum delay.

The amount of direction change after take-off, and the length of the cross-wind beat, will depend on the wind and the thermals, as will be shown by the diagrams.

The best way to obtain an improvement is for the pilot at either end to tell the other how the operation could be improved.

ANN WELCH.

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B.G.A. NEWS

Appointment of Devices Development Co-ordinator

Lieut. Commander R. Brett-Knowles, R.N., H.M.S. Collingwood, Fareham, Hants, has kindly consented to undertake the duties of the above appointment. He will act as a clearing house for new ideas and projects in the field of instruments, radio (in conjunction with the B.G.A. radio co-ordinator) and batteries. The intention is that anyone working on a new idea can write to the co-ordinator so that they can be introduced to others who are also working on the same problem, and he will arrange for technical advice to be made available to pilots.

SIR GEORGE CAYLEY

A COMMEMORATIVE blue plaque to Sir George Cayley, whose invention of the first man-carrying glider was described by Charles Gibbs-Smith in our February issue, is to be placed by the London County Council at 20, Hertford Street, Westminster, which was his London residence from about 1840 to about 1848.

Anyone interested in Sir George's life and many inventions would do well to read Capt. J. Laurence Pritchard's recent biography, "Sir George Cayley," published by Max Parrish, London, at 42s.

TRAILERS AND KILOMETRES

AT a Council of Europe Road Safety Conference held at Strasbourg in April, a Press Conference was told by Senator H. Vos, the Dutch former Minister of Transport, that the delegates were not unanimous on a maximum length for trailer lorries. It was argued that a reduction of permissible dimensions would lead only to more lorries on the road.

"As Britain's contacts with the rest of Europe multiply," he said, "it would be desirable if the move towards a decimal currency were supplemented by a change from miles to kilometres."—*The Times.*

COMING EVENTS

IN addition to the events listed in our April issue (p. 96), the following should also be noted:

JUNE 30TH—JULY 1ST AND JULY 7TH—8TH: Bristol Gliding Club Qualifying Competition; 15 gliders accepted.

JULY 28TH—AUGUST 6TH: Devon and Somerset Gliding Club Qualifying Competition.

Lasham Spring Rally

April 6th – 9th, 1962

OUT of 24 entries, 21 turned up, and out of the four days available, two brought good enough weather for a contest.

Friday, 6th April — With a forecast N.N.W. wind of 25 kt., 340°, cloudbase at 2,500 ft., and snow showers, the task set was 35 miles S.E. by E. to Steyning, then 37 miles W.N.W. to New Alresford, then 9 miles N.E. back to Lasham. Just half of the 20 who took off completed the triangle. Of these ten, George Collins of Cornwall made the fastest average speed with 32.9 m.p.h. in a Skylark 3F; Nicholas Goodhart ran him close with 32.2 m.p.h. in an Olympia 419; Gerry Burgess made 30.6 m.p.h. but took 5th place because of handicapping, so that Peter Collier of Bristol (28.2 m.p.h.) and Bill Shepard (27.0 m.p.h.), each with a Skylark 2, gained more points. Others to finish were Brennig James, Bill Mackworth-Young, John Everitt, J. Smoker and Anne Burns. Steyning seems to have been a difficult place to get away from; Ian Strachan slope-soared there for an hour.

Monday, 9th April — A slightly longer triangle was set: 10½ miles E.N.E. to Farnham Castle, 45 miles W.S.W. to Salisbury Cathedral (passing over Lasham), and 35 miles E.N.E. again back to Lasham. With a forecast wind of 25 kt. on the surface and 45 kt. at 4,000 ft., blowing directly across the track from N.N.W., it was some task, especially as there were cu-nims about, including a large one which sat over Lasham just when many people were trying to pass it on their second leg. Some pilots went inside them but were then carried off course by the wind; for instance, Humphry Dimock, competing unofficially, reached 9,500 ft. but had to land at Alton.

Nicholas Goodhart, who never went above 5,000 ft., was the only pilot to get round the course, doing so at 25.7 m.p.h. average. His spectacular glide-in from over Winchester, with just one circle at New Alresford, was watched by several people who said that he never deviated from a fixed position in the sky, but just got larger and larger. Gerry Burgess spent a long time in the neighbourhood of Salisbury, trying in vain to circumnavigate the cathedral spire. Most of the others came down on the way to Salisbury, but such was the excellence of their course-keeping that all but one landed almost exactly on course.

So Nick Goodhart won the Rally easily, with Gerry Burgess second.

A.E.S.

Lasham Rally : Final Results

	Pilot(s)	*Sailplane*	*Points* 6th	*Points* 9th	*Total Points*
1.	H. C. N. Goodhart	Olympia 419	980	1,000	1,980
2.	P. G. Burgess	Skylark 3G	940	412	1,352
3.	F. W. L. Shepard	Skylark 2	944	288	1,232
4.	P. E. Collier	Skylark 2	973	231	1,204
5.	G. Collins	Skylark 3F	1,000	94	1,094
6.	D. B. James	Skylark 3F	887	155	1,042
7.	J. Everitt & H. C. Mackinnon	Skylark 3B	849	142	991
8.	W. Mackworth-Young	Skylark 3F	884	94	978
9.	J. Smoker & C. R. Hurst	Skylark 2	843	76	919
10.	Anne Burns and D. Burns	Skylark 3	785	94	879
11.	I. W. Strachan	Olympia 2	492	323	815
12.	L. Cheesman	Skylark 3F	424	264	688
13.	S. Morison	Skylark 3	510	154	664
14.	B. Jefferson	Skylark 3B	446	205	651
15.	H. U. Midwood	Olympia 2	467	68	535
16.	R. T. Willbie	Skylark 3B	313	160	473
17.	I. Agutter & P. J. Chick	Olympia 2	453	13	466
18.	E. Jerzycki	Olympia 2	393	—	393
19.	J. Simpson	Skylark 2	262	103	365
20.	S. B. Wills	Olympia 2	342	18	360

Gliding Certificates

GOLD C HEIGHT LEGS

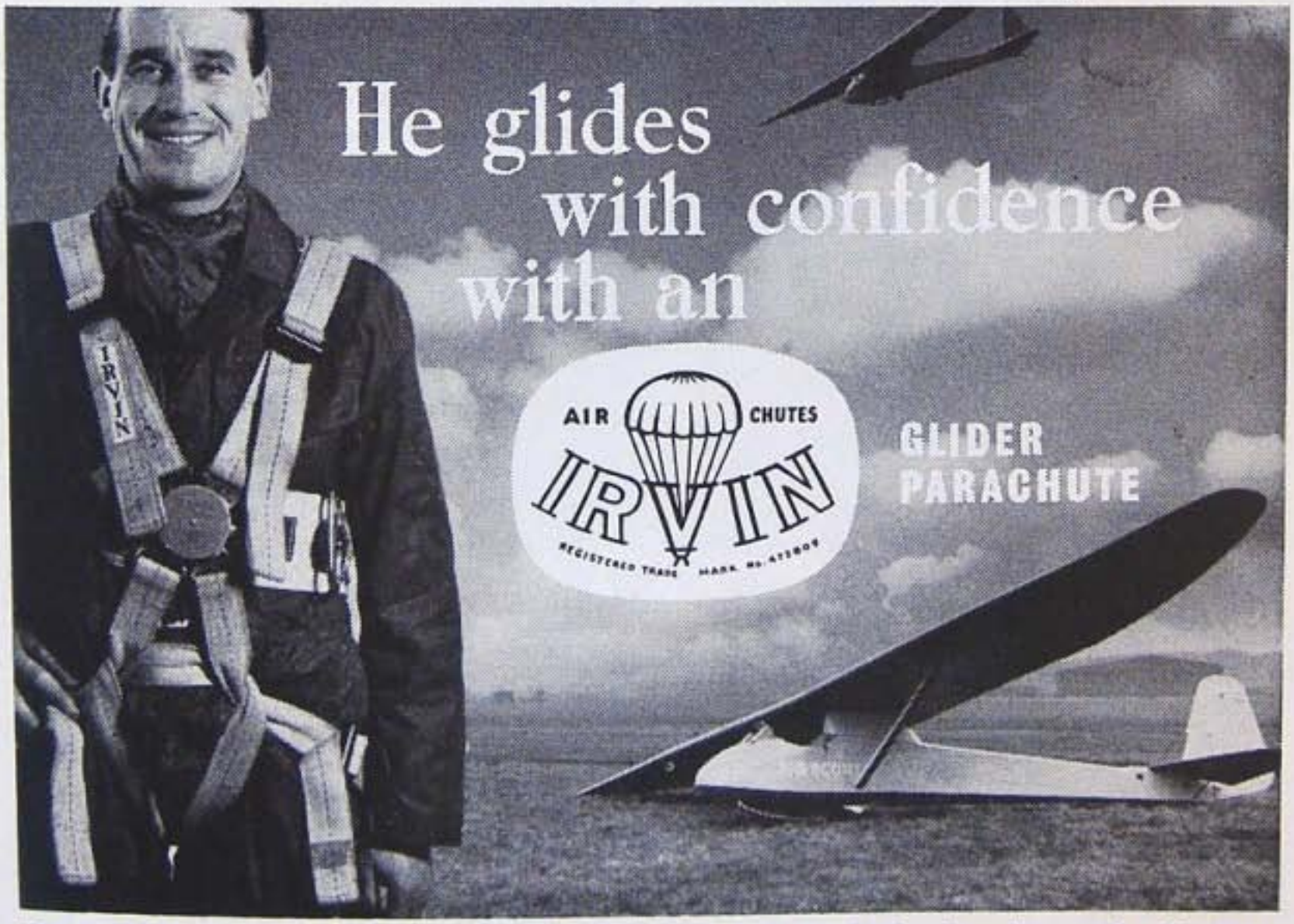
No.	*Name*	*Club*	*Date*
	L. Kurylowicz	Chilterns R.A.F. Gliding Club.	23.2.62
	D. V. Zotov	Army Gliding Club.	17.2 62
	N. H. M. Maygothling	Windrushers R.A.F. Gliding Club.	23.2.62
	R. G. Gregory	East Midlands R.A.F. Gliding Club.	23.2.62

SILVER C CERTIFICATES

No.	*Name*	*Club*	*Completed*
1106	A. Somerville	R.A.F. Brüggen Gliding Club.	7.8.61
1107	H. J. A. F. de Salis	Bristol Gliding Club.	17.2.62
1108	W. Alexander	London Gliding Club.	30.5.61
1109	R. G. Gregory	East Midlands R.A.F. Gliding Club.	23.2.62
1110	V. Brain	In United States of America.	16.9 61
1111	D. J. Minson	Devon and Somerset Gliding Club.	16.2.62

C CERTIFICATES

Name	*Gliding Club or School*	*Name*	*Gliding Club or School*	*Name*	*Gliding Club or School*
R. J. Evans	London	D. R. Smith	East Anglian	J. L. Lloyd	Southdown
J. E. Duthie	Scottish G.U.	J. Kinsey	H.M.S. Fulmar	K. J. Fuller	London
J. T. McKinstray	Dumfries	G. E. Bell	Fenland	P. J. Best	London
R. E. A. Miller	613 G.S.	T. I. Q. Hall	Bristol	I. J. M. Cooper	East Midland RAF
G. Binns	Dumfries	I. M. Yule	Midland		
D. E. Castle	Coventry	R. B. Newman	RAF Halton	R. Martindale	Newcastle
M. D. Squires	Southdown	B. Humford	Bristol	D. G. Hayward	Surrey
F. B. Sykes	East Yorks	M. Stewart	Nimbus	G. F. Fuller	London
R. A. Barret	Four Counties	B. J. Evans	634 G.S.	R. E. Mason	Surrey
I. G. Smith	Four Counties	L. B. Hattam	626 G.S.	T. Rowles	Surrey
K. D. Davies	Coventry	M. Horner	Doncaster	C. M. Morris	Moonrakers
				A. M. Phipps	White Rose



Write to: Dept. SG., Irving Air Chute of G.B. Ltd., Letchworth, Herts.

CLUB AND ASSOCIATION NEWS



THIS month my editorial will be brief and to the point; merely to wish all competitors good luck in the Nationals and to say that Club News will be here as usual next time to report the activities of those who could not go to Aston Down, but have some soaring to report.

Incidentally, as we will have little room for long accounts of flights done at the Easter rallies, if any of your pilots did anything interesting at any of these that we have not heard about, you could include it in your Club News for the next issue. Items on the Nationals should not be included as these will be fully covered in articles elsewhere in the magazine.

The August issue Press date is back to the usual time, Wednesday 20th June, and please do remember to type double space on foolscap, to state the number of words, and if your news is rather long to indicate which paragraphs should be cut first.

Send your news to 14, Little Brownings, London, S.E.23.

YVONNE BONHAM,
Club and Association News Editor.

BRISTOL

AT the A.G.M., held on 31st March, the Club Chairman, Denis Corrick, was able to report a year of continued growth with a record number of hours and cross-country miles flown. However, the need to replace worn-out equipment and to provide better and more extensive facilities for the expanding membership had strained the Club finances, and it was necessary to make small increases in subscriptions and entrance fees. This followed an increase in launch fees earlier in the year to offset the increased cost of petrol and reduced rebate.

Bookings for courses had gone extremely well and almost all available places had already been filled. The Club could look forward to a further year of expansion and it was hoped to hold another week-end rally during the summer.

Cups were presented to Jane Warter (best progress by an *ab initio*), Tom Bradbury (height) and jointly to Derek Stowe and Peter Scott (for distance).

The soaring season started fairly early at Nympsfield and the following flights have been recorded:

Completing Silver C:

Dave Wales (5 hours and distance).
Shaun de Sallis (5 hours).
John Daniell and Geoff McBroom (distance).
Geoff Lloyd (height).

And also 5 hours for Noel Baker, Pete Simmonds and Jim Webster, and distance and height for Jim Stewart-Menteth.

It is interesting to note that some of the 5-hour flights were done in thermals in March, which a few years ago would have been thought impossible here.

A.L.S.



LEFT : Happy members of the Bristol Club at the B.G.A. Ball watch June Stanier playing Russian Roulette.

BELOW : Lionel Alexander of the Cambridge Club proudly accepts the Manio Cup from Mrs. Slingsby.

CAMBRIDGE

A 63-MILE goal flight to Weston-on-the-Green, the site of the Oxford Gliding Club, is as good a Silver-C distance flight as any for a Cambridge man, and certainly a splendid start to the year's cross-country flying season. With this performance, Bob Fleuret completed his Silver C in the Skylark 2 on 24th March. On the same day, Terry Gunby landed the Olympia 60 miles away at Bicester and thereby gained his distance leg.

For the third time in the history of the



Club, a wave was soared over Cambridge, this time by Ray Haddon, who climbed the Olympia from 3,500 to 5,000 ft. in a lenticular cloud on 18th February.

At long last, after a break of 11 years, a national trophy was won in a sailplane operated by the Club when Lionel Alexander was awarded the Manio Cup at the B.G.A. Ball.

Simon Redman has acquired a Slingsby "Sky", which has now joined our fleet. In the Club's system of advancement, the Sky has been placed between Skylark 2 and Eagle, and is available to most pilots of Silver C standard.

There are now two syndicate-operated sailplanes stationed at Cambridge, the Swallow "Penguin" and a Skylark 3G which is owned by John Burton and Bryce Smith. The Penguin spent an extensive winter holiday with the Scottish Gliding Union at Portmoak, where one of the owners, Arthur Cruickshank, took this handy little craft from a winch launch to 11,500 ft. in hill and wave lift on 18th February. The flight lasted a cool 6¾ hours and earned Arthur his Gold C height leg.

In spite of the cold weather in February and March, the Club's sailplanes soared on 16 days during these two months. By the end of March, well over 200 hours had been logged since the beginning of October. G.S.N.

CORNISH

BY the time this is published the Club should have launched its satellites; these, like their Russian and American counterparts, require a great deal of planning, hard work and a certain amount of money. They are satellite airfields at Davidstow Moor and Newlyn East. Perranporth, however, will remain the Club's home and centre of operations.

Davidstow has been available to us for some time now, and was used during the Regional competitions of 1960 and has also been used from time to time by private owners. We now feel that the Club is coming of age and there are enough pilots flying high-performance machines to make regular Club operations from Davidstow worthwhile. Davidstow also produces more thermals than the cliff-top site at Perranporth and there is just over 50 km. between the two airfields.

The long spell of east winds in late February and March have not given much chance of bright performances at Perranporth, but just before this setback in the weather Jane Pollard flew for five hours in the Swallow for her Silver C duration leg. Jane is the first lady member to achieve this.

Congratulations also to Dave Pentecost on converting to the Swallow.

J.E.K.



Bernard and Mrs. Warmington of the Cornish Club sample the Victorian Coffee Bar at the B.G.A. Ball.

COVENTRY

LAST time the Club's activities were listed, we were able to report a start to the soaring season at Baginton. This time it is the cross-country season that we claim to have started. In mid-March Mike Smith took a private Olympia to beyond Evesham, a flight which would have done very nicely for a Silver distance leg, if only Mike had not got that badge some time ago. However, this example should start the ball rolling for a better than ever batch of cross-countries this year.

Although we have had several flights of more than an hour's duration from the Club, no C Certificates have yet come our way. Training has progressed none the less, and congratulations are extended to our most recent first soloists, Messrs. Evans, Shatlock and Blagden.

The large number of Certificate of Airworthiness inspections, for both private owners and Club machines, which have kept the workshop full since last November, are over, except for a Prefect, whose return to service is imminent, with the result that the trailer fettlers are now in possession, and we should be fully prepared for the best part of the year which is now with us.

The experimental Thursday flying mentioned in the last issue has now become a regular thing, and with the advent of summer-time Friday evening flying is with us again.

C.D.D.-J.

CROWN AGENTS

THE annual "Wine and Cheese" Party was held in the Crown Agents' Restaurant on Millbank on 22nd January. Paul Thompson, one of the hardest-working founder-members of the Nairobi Gliding Club, was present.

By the time these notes appear we hope to have welcomed others of our overseas members who will have arrived on leave; in particular, Barry Smith from Uganda, "Sandy" McKeay from Nigeria, and Dick Kuyper and Mike Wilson from Kenya.

J.E.G.H.

DERBYSHIRE AND LANCS.

SPRING is officially with us, but Camphill has not as yet been released from the reminders of the winter past, snow having fallen on each and every week-end of March.

Waves have not been abundant, although one did produce heights of 8,600 ft. above take-off, and was enjoyed by a large number of Club pilots.

Regardless of the snow we have had our first thermals of the year, and heights in excess of 2,000 ft. have been soared on two occasions. We have now cleared away the wreckage and assessed most of the damage caused by the recent gales. The repair and improvement of club buildings is proceeding with all haste in view of the onset of the courses and the soaring season.

Freddy Coleman's two-seater Harbinger is now repaired and back on the site, and we look forward to seeing in the air again this unique aircraft. Frenzied work is being done on the two Club trailers by the usual small group of Club members after a firm ultimatum by the C.F.I. The Northern Competitions are again being held at Camphill on 28th July-6th August this year, and we look forward to seeing the usual faces that frequent these occasions, with large smiles on them.

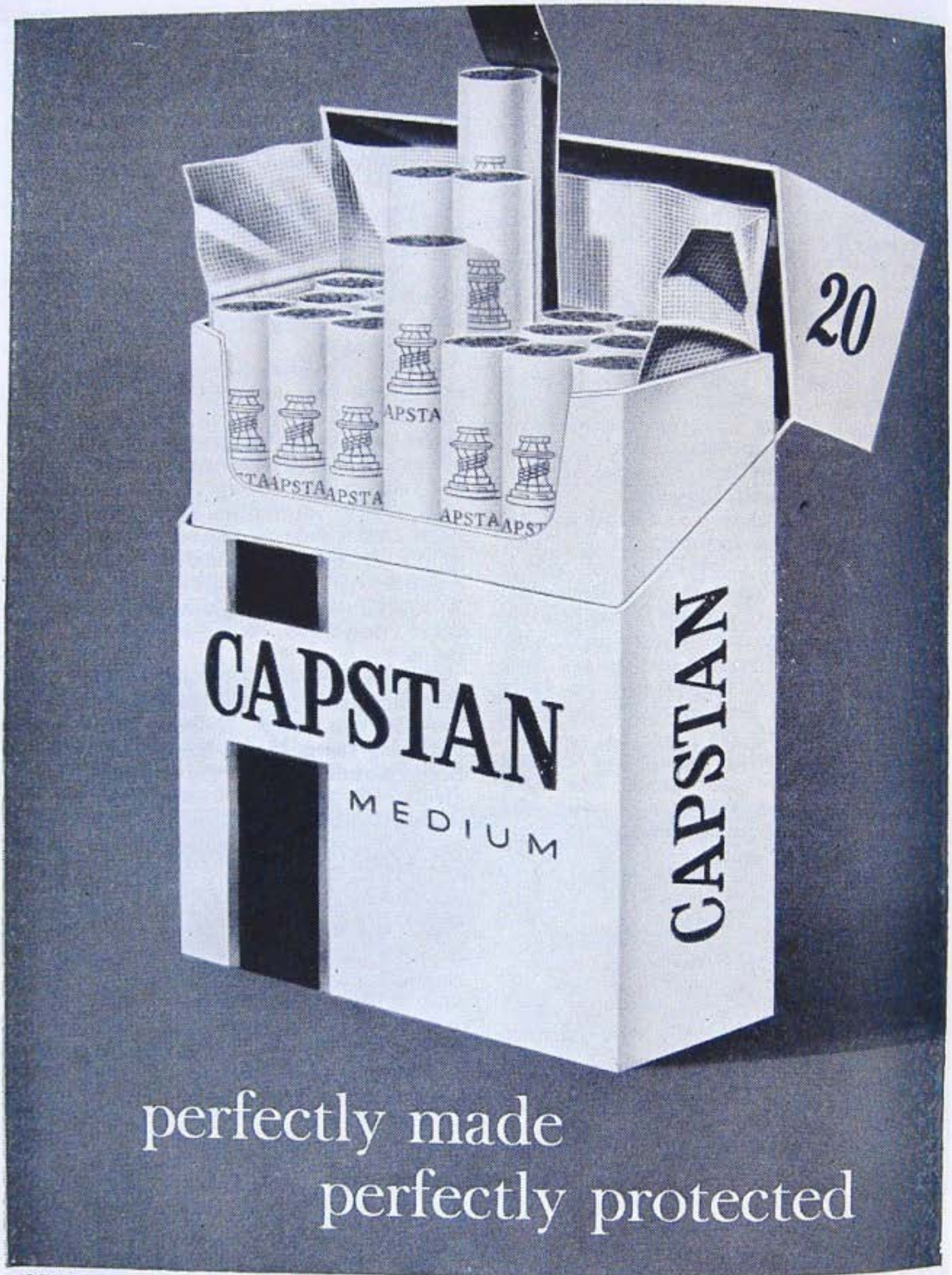
We regret to report the retirement from the committee of Dennis Ward, a member of our very active, of necessity, winching team. Harry Midwood, who has been wandering in parts foreign, was elected to fill the vacancy, and is welcomed back.

K.B.

DEVON AND SOMERSET (Dunkeswell)

AT the Annual General Meeting held in Taunton on 2nd April, a most important proposition was put forward and accepted by the meeting. It was a three-year development plan for the Club, starting in 1962 with the purchase of a second Swallow. In the Spring of 1963 a new T-49, and in 1964 possibly a second-hand Skylark 3. It also involves scrapping our Ford V-8 tow cars and replacing them with Austin Princesses, one of which is already giving good service. A financial sub-committee has been formed to look after the money which will be required to finance the plan. Also at the meeting, Dave Minson received the President's Trophy and John Groves the Kelsey Trophy for their progress during last year.

In 1961 we trebled our hours flown



CC 76

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and did 800 cross-country miles; this year our aim is to double both these and see more completed Silver C's.

All clubs should have received full details and entry forms for the Regional Competitions to be held at Dunkeswell from 28th July-6th August by the time this report is in print. P.E.B.

DONCASTER

TWO further buses, one petrol, one diesel, have been purchased and have undergone one of the most rapid conversions yet seen. The first bus has been converted into a mobile tea bar cum restaurant. Hot meals on the field in relative luxury are now a reality. Full credit to the two Johns — McEwan and Johnson — and their team of helpers for this magnificent effort, and to Betty Hayes for keeping us so well fed at weekends. We are so proud of this that we are offering a prize. The first pilot to land at Doncaster when this is in operation having completed a Silver or Gold C leg, gained a Diamond or broken a record, will get a free meal! — providing we are given some notice, of course.

This conversion having taken a week this team then leapt on to the second bus and in ten days had produced a self-propelled winch which, so far, has proved completely snag-free, though admittedly it still has to be driven by Certain Members Whom I Shall Not Name. Two wires are now a fact, but by the time this is printed we should have four. Come to Doncaster and be winched to aero-tow height.

The Olympia is now in the workshop for finish of the C. of A., and the elite who are allowed to fly it are all furiously buying maps and drawing triangles. When this flies it will bring the fleet up to four plus several miscellaneous bits.

Two last item of news in order of importance — Sid Hayes got a well-deserved C on the 24th March with a magnificent 38 minutes. Congratulations to John Stirk and Pat Willert, who were, we believe, married on 17th March.

M.C.U.

DUMFRIES AND DISTRICT

THERE has been very little to report on the flying side during the winter months, apart from a good deal of weather—mainly high winds, sleet and snow.

There was a good deal of other activity, however, and our annual dance was perhaps the best yet — quite a party — even if we can't fly, we can twist!

We have acquired another Tutor from the B.E.A. Club, and the collection party apparently enjoyed their journey to the far south.

Our main news, however, is that we have the use of the runways at the former Dumfries Aerodrome, for which we are indebted to Dumfries Trading Estates Ltd. Since it is lambing time again on the hill we have moved to Dumfries, lock, stock and barrel, where we are very tidily parked in one corner of X Hangar. From now on until further notice we will operate from Dumfries, although we hope to take advantage of good hill-soaring days at Thornhill. Visitors please note that the runways are partly fenced.

We should now be able to achieve a good launch rate with very little effort, and by the time this appears in print, we hope to be well on the way to respectable figures, both in the log book and the balance sheet. G.J.K.

ESSEX

FROM the flying aspect the three-month period just ended has been one of hard work under trying conditions both for instructor and pupils.

Undoing safety pins (the aircraft variety, of course!) on freezing nights during de-rigging has been very trying. Although shorter flying time reduced the daily launch rate, most of the hardy members of the Club who braved the bleakness of the airfield managed to fly on their respective flight days. In fact very few complete flying days were lost during one of the coldest winters for some years.

Some welcome and unexpected soaring weather during March enabled Mike Bishop and Brian Hockley to get their C's, the first of the season.

On 4th March three of our highly esteemed instructors had a taste of their own medicine when Roger Neaves of the B.E.A. Gliding Club, acting for the B.G.A., checked them for Categorisation. Subsequently, Ernie Williams (now our new Deputy C.F.I.) and Roger Burton were declared as B Category Instructors. The really big news, however, was the

Club's acquisition of a new Swallow in April. New colours, of ivory and light blue, will now be seen around the skies of North Weald, keeping our budding (cross-country conscious) solo pilots happy. Anyone in this vicinity from now on will see a profusion of gliders in the air, from A.T.C.-flown T-31's, Prefects and T-21's to Club and syndicate-owned Swallows, Tutors and Skylark 3's!

M.G.R.

KENT

IN spite of the continuing cold weather, quite a number of members did local soaring flights during February and March. Denis Crabb started the season off in the syndicate Skylark 2 with a flight of 17 miles to Crowborough in difficult conditions on 18th March.

24th February was a particularly interesting day, with the T-21, flown by Bill Bailey and Ron Cousins, still soaring half an hour before sunset when the near ground temperature was only 2 degrees above freezing.

There is now a queue of volunteers for the job of log-keeper, since the arrival of a miniature caravan built on an old car axle. It was made by Alan Middleton, to whom the Club is very grateful.

C. of A.s have been carried out on three of the Club aircraft, so the full fleet is once more in operation. A second syndicate-owned machine has just made its appearance at West Malling, a new blue and white Olympia. This brings the number of gliders operating from the airfield up to six.

P.B.

LASHAM

IN spite of (or perhaps because of) the continued spell of cold weather, the thermal soaring season started earlier than usual this year, and by the end of March no fewer than 15 members had qualified for their C's. The first 5-hour and height went respectively to Dick Hearth and Eric Clothier on 16th March, and Phil Gardner reopened the Shoreham milk run to get his distance on 27th March.

Meanwhile the usual pre-season syndicate shuffling has been taking place. Two well-known Skylark 3's, Jill Walker's 67 and Frank Irving's 66, have moved on, Eagle 13 is now Skylark 3G 13, and another 3G (139) is proudly owned by Tony Barker, Peter Ibberson and Gerry Burgess. One of the final Olympia 2's was being flown by Helen Woods, Ray Duckett and Peter Wrigley less than two weeks after placing the order.

The attention of the No. 1 Test Group has now been turned to the Skylark 4, which made its first flight on 24th March.

The next stage of the Lasham face-lift has now been started with the rebuilding of Southdown Aero Services Ltd. workshop. The demolition of the Nissen hut proved convenient for Hugh Hilditch's T.49 trailer, which had been built too big to come out through the door.

J.N.C.

MIDLAND

OUR cross-country season began on 1st April with two Silver C distances being flown. One by a visitor and one by Bill Inman, who earns our hearty congratulations.

On the same day we held our A.G.M. at the clubhouse. It was pleasing to hear that the past year had been a satisfactory one financially as well as in terms of hours and launches. The weather, of course, was a principal contributor to this happy state of affairs, although improvements in the efficiency and economy of our operations must take their share of the credit.

John Harnden takes over as Vice-Chairman in succession to Roger Thwaite, who has resigned. Roger, who has served the Club in one capacity or another since its foundation, was elected as a Vice-President. Charles Green, who has ably served as our Subscription Secretary for four years, is succeeded by Christine Mansell.

Continuing their policy of quality vehicles only, our M.T. Committee has acquired a diesel tractor and has had the existing petrol tractor overhauled, which should result in improved operations and elimination of various "old faithfuls" that were becoming increasingly expensive to run.

Our new Swallow is due for collection in mid-April and will give much-needed increase in our medium performance capacity.

Arrangements for the Easter Rally are now well in hand, and we look forward to good weather and keen competition.

K.R.M.

NEWCASTLE

THE A.G.M., which was held at Carlton on 25th March, resulted in no change in Club officials and committee. A 100% improvement in launches for the first three months of 1962 compared with the same period of 1961 can mainly be attributed to the drier winter, although high winds have offset much of the training value of these launches.

North-westerly winds on 18th February produced the first C certificates of 1962, when Bob Martindale on his third attempt remained airborne for 40 min. During this day wave conditions prevailed and flights to 6,000 ft. were achieved. Dick Stoddard did a "proving flight" to the bottom in the Kite I when the hill lift was cancelled out by the down of a wave.

The Swallow syndicate has now reformed and this enthusiastic group are expected to improve the Club cross-country mileage figures this year. Ken Saddington's "Bergfalke" should have a C. of A. when these notes are published and this should prove an interesting addition to the aircraft flying at Carlton.

A.P.

NORTHAMPTONSHIRE

THE A.G.M. of the Club was held on 31st March, 1962, and with it came some changes in the committee. Messrs. S. Norsted, R. Spokes and F. Rowell leave the committee, and our thanks go to them for their untiring efforts on behalf of the Club. E. Underwood takes over the post of Secretary from D. Woodford, who continues on the Committee as Chairman of the M.T. Committee after many years as Secretary. G. Grant remains as Chairman and K. Pearson as Chief Flying Instructor. Newcomers to the committee are J. Swain (Flying Secretary) and N. Kay (Public Relations).

The Annual Dinner and Dance was held on 16th February, and again was a great success, and more important still the Social Secretary, E. Clarke, reported a profit.

The soaring started early at Podington this year. Good thermals were found in January and February, and Mike Millers on 17th March took the Swallow to

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4,000 ft.

The T-21 is back again in service looking like new, painted in the Club colours, and appears to fly even better than it did before.

The year 1961-62 was a somewhat difficult year for the Club, but the new year has started well, with great promises. The fully paid-up membership of the Club for the first month of the year is the best for some time. Every effort is being made to increase the membership this year to over 100 to safeguard the greater commitments the Club will have to face when the lease of the runways is secured in the very near future.

A new innovation is to be tried this year, when competitions will be held for all Club members in all types of aircraft from the Cadet upwards with a view to later inviting other clubs to join us.

R.N.W.K.

NORFOLK (Tibenham)

THE Club is recovering from low point of last winter and is now flourishing. We are getting 1,500 feet launches with the ex-Lasham Chevrolet towcar and we did over 9 hours' soaring in March with a maximum height of 5,800 ft. John Nary has soloed, Brian Lockwood and Doc Bruce have achieved their C, Brian as well as Adrian Prime having since converted to the Swallow. There is bags of room in the hangar and bunk space in the clubhouse for anyone who comes to Tibenham to sample our soaring.

R.T.

OXFORD

THERE is little to be said for the winter months except brrrr!

On the occasions when the ground was not too wet, and it was not raining or snowing, and cloud base was not too low and the wind sufficiently moderate, the avid enthusiasts flew and thawed out their eyebrows during the week.

Chris Hurst has completed an uninterrupted sequence of C. of A.s to enable us to face the summer with hopes of unbroken(!) service from our aircraft.

In February we held our first Dinner in celebration of ten years' post-war existence, and we were pleased to have as our guests many of gliding's stalwarts who have helped us on our way.

March brought the inevitable A.G.M., and Peter Pratelli and John McKenzie joined the committee, which is otherwise unaltered. This evening was rounded off by the last of a series of excellent Film Shows provided by Ron Simpson.

Chris and No. 169 are entered for the Lasham Spring Meeting, and will join the Skylark 3B Syndicate and R.S.J. with Olympia 170 at Swanton Morley in a determined effort to gain us a place in this year's Nationals, and if only Spring can get here before the summer is over we can look forward to a most successful season.

A.S.

SOUTHDOWN

MARCH brought some good north-easterly winds, and hill soaring took place on several week-ends, giving many members an opportunity of trying out bungey launching. George Goffin gained his C on the ridge and John Lloyd, Mike Squires and Peter Henderson completed the 5 hours, John and Mike having gained their C's earlier in the year.

At the end of the month Ian Agutter made a 44-mile cross-country flight in the Olympia along the Downs to East Harting, near Petersfield, using hill and thermal lift.

We were very sorry to lose the services of Peter Staff, our full-time Ground Engineer, who had been with us for three years. We would like to thank him for all the work he put into the Club during this time, including the rebuilding of our second Olympia. We wish him all the best in his new post.

P.W.

SCOTTISH

THE Portmoak waves made a welcome appearance on 18th February, and our records show that a minimum of five Gold C Heights were attained; of these, J. Duthie (Swallow), A. Cruikshanks (Swallow) and J. Rae (3F) qualified for the gold leg.

Unfortunately the appearance of waves during this period did not coincide with the visit of a B.E.A. Group. This group was led by Ken Wilkinson and Roger Neaves (Fauvette and Swallow).

Our courses continue to find considerable popularity, and this year have filled in record time; our apologies to those who have been disappointed.

The high-performance pilots are now awaiting the delivery of a second Swallow, which should bring this group back

to strength, although recent promotions to this group continue apace.

W.A.S.

SURREY

ALTHOUGH the temperature has been very much that of winter up to the date of writing, this does not seem to have had very much effect on soaring enthusiasm, and our Club fleet, which now consists of four Skylarks and a Skylark 3F, has been soaring regularly. Our Olympia, which is on loan to the society for use in the school by early solo pilots, has also had its share of soaring, and produced its first crop of C's in February.

It is our practice to award free soaring time for the rest of the season to Club members who complete the first Silver C legs of the year, and two of these (height and duration) had been won by the middle of March.

Visitors to the workshop recently have been startled by the appearance of a formidable device resembling a model of the Forth Bridge. If, however, they were so foolish as to ask Hugh Hilditch in derisory terms what it was, they probably regretted it, as it was the beginnnig of our new open trailer suitable for two-seaters of various shapes and sizes, and they probably spent the next few hours working on it, which was good for their souls as well as the Club.

In an attempt to solve the communication problem which must always be present in a big club, and which can make life pretty miserable to a new member, Ron Walker has undertaken the production of a booklet which we hope will make the new member's task of settling in a little easier.

Congratulations to Pat Garnett and Sarah Wilks on their engagement.

A.W.B.

SWINDON

THE Annual Dinner-Dance took place on Thursday 29th March, when 80 members and friends were delighted to welcome the National Champion, Sgt. John Williamson, as guest of honour. Proposing the toast to the Swindon Club he thought of the future and pointed out that results achieved by hard work were usually of greater value than the "handed out" variety. Much satisfaction should result from being a member of a growing club. He concluded by inviting us to join the Moonrakers at some future date in ridge soaring at Huish — an offer which Club Chairman Les Colquhoun accepted with zest.

M.B.H.



At the Swindon Annual Dinner. L. to R.: Les Colquhoun, Chairman; Beryl Sanders, Secretary; M. E. P. Hill, President; and John Williamson, Guest of Honour.

SOUTH WALES

ON the afternoon of 24th February, John Williamson and Alwyn Sutcliffe visited us to test Alan Newton for his instructor's category. We are delighted that Alan passed, and equally delighted that John brought an Olympia 2B and crew. They did two hours' soaring in four launches in a strong easterly. John said he could have stayed up all day on this ridge, which we have done nothing with in the T-31.

It is now clear that with a good performance aircraft, the site is soarable in every wind direction except southerly. John said the site had great potential and that the cables on the one boundary did not constitute any hazard. The limitations of the site were also pointed out. First, the rough condition of the launching area in an easterly wind and, second, that the launching areas generally were not large enough to operate more than about five aircraft. We are working on the first point, and do not think the second point will worry us for a couple of years yet.

On the following day, in similar conditions but with less cloud cover and a higher cloud base, we were able to soar the east ridge in the T-31 for the first time, *thanks* perhaps to the inspiration received on the previous day. However, heavy snowstorms eventually stopped flying after a 45-minute trip to 2,500 ft.

The long spell of easterly winds finally ended on 1st April. There was a strongish north-west wind and 24 launches in the T-31 returned 5 hrs. 39 min.

WEST WALES

EVENTS have moved very rapidly in the last two months. Our Skylark 3F arrived and has proved itself already on a number of soaring flights, the best being 1 hr. 19 min. by our C.F.I., Gil Phillips, in very mediocre weather. The power group — seven members headed by Peter Wulff — have provided a number of aero-tows in the Tugmaster, thereby giving us a taste of things to come. We were disappointed not to receive the Sky, which was expected at the end of February, but Gil and Peter are now making arrangements to go over to Holland in the Tugmaster and tow it back, probably in the next week or two, subject to suitable weather conditions.

We have just tried out the Dublin G.S. method of reverse launch (S. and G., February), with very gratifying results, and this is likely to be our permanent system from now on. In gusty conditions on the short east-west runway (1,000 yds.) we were getting heights of 1,400-1,500 ft. where 900 ft. was previously considered good. In fact, the best height of the weekend was 1,750 ft., made by Grahame Barrett, a Club record which is not expected to last very long. Turn-around was such that the delay was from the glider end, the rate of launching depending on the speed of getting strapped in, doing cockpit checks, etc. We are indebted to Dublin for the idea and to Con Higgon, who made the equipment.

David George and Bill Sheppard have gained their C's and John Thomas has made his qualifying flight, while Tom Kingsland and Idris Morgan have done their first solos. Membership is increasing steadily, about 20 new members having joined up to the end of March.

H.J.

YORKSHIRE

THE Yorkshire Gliding Club are now in the process of seeing their new clubhouse take shape before their eyes. This long-awaited shelter from the elements looks like being finished by the end of the summer.

Aero-towing evaluation has been done in the Tiger Moth. We hope to have a good meeting at Easter at Sutton Bank with aero-towing, and we hope to set tasks each day.

Our new winch is taking shape and should be in operation by Easter. Michael Wilson has been appointed a Club Instructor, and we are pleased to say Ralph Stothard, David Hill and Jock White have been awarded the B.G.A. Category. Tony Smallwood is now a P.1 on the T-21.

We say goodbye to an old friend, for the Swift Syndicate have sold their aircraft and expect to get a Skylark 4 to replace it.

This summer the Club hope to have the services of Mr. Cox, an Australian, as additional instructor to Henry Doktor. Mr. Cox will be an assistant on the courses.

We are always pleased to see any visiting pilots, with or without aircraft, to come and enjoy the facilities at Sutton Bank.

J.C.R.

Service News

BANNERDOWN (Colerne)

NOTWITHSTANDING the polar conditions, 425 launches were achieved since our last report, with a total of 37 hours. One day, 11th March, it was good to see four aircraft in the air, a healthy "List", and 22 cars at the launch point.

On the ground our personnel have appeared and disappeared with startling rapidity. During detachment C.F.I. Ed Meddings had the misfortune to slip a disc, and is now in hospital with the prospect of being grounded for some time. J./T. Paddy Stephenson, our maintenance gen-man, has gone to Dishforth. Bill Longley is off on his Hastings trips again and Steve W-F, recently welcomed as Deputy C.F.I., is posted to Germany at the end of June.

At a recent committee meeting consideration was given to the award of the Bannerdown Trophy, which is won each year by the novice who has put up the best performance in the air and on the ground. A sub-committee considered in all 14 members, awarding them points for attendance, flying progress and for ground effort, making suitable weighting for leave, detachment and the credit squeeze. The clear winner is Brian Campbell, who topped all sections, and we offer Brian hearty congratulations and thanks for being a gliding "type" in the true sense of the word.

P.H.

CLEVELANDS (R.A.F. Leeming)

AS these lines are read, thoughts of winter's chilly blasts will be far away, and just as well too. However, it is only right to remember our small but hardy band of enthusiastic members who braved the rigours of the past winter and continued to fly despite the wind and the snow fronts and similar icy delights. Life was not without its "moments"! Les Boyer scored the first thermal for the Club flying the Grunau — this was in January — and since then we have put in some quite useful local soaring. Alec Glover in the Oly gained 3,500 ft. under a fat Cu. which miraculously materialised after a sharp snow front had gone through — the usual story follows, of course: the only thing that was ticking in the Oly was Alec — no barograph!

We welcome Dick Feakes and Mike Baker to the Club. Their instructional B Cats. have been officially confirmed recently, and both have converted to the Skylark 3F. The "band" of 3F pilots grows; those converted are J. Wombwell, J. Clark, G. Appleyard, A. Glover and R. Pledge.

Two members highly delighted with their conversion to the Grunau are B. Coutts and W. Lombard. Both are impressed (surprised!) by the ability to spot-land the G.B. due to its delightfully effective air-brakes.

Our only flight of note so far this year has been Dick Feakes' climb to 7,000 ft. in the Olympia, on the same day that Alec forgot his barograph. Dick has his Silver C, and on this flight was carrying a barograph — but did not know!

We have pressed on with our training during the winter months, and so far this year 11 pupils have soloed successfully.

R.F.P.

EAST ANGLIAN (R.A.F. Duxford)

NEW additions to the Club over the past two months include Sqdn. Ldr. Rogers and Capt. Bill Cressy, U.S.A.F., to whom we extend a warm welcome. Our two bosses, John Delafield and Pete Dawson, are flying at Bicester in an Olympia 460 and Olympia 2B respectively. In preparation for Bicester, Pete has completely rebuilt the ageing Olympia trailer, and transformed it from a dilapidated, unsafe heap to a really first-class trailer.

Congratulations to our met. man, Bruce Bishop, Trav Spurling and Dick Barton on their A. and B. Good show also to Peter Pool and Al Cummingson gaining their C's. Chris Morris got Silver height in the Olympia, and Al Whiffen got Silver height and distance with a trip to Trunch, near Cromer.

The Tutor is having a respray after its major, and will conform with our new fleet colours.

Finally, we thank Dick Austin for the valuable work he has done for us during

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Replacement.—*"I must get my Gold C soon—I have lost my Silver C badge."*

his tour as Treasurer, and we wish him success in civilian life.

A.H.W.

FENLAND (Swanton Morley)

BY the time this report appears, our Norfolk Easter Rally will have been held. We hope for better weather than last year! Both the Olympia and the Gull 1 will be flying in the rally, and the Olympia is in the Lasham Spring Rally and the contest at Bicester too. Frantic efforts are being made to improve Ian Strachan's and Peter Kevan's B.G.A. "Rating" with a slim chance that we may have an entry in League 2 this year. Peter recently declared Tibenham and return, but had to land at Shipdham on the way back. Ted Bensley took the Olympia over the Fens and eventually landed virtually in his own back garden at West Dereham. Harry Orme and Al Pengelly have been converted on to the Gull, and have gained well-earned C Certificates. John Waters, Dave Newman and Dick Aldred have recently been solo.

I.W.S.

FULMAR (R.N.A.S. Lossiemouth and R.A.F. Kinloss)

THE climax of our 1961 soaring was reached one day at the end of October. After being hangar-bound for most of the day the wind at last dropped enough to push out the Skylark 2B. It was Dave Innes' turn to fly and you never saw anyone get so quickly into a glider. "Tiger" started and we enviously watched them climb straight into wind towards the huge wave near Rothes. "Tiger" returned and then, aeons later it seemed, a speck, high above us, spinning and looping, obviously pleased about something. We rushed across to hear him say "indicated 18,000 ft., had to stop, no oxygen". That was our first Gold C.

It all seemed so easy, but then came the disappointments. A Christmas Wave Safari which never materialised because of impossible weather, a magneto-less Tiger Moth and then some more impossible weather. However, after struggling through a bleak January and February with either horribly short or horribly cold auto-launches, "Tiger" returned to the scene. The Weihe syndicate from Aberdeen, having gallantly flown with us during our worst weather and, what is more, helped out with some instructing, at last got in some aero-tow practice before their own Tiger arrived.

Then came a very cold unstable northerly day which gave us a bright morning and a little thermic. The airfield was still snow-covered, but those little Cu. off the sea sucked like mad and kept Bill Forster up for an hour and gained him a well-earned C.

A mere fortnight later came a wave day. For most of the afternoon there were no gliders on the ground. There were three more C's, for Tony Bell, Mervyn Singer and Jock Knowles, clocking nearly 3 hours and 16,000 ft. between them, all in the Prefect. The T-21 reached 7,000 ft., having formated at 5,000 ft. with the T-31 flown solo by Bill Forster. All this time John Harris was sitting in solitary state somewhere around 10,000 ft. in the Skylark, for 4 hr. 15 min. Two lucky chaps had first air experience flights, soaring to around 5,000 ft., and everybody ended the day exhausted but happy.

Trying not to sound too blasé, we are now looking forward to a flock of Silver and Gold C heights, and why not the odd 5 hours?

H.R.T.

HOME COUNTIES (R.A.F. Hornchurch)

HOME COUNTIES Gliding Club is now extinct — it was irrevocably sunk at the beginning of March. We have been looking around for a new site since we first realised that Hornchurch would be closing down. There are, however, no suitable airfields available in the London area, and our aircraft have now been reallocated throughout the R.A.F.G.S.A.

We have been flying for two years, although efforts to bring the Club into existence started long before that. We have all had good times with Home Counties (in between working), and we know that out of the few people we have introduced to the sport many have already become addicts.

In signing off, we wish all our fellow clubs very good gliding throughout the year. And, *please*, if you see any of our chaps wandering around looking for a new home, save them a place on your flying list. They are all reasonably good workers! Cheerio!

G.H.M.

WINDRUSHERS AND R.A.F.G.S.A. CENTRE (Bicester)

WITH the Club and centre now operating at full strength, coupled with the improving weather, gliding at Bicester is increasing rapidly.

Ab initio courses have been considerably over-subscribed, and we are now booked up until September, the first two *ab initio* courses have produced 14 A and B's. Instructor courses have been going well, and we hope to make a very real effort to improve the standard of instruction. The increasing number of people coming to the centre has meant that we will have to plan extensions to the bar!

Notable achievements this year include a C gained by A.C. Hall in difficult thermal conditions on 18th February, and C.P.O. Osbourne, from Yeovilton, who celebrated the end of his instructor's course by taking an Olympia down to Exeter, a generous Silver C distance. C Certificates have also been gained by A.A. Kerry and S.A.C. Shrosbree.

Coming attractions include the Bicester Competition during Easter week, which has been recognised as a B.G.A. qualifying competition.

Owing to the fact that Little Rissington is 30 miles from Bicester, Flt.-Lt. Saundby has relinquished the job of Club Secretary, and this has been taken over by Snr. Tech. Ron Newall.

R.P.S.

Overseas News

BULAWAYO

IT has been a long time since we conveyed any news to you and our distant friends who have left us to live in New Zealand, South Africa and England, and we wish to state that we are still very active. This despite the fact that our T-31 and Bergfalke are out of the air undergoing repairs after mishaps. Our hard core of types who were undergoing instruction, oddly enough, are all doctors, yet still come out at week-ends to chat, help, and watch the fortunates getting away in the single-seaters.

Our new winch, powered by a V-8 engine, is a dream to drive and be launched by, and due to an excellent pay-on gear, guide wheels, etc., has so far eliminated all cable breaks. This creation demands a lot of publicity, more than space allows, and is the "Baby" of two members, Werner Barczyk and Ernie Brockman, to whom we give full marks. But, as is so often the case with such people, Werner is not satisfied and is now thinking along the lines of a steam winch, all necessary parts available or makeable. This raises problems inasmuch as our winch drivers are assorted sizes, and asbestos suits, gloves and peaked caps for each may run expensive.

We also mean to explore the practicability of mules for retrieving to launching site, provided the field is not turned into a local rodeo.

All this ground activity has not been done to the detriment of flying, and we have had some commendable flights of late, earning a bevy of C's, the odd Silver and a couple of Gold heights.

The ladies, God bless 'em, still provide teas, lunches and dinners all hot from our gas stove, and the writer being a bachelor can speak for the others in like circumstances by saying they are the best meals of the week.

Joe Birtle is still trying hard for his Gold C distance in the Grunau Baby, but so far has fallen short.

Our Chairman, Roy Hester, has been the strong moving force in the purchase of a Goevier, which is due to reach Lourenco Marques.

The Tiger Moth is still giving of its best and going strong. The honour of the shortest and longest tows in the Club go to Werner Barczyk for a 2-minute and a 22-minute tow, done consecutively.

C.F.I. Mike Browning did some Line Squall soaring and was thrilled to see an article in the February issue of S. & G. which was almost a carbon copy of his flight done in the Wolf.

With three two-seater aircraft in the Club we hope to progress very nicely, and we shall need some further single-seater syndicates formed to keep all happy and regularly airborne.

Our African watchman and handyman residing at the Club has been presented with yet another piccaninny, and our Chairman's dog had a front leg ampu-

tated and is now called Tri-pacer.

This seems to bring us up to date, and we wish to send greetings to all our friends, wherever they may be.

M.W.B.

DUBLIN (Baldonnel Airfield)

ST. PATRICK'S DAY marked the opening of the soaring season this year for us at Baldonnel. Mild wave conditions were encountered by the Ka-7, Ka-8 and Kite 2, but on this occasion the lift did not seem to extend much above 3,000 ft. On the following day, 18th March, we were visited by Group Captain "Paddy" Kearon of the R.A.F.G.S.A., who showed us what can be done by an expert, in marginal soaring conditions, by staying up in our Ka-7 for about an hour on what was only his second flight ever in that type.

Very strong westerly winds rather spoilt the first week-end of April. Nevertheless some local soaring was achieved, but pilots had to be careful not to be too carried away (literally) when thermalling, for even the higher performance aircraft appeared to have negligible penetration against a wind of 40 knots, and it is a long way to Wales across the Irish Sea!

Plans are going ahead for the first Irish National Gliding Championships, which are now expected to be held this August. At the time of writing these notes the final details have still to be worked out, but competitors from overseas will be very welcome to take part. Next year's World Championships in Argentina may have an Irish entry for the first time if financial arrangements can be made.

Statistics of last year's operations were given at the Annual General Meeting of the Club. Launches totalled 1,380 and flying hours were nearly 250, showing increases of 28% and 65% respectively over the figures for the previous year.

A.G.M.

HOLLAND

JUST after the news for the last issue had been written some more good wave flights were recorded from Issoire. Peter Seton and Terlet-instructor Jan Minoli completed their Gold C's, v. Nifterick and van Lamsweerde reached Gold C height, and van Geuns reached Diamond height, all on 10th January.

Two days later van Lamsweerde tried again, with even more success, reaching Diamond height as well, making the score for the whole safari 17 Gold C heights, of which 5 were Diamonds, with one new Dutch record, spread over five different days. The third Sagitta has been delivered to Joop Jungblut, and a series of five will now be built, four of them for the Dutch gliding movement.

Our Nationals will be held from 19th May-2nd June at Terlet. All seeded pilots for the World Championships will fly Skylark 2's, the only performance machine available in sufficient quantity.

J.V.E.

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