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SAILPLANE AND GLIDING

OFFICIAL ORGAN OF THE BRITISH GLIDING ASSOCIATION

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COVER PHOTOGRAPH.—Philip Wills has photographed his Skylark III with the Official Observer before starting for—where?

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1959 and All That

BEFORE it seems to have started, this incredible year is now coming to an end, and here we are once more thinking in terms of stockings and Yule logs and what have you. Never in recorded history have we had such a summer; what use have we made of it?

Rather oddly, the tale of Records does not seem as brilliant as might have been expected. The Goodhart brothers have done satisfactory things to Straight Distance, and Anne Burns has at last given the ladies a fair excuse to raise their heads, but by and large most records have remained unchanged. Was this because the Nationals were held in May, after which the pundits slacked off? Or was it that, although so many days were good, few were really excellent? Certainly the crop of Silvers, Golds and Diamonds is such as to bid fair to lead to inflation and debase the currency.

On 4th December 1929, the British Gliding Association was formed at the famous "gliding lunch", and it is to be guessed that no one on that auspicious occasion was optimistic enough to foresee the result of 30 years' growth. The latest Silver C issued bears the number 881, and Gold C number 56 has just been minted. Diamonds, undreamt of in 1929, are now no uncommon jewels, though every possessor has legitimate grounds for pride.

SAILPLANE & GLIDING forges ahead, steadily and surely. This issue is a great experiment, with its coloured cover. We had a coloured cover in June, but this was our Contest issue, so the increased sales could not necessarily be credited to the cover alone. On this occasion we shall be able to interpret from our circulation exactly whether or no the vast extra cost can be expected to pay for itself. *So, if you want more colour, persuade your friends to buy a copy of this issue*, or better still, to send a year's sub.

What of 1960? Our new and shiny Government talks of revising its approach to Civil Aviation and also increasing its support of Sport. Under both headings we have a case for something rather more positive than the amiable you-get-on-with-it-and-we-won't-bother-you attitude of the last decade. A positive policy of encouragement for Sporting Aviation is long overdue and there is no country anywhere near our size and importance in the world which does not give substantial support in this field.

But we cannot grouse after such a year. Thank you, 1959; come on and do better, 1960. And in the meantime to all our readers—

A Happy Christmas and New Year

Thirty Years Ago

by A. E. Slater

WHY did by the present British gliding movement not start until late in 1929, when the first British soaring contest had been held seven years earlier in 1922? There may have been other factors, such as the "spirit of the times" and all that; but the only obvious difference between the two dates lies in the kind of soaring that was being done in the world.

The world's first soaring flights of over an hour, made in Germany in August, 1922, stimulated the *Daily Mail* to organise a contest two months later on the Itford-Firle ridge, where the duration record was raised to 3 hrs. 21 mins. But it was all done by slope-soaring.

An involuntary thunderstorm flight in 1926 by Max Kegel, and a deliberate use of lift under cumulus clouds by Robert Kronfeld in 1928, both at the Wasserkuppe in Germany, led at last to the wonder year for soaring, 1929, when gliders were well and truly liberated from dependence upon hills. But it was still a gradual process.

Stimulated by the offer of a prize worth £250 by a newspaper, the *Grüne Post*, Johannes Nehring made two trips along the Bergstrasse, a range of mountains bordering the Rhine valley south of Darmstadt. On 3rd April he managed 70 km., and on the 25th, 72 km. (45 miles—world's distance record); but he was brought down each time by inability to cross a gap, although on the second occasion he used cumulus lift to climb to 3,960 ft., an official world's record.

Next it was Kronfeld's turn to try for the prize in his new Wien sailplane. He chose the Teutoburger Wald, a range of low hills in north-west Germany, with Oerlinghausen at its foot about half-way along. On his first attempt on 9th May, a gap brought him down. But on a second attempt, on 15th May, he waited at each gap for a cumulus cloud to come and help him across, and won the prize by making the world's first soaring flight of over 100 kilometres. He had, in fact, already used cumulus lift, not only in 1928, but again on 14th April, 1929, when he climbed to 4,183 ft. at the Wasserkuppe; this was an unofficial record, being beyond the range of his barograph.

But the really big stuff came in July, during the annual contest at the Wasserkuppe. On the 20th Kronfeld made the first *deliberate* thunderstorm flight (unlike Kegel's of 1926, which had been far from deliberate), and was able to do so without undue qualms because (a) Professor Georgii had told him he would find "cold front" lift in the clear air in advance of the storm clouds, and (b) he had taken the precaution to get a parachute. By the time Kronfeld took off about 3 p.m., Wolf Hirth was already up at 3,000 ft. in front of the approaching storm. Kronfeld caught the lift also, and from 6,500 ft. saw that the storm front stretched from west to east and was moving northwards at great speed. Then the front split in two and he soon realised that the western half, where he was flying, was dying out. Unlike Hirth, he managed to cross through downcurrents to the eastern half, was engulfed by cloud, spun out of it (unintentionally), and carried on till approaching darkness forced him to land at Hermsdorf, near Jena. He had broken the world's distance record with 89 miles and the world's altitude record with 7,084 ft.

Ten days later, on 30th July, Kronfeld



broke both records again in a flight to Sienlas, near Bayreuth. As a big cumulus cloud approached the Wasserkuppe, he saw two other pilots disappear into it. Though without a parachute, he followed them in, and managed to preserve his balance while climbing rapidly until a succession of violent gusts flung him out of the top of the cloud. He had climbed 8,494 ft., and, with the help of further clouds, made 93 miles from the Wasserkuppe.

On the same day the world's two-seater distance and height records were broken by Günter Groenhoff in the first sailplane to be named "Rhönadler." He got lifted unintentionally into a cloud; then fierce turbulence set in. Suddenly there was a loud crack, and a rent appeared in the "neck" which joined the centre of the wing to the fuselage; thereafter the wing was held on only by a pair of struts on either side, while the split in the neck opened and shut in response to the gusts. The passenger in the front seat, oblivious to what had happened, chattered away gaily; he was Alexander Schleicher, who had built the machine at his factory in Poppenhausen village down below. He still builds gliders there.

The records were: 22 miles, 4,183 ft.

All these exciting developments did not pass unnoticed in British aviation circles, and on 4th December, 1929, came the famous "gliding lunch" at which the British Gliding Association was formed and the London Gliding Club mooted. The instigator of this lunch, Mr. Douglas C. Culver, tells in the following article how it came about. He was a pilot in the first world war, until he was shot down in August, 1918, and made a prisoner, losing an arm as a result of the crash. He got his C certificate at Dunstable in July, 1931.

Meanwhile, for the record:

First soaring contest in the U.S.A. at Long Beach, California, on 4th and 5th May, 1929; eight machines entered.

In September, 20 gliders were entered for a Russian contest at Koktebel in the Crimea.

On 7th October, flying in the Allegheny Mountains, Wolfgang Klemperer set up three U.S. records: 1 hr. 40 min. duration, 16 miles distance, 600 ft. climb. Dr. Klemperer has now moved over to astronautics, but his son and daughter both glide.

The world's duration record was raised to 14 hrs. 43½ mins. on 19th October by Lieut. Dinort at Rossitten on the East Prussian coast.

In Poland, on 2nd November, at Bezmiechova in the Carpathians, a flight of 2 hrs. 11 mins. by Grzeszczyk created such a sensation that a subsidised national soaring centre was set up there.

Finally, on 10th December, W. Hawley Bowlus raised the U.S. duration record to 2 hrs. 47 mins. He was the man who designed Lindbergh's transatlantic aeroplane in 1926.

How It Happened

by D. C. Culver

Reproduced from "The Sailplane & Glider," Nov.-Dec. 1939

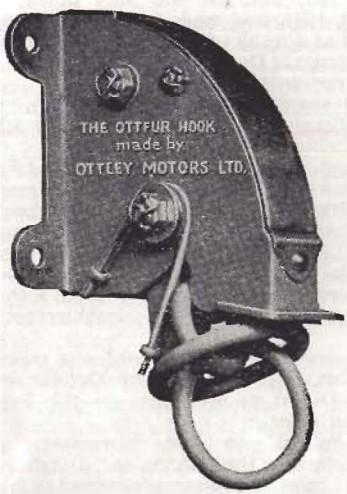
THE inspiration for the present British gliding movement certainly came from *The Aeroplane*; I believe that Mr. Thurstan James was really responsible for the Gliding Number of *The Aeroplane* which was published on 6th November, 1929, but it had the benevolent blessing of the editor, C. G. Grey. The result of the articles on German gliding published in this issue was a flood of letters to *The Aeroplane*, amongst them being one from myself containing certain suggestions which apparently met with approval, for I was invited to call at *The Aeroplane* office for an interview with Mr Thurstan James.

At this meeting I offered to undertake to organise a luncheon party at a West End restaurant at which anybody who was interested in the subject would be welcome. Mr. Grey and Mr. James agreed to push the lunch in *The Aeroplane* as soon as I found a venue and fixed a date.

There were, of course, certain difficulties. I had no idea of the probable number to be accommodated, and without this information restaurant keepers were chary of giving me a date. In the end, by giving a guarantee of a minimum of twenty-five, the Comedy Restaurant in Panton Street undertook to do the job and the date, 4th December, was fixed.

On the appointed day I arrived with Mr. Grey and Mr. James and found no less than 56 people present. I also discovered to my

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POPPENHAUSEN an der Wasserkuppe, Germany

disgust that I was expected to take the chair.

Well, the Comedy gave us an excellent lunch and we then got down to business. I opened the proceedings by suggesting that those present should form a gliding club with a small subscription, find an easy site and purchase a ZÖGLING from Germany. I was followed by several speakers, amongst them being Mr. R. F. Dagnall, Mr. Marcus Manton, Mr. J. R. Ashwell-Cooke, Captain Latimer-Needham, "Jimmy" Lowe-Wylde, and Mr. Howard-Flanders. Eventually, round about 4 p.m., the party broke up, having accomplished very little except the installation of Mr. Howard-Flanders as Hon. Secretary, and myself as Chairman, of a body with vague ambitions, to be known as the "British Gliding Association."

That is the story of the "Gliding Lunch," as it has come to be known, and of the birth of that troublous and much-maligned body, the B.G.A. But it is not the full story, for Mr. R. F. Dagnall followed it up by building, and presenting to the B.G.A., "A.T.1," or, in other words, the R.F.D.-built American trainer which is now universally used in this country and known affectionately as the DAGLING; he also imported a ZÖGLING from Germany.

Fifty Years Ago

FOUR weeks before Louis Blériot made the first Channel crossing by aeroplane on 25th July, 1909, the first British soaring flight was made over Amberley Downs by E. C. Gordon England on a Weiss glider, as readers of our June issue will already have learned.

This was the first year of publication of *Flight*, and its issue of 31st July, 1909, is given up almost entirely to the cross-Channel event. But what of the pioneer soaring flight on 27th June? The issue of 3rd July has a reprint of an article by Octave Chanute on soaring flight, written in 1907, prophesying that, one day, "some bold man will attempt the feat of soaring like a bird". But neither in this nor in any subsequent issue that year is Gordon England's flight mentioned.

However, this first volume of *Flight* reports a fair amount of gliding, all of it done as a mere preliminary to power flying. For instance, the issue of 10th July states that the Aeronautique Club of France was organising a series of monthly competitions among its pupils for gliding flights at its school in the Champlain-Palaiseau Park. And in England, in September, one glider was being built for the Shropshire Aero Club and six for the Liverpool Aviation Society.

More than two pages were given on 4th December to a Mr. Horace Vaughan to describe how he built a biplane "hang" glider with a box tail. Having discovered that it flew more efficiently with the top tail plane and both vertical panels removed, he concluded by simple extrapolation that it would fly still better if the remaining tail plane was taken off too. After his next attempt to fly, he decided the wreckage was not worth rebuilding, and acquired a Wright-Clarke glider. This was an excellent-looking biplane with front elevator and similar controls to the early Wright aeroplanes, i.e. two control sticks—one for the elevator and the other both for wing-warping and steering ("if the lever is moved forward, the rudder puts the prow to the left").

Another attempt which ended in a crash was by Lieuts. Porte and Pirie, R.N., who together set off down a pair of rails laid on Portsdown Hill in a biplane with a 45-degree stagger. Nearly 30 years later, Pirie's son was gliding with the Cambridge Club.

Among prizes offered to aviators in 1909 were the Soulé Prize "for the first aviator to glide down the sloping side of a mountain from an altitude of 500 metres without touching it," and the René Quinton Prize "for the first aviator who, having stopped his engine, keeps aloft for 5 minutes without descending more than 50 metres".

Following the example of Lilenthal, several artificial hills were built on flying fields. An "academy for aeronautical study" at Munich, founded in May, proposed to construct one for its members to glide from, and at the Frankfurt aeronautical exhibition in July, "among other conveniences a gliding hill had been built." Then, in the issue of 21st August, there is a photo of an artificial hill built specially for "gliding experiments" by Messrs. Handley Page on their extensive flying ground (2½ miles long by a mile wide) at Creekmouth, between Dagenham and Barking. It appears to be four times the height of a man seen standing on top, so it may not have entirely disappeared even after 50 years. Would some local reader please confirm?

DAUNTLESS DOG-LEG

by D. M. Kaye

Date: 30th August, 1959.
Sailplane: T-42B "Odin".
Pilots: D. M. Kaye and E. J. Martin.
Declaration: 245 mile dog-leg, Camphill,-Cranfield-Exeter.
Wind: N.E., 12 knots.
Distance Achieved: 229 miles in 5 hours 23 minutes.

IT is going to be an exciting day; even the T-31 has shown mild interest in thermals at only 10 a.m. Everyone else is rigged and ready. Jimmy Muggins hasn't even started.

"Ernest, get the '42 rigged (tongue in cheek); I'll sort out the maps and a retrieve crew." After a frantic search I find all the team are on holiday; no car is available. Oh, to hell with it, let's go! Where? Well. how about Camphill-Cranfield-Exeter; but that's a long way—so what?

The tractor crawls painfully up to the launch with our giant. Two people are already thermalling high in a sky of 4/8 cumulus, yet still we stumble across the field. At last time to climb in amidst an assortment of sandwiches, fruit, sweets, maps and glide tables. "What do you mean, don't break the cable?" Give me the chance.

12.00 hours, a successful launch and a convenient thermal combine to make life much happier. The fast-approaching high cover doesn't look healthy, so we rush away into the sunlight as soon as possible. Five miles downwind there's a kick in the pants which only fades well inside a cloud at 5,600 ft. indicated (all heights above Camphill, itself 1,200 ft. a.s.l.).

An ominous choking splutter from behind needs little analysing. Ernest is temporarily incapacitated, but the navigation is simple. There's Matlock, and a very handy thermal, too. The rate of climb is very satisfactory, 400-500 ft./min.; course, although 70° cross wind, seems feasible, and cloud base at 3,600 ft. doesn't cause any worries. Derby is now in sight and a pippin of a cloud up to 6,800 ft. puts the hills behind us.

Loughborough slid by within the hour: that makes an average 48 m.p.h. No airways to worry about yet; each cloud as active as the next and Ernest a lot better. Coming upon Northampton, we find one or two dams the Ordnance Survey have overlooked. Then panic—someone's moved Billing Aerodrome. It's certainly Northampton, and at last the aerodrome is there too.

Life's been easy, but round the corner lies a problem, for the cumulus has gone; in its place strato-cu. Cranfield, bang underneath the clag, lies a tantalizing ten miles away. We scuttle about at 3,000 ft.; a bit of arithmetic makes us 4,000 ft. above the ground, but it isn't enough to reach the objective and return to safety.

Ernest unearths the camera and we select a prominent landmark called Salvey Forest. You couldn't miss it unless you were told to go and find it. Pictures taken, we make a bid to reach the better conditions, but the ground draws relentlessly closer. I've never been to Silverstone before, neither has Ernest; that will soon be rectified. Ah! but that's where you're wrong. A real pundit thermal off the runway saves the day. We can really do something now, but a voice from the rear says "Airway!" All I think is not printable, but "it's all in the mind, you know."

Eventually we reach Oxford, enter cloud, and Ernest celebrates. He must be jolly hungry by now. Another airway rears its ugly head; we climb furiously to 6,700 ft. north of The Vale of White Horse and crash across to the south side at 15.20 hours.

The clouds now look a bit dead and seem ridiculously far apart. They don't feel dead, however, as we bowl on past Marlborough.

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I can smell something burning; it's a fragrant scent, however—must be Ernest having a pipe. He might be content, but this glide has gone on a long time. We gaze over the edge of the cockpit at Frome. The voice in the back says: "Lot of pylons down there;" that ought to do something, I think, and we're off again in a turbulent young thermal.

Now the clouds re-form closer together, the ground speed increases encouragingly; 5,000 ft. over Yeovilton, and maybe it's Exeter for us. The last cu. in the sky looks good for 2,000 ft. of climb, but certainly doesn't live up to its appearance. Dunkeswell's in sight; so are two soaring sailplanes. But a hundred feet is a little low to start circling, so we land on the launching wire 17.23 hours.

In true Devonshire manner the Taunton Vale Club were magnificent hosts, and entertained us along with Chuck Bentson and Godfrey Harwood who also found their way there. The retrieve is, as ever, another story but we all got home in the end.

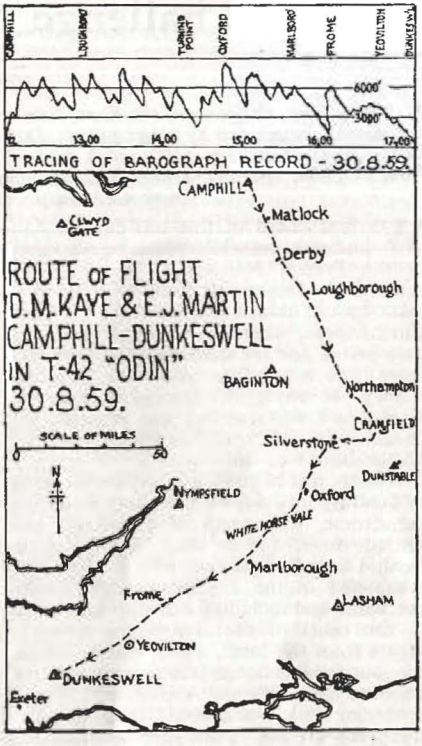
* * *

EDITORIAL NOTE.—The flight which Mr. Kaye has described above was the longest two-seater flight to start and finish in Great Britain, and was only 25 miles short of the National and U.K. two-seater record set up by Lorne Welch and Frank Irving on 14th May, 1953, when they flew from Lasham to Louvain in Belgium, also in a T-42.

Earlier this year, on 19th July, Mick Kaye made a 134-mile out-and-return from Camphill to Baginton and back. The following notes on this flight are taken from "Camphill News", where they appeared under the title:

IT'S QUICKER BY RAIL

"Four hours 52 minutes were taken to complete the journey of 130 miles, giving an average speed of about 27 m.p.h. Of this, 2 hours 35 minutes were spent going up in 28 thermals which gave a total gain of 28,950 ft. but gave no effective progress over the ground. The best gain in a thermal was 3,550 ft. and the average gain just over 1,000. The longest time was 10 minutes and the average time 6 minutes. The best rate of climb was 450 ft. per minute and the average 190. Something over 5 h.p. had to be found to keep the thing up and another 6 h.p. to get it up high enough to travel. The maximum h.p. used might have been about



20. Something like 140 miles had to be travelled in circles to get height for 130 miles effective flight. Allowing for drift caused by the light west wind, the total distance flown would not be far short of 300 miles.

"Two hours 7 minutes were spent coming down in 28 glides, giving an average effective speed over the ground of about 65 m.p.h., which would be nearer 75 m.p.h. after allowing for drift and searches for thermals. The greatest loss of hieght in a glide was 3,300 ft. and the average over 1,000. The longest time was 10 minutes and the average 4½ minutes. The quickest loss of height was 400 ft. per minute and the average 220. The longest run was 11 miles and the average run nearly 5 miles.

"Ten minutes were spent messing about near Ashbourne going round in circles getting nowhere.

"What a crazy and uncomfortable way to travel about the country!"

Challenge Victor Boin

by David Ince

M. Victor Boin, chairman of the Royal Belgian Aero Club, presented a trophy a few years ago for annual competition by glider pilots. David Ince describes how he won this year's contest with a flight of 289 km. (180 miles) in an Olympia 419, in competition with 28 other pilots from Belgium, Holland, France and Germany. The meeting was organised by the Belgian Aero Club and the Journal "Les Sports."

WE first heard of this one-day Belgian gliding event whilst planning our entry in the French Nationals. Investigation revealed the fact that it could be fitted in—just—on our return journey from St. Yan. Furthermore, there were most generous cash prizes, and for unsuccessful contenders there was more than sufficient "starting money" to cover all reasonable expenses. Even one's entrance fee was returned on checking in with the Organisers. Clearly, Victor Boin was on!

And so, just before 2 a.m. on the morning of Sunday, 5th July, we drove into Gosselies aerodrome, just north of Charleroi, and settled down for a brief night's sleep. Behind us was a journey of over 700 km., completed in the 13½ hours immediately preceding and including one stop for a meal in the heart of the champagne country. Apart from the meal, which was excellent, the journey was not as bad as it sounds, for we were using Elliotts' Ambulance caravan retrieving vehicle and could sleep in turns when not driving. I am sure that this had a great deal to do with my eventual success in the following day's contest.

Harry—in the cab—was awake by 7 a.m., and we were soon out on the airfield parked alongside a number of other entrants, and no doubt much in their envy as cooking smells and shaving noises emerged from the interior of our vast pantechnicon. On taking stock of our surroundings, we found Gosselies to be the sort of airfield which has one long runway, approximately east/west in this case, with a wide grass strip on each side. The gliders were parked about 100 yards on the north side of the runway and about half-way along its length. Entries included Skylark II, Ka-6b, Ka-7, Air 100, Breguet 901, L-Spatz 55, an AV-36 and certainly others, although we never really had time to look.

A one-day contest must be exceedingly difficult for its organisers, and I have nothing but praise for the way in which this was handled. After a short period of uncertainty we were briefed in French, German, Dutch and English. This briefing was relatively simple and quite clear, and it included a good picture of meteorological conditions. In essence, launching would begin at 12.00 local time (B.S.T.) and would proceed as rapidly as possible, one aircraft at a time, with release at 500 metres over the centre of the airfield. The Olympia 419x was number 21 to go in a field of 27, one or two of whom never arrived.

An anticyclone was centred over Western Germany, giving light southerly winds at Gosselies, and westerlies over the Western Frisian Islands, veering northerly in the area bounded by Bremen, Osnabrück and Hanover.

In planning this flight I had the great advantage of knowing much of the area extremely well, and it rapidly became apparent that the most logical route was one north-eastwards passing just to the north of the Ruhr. The first step, therefore, was to state an ambitious plan and draw a line from Gosselies to Osnabrück, extending it to the edge of the Minden hills, in the hope that these (if one got to them!) might allow the flight to be extended by hill-soaring from north of Osnabrück towards the Minden Gap.

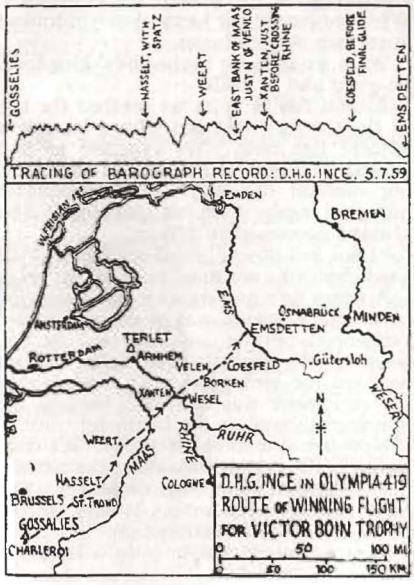
At this stage, however, I was rather more concerned about the possible lack of thermals over earlier parts of the route where the land is low-lying and damp. For this reason I aimed to route myself from Gosselies direct to the airfield just south of St. Trond and from there to Weert about 10 km. beyond the Dutch border. From Weert it was a straight line onwards through Osnabrück over very familiar territory, much of which I expected to be good for thermals.

I released over Gosselies at about 12.40 and soon afterwards reached 4,300 ft. north of the airfield. Very small cumulus, not more than a few hundred feet thick, were appearing all over the sky, and the going to St. Trond was easy—mostly

flying straight along thermal streets and hardly losing any height at all. In this way I passed several other competitors, including a Ka-7 and the AV-36, circling under one of the best clouds of the day. Near Hasselt I was glad to share a better-than-average thermal with a Belgian Spatz which was being flown with great skill. After this we went in different directions and I didn't see him again.

So far, things were going very much according to plan, and I began to wonder whether I might yet see Osnabrück and even perhaps the Minden Gap. But pride comes before a fall—I should have paid more attention to the thin streaks of cirrus moving in from the north-east, each one bringing its band of gloom and damped-out convection. Shortly afterwards I was down to 2,000 ft., flying fast to clear the shadows and heavy sink.

Fortunately a good thermal saved me when a landing in Belgium seemed almost inevitable. From 5,000 ft. again I was able to look down on Weert and contemplate crossing a second frontier and the rivers Maas and Rhine. But there was more cirrus trouble to come, and I was forced to mark time again after crossing the Maas a few miles north of Venlo. One more good



thermal just before crossing the Rhine at Xanten and then the day slowly began to fade—each thermal weaker and with a lower ceiling than its predecessor, and the small cumulus gradually dying away. Expecting each climb to be the last, I stayed as high as possible, slowly working E.N.E. via Borken and Velen.

Near Coesfeld a wide and very weak thermal carried the 419 back to just under 4,000 ft. All trace of cumulus had now vanished from the sky, and I set out on what must surely be the final glide of the day against a light head-wind. Down to 800 ft. over Emsdetten, the town produced weak lift, but a height gain of 400 ft. was no more than enough to offset the downwind drift, and so down to earth at Herr Gerling's farm on the Emsdetten-Saerbeck road to await Anne and Harry. While so doing, it was interesting to speculate on the Minden Hills, so near and yet so far—would it really have been possible to extend the flight by hill-soaring?

At this point a German retrieving crew appeared on their way back to base with a Ka-8 on an open trailer. As I showed them over the 419, their pilot explained that he had just completed his Silver C with a cross-country flight westwards towards Arnhem. I examined the Ka-8 on its trailer—an elegant but functional-looking lightweight single-seater with steel tube and fabric fuselage—the Germans considered it to be an ideal club intermediate sailplane "which is the first to stay up in the morning and the last down in the evening". As with all Schleicher's sailplanes, the standard of workmanship and quality of finish were quite excellent.

We parted company, mutually regretting that it was necessary to return to work in order to earn money for gliding (!) and I fell to musing about sporting flying in general. Those Aero Clubs all over France with small fleets and austere accommodation; and in Western Germany, as I had just seen from the air, a similar pattern could be discerned. Simple airfields, mere strips in the midst of farming land with a single winch, two or three gliders and maybe no buildings at all. I had yet to hear from Anne and Harry about the club which they had visited at Wesel during the retrieve. Here, working almost unaided, one member had designed and constructed a simple and attractive clubhouse. For the basic structure he had used the arches of a

completely destroyed Rhine railway bridge running across one end of the site; and all was completed in less than six months—truly a labour of love.

What a wonderful thing it would be to see the spirit and growth of a similar flying movement here in Britain. Only then—for all our great heritage in the air—shall we be able to claim that we are a truly airfaring nation in the sense of our modern continental neighbours.

Contest Results

Pilot	*Sailplane*	*Km.*
D. Ince (Gt. Britain)	Olympia 419	289
A. Xhaet (Belgium	Ka-6b	276
J. d'Otreppe (Belgium)	AV-36	275
J. Defosse (Belgium)	Ka-2b	261
P. Lafosse (Belgium)	Ka-6	258
A. Litt (Belgium)	Jaskolka	256
H. Mojet (Belgium)	Superspatz	241
M. Doutreloux (Belgium)	Bocian	232
M. Alexandre (Belgium)	Spatz	228
J. v.d. Stegen (Holland)	Skylark II	200
R. Rolle (Belgium)	Spatz	183
H. Nichol (France)	Air 102	181
J. Masuy (Belgian AF)	Condor	180
J. Krols (Holland)	Skylark II	175
A. Schmeltzer (Germany)	Olympia	165
R. Lefebvre (Belgian AF)	Ka-2	163
P. M. Smits (Holland)	Skylark II	158
Marbleu (France)	G.30	152
A. Scheffer (Holland)	Skylark II	131
Ruhling (Belgian AF)	Weihe	129
L. Drury (Belgium)	Sohaj	115
Thirion (Belgian AF)	Ka-2	91
P. Lepanse (France)	Breguet 901	76
D. Hinlopen (Holland)	Prefect	64
W. Lobet (France)	Air 102	50
P. Hannart (France)	Breguet 901	49
Quettier (Belgian AF)	Ka-2	47
M. Deswarte (France)	Breguet 901	31
H. Gildemyn (Belgium)	Sohaj	28

The Hawk as a Variometer

by Wieslaw Stafiej

AFTER long raining there comes a fine clear day. What a good occasion to begin the flying season!

I've left labour at 4 p.m., directing my steps into the airfield.

Bielsko, the town where I live, lies near the mountainous southern border of Poland. Even in afternoon hours we can meet here good thermals or, when the winds are favourable, it's possible to soar on some hill-updraughts.

With my friend we started on two-seater SZD-9BIS "Bocian" (Stork). The aeroplane towed us and when we reached an altitude of about 800 m. the rope was released.

Now the circling began, but the variometer indicated constantly about 1 m./sec. sinking. The hunt on its scale was now our only point of interest. We couldn't meet any thermal and in consequence our altitude dropped to 500 m.

"That's agony," said my companion. I've agreed with him.

Suddenly I've seen a hawk circling about 50 m. higher and a little to the right. It was evident that Mother Nature came to the rescue. We have directed Bocian to the thermal, so clearly shown us by the bird. The variometer indicated now 2 m./sec. climbing. We began circling and the altitude grew up slowly but constantly. When we passed the hawk closely it looked at us with very bad eyes.

What, an intruder in the birds' kingdom? So great and so swift?

After a few minutes we reached the top of the thermal, and our course became a straight line now. We expected to find another stronger updraught but there was not one on our way. The variometer indicated again 1 m./sec. sinking. The altitude decreased to 500 m.

"Look left down," cried my friend, "the hawk beneath; we must simulate it!"

A sharp turn and we were just above the bird. All attention was given now to the variometer but we had always 2 m./sec. sinking. We couldn't believe that instinct deceived the bird. It wasn't possible that the variometer was damaged, because the altimeter showed us the sorrowful truth.

Now it was a complete agony. We were forced to direct our Bocian into the airfield.

"Look right," cried my companion. The hawk passed by our wing. Its beak seemed to smile with great satisfaction.

How malicious can be such a little but cunning animal!

Aerobatics at Dunstable

ON 20th September the Third Annual and Second National Aerobatic Contest was held at the London Gliding Club. This time competitors could be released at 2,500 ft., in the absence of low cloud which had reduced launching height on the two previous occasions. Of the 16 entrants, only one failed to arrive, and it is rather remarkable that 11 of the 15 who flew were from Service clubs: 5 from the R.A.F., 4 from the Army, one from the Royal Navy and one from the Civil Service. As before, every competitor had to attempt a spot landing.

To keep the public entertained, there were joy rides (including a free one for whoever got the programme with the lucky number); an out-and-return soaring contest; a race for ultra-light Turbulent aeroplanes; and a distance race for hydrogen-filled toy balloons, of which the winner, launched by Ken Machin's son Gordon, made 400 miles E.N.E. to Brake, on the Lower Weser in North Germany—reference to weather charts show that it would have crossed the North Sea between about 21.30 and 06.00 hrs. and must have landed about 16.00 hrs. after a 24-hour flight.

The soaring contest was to Kidlington and back, 66 miles, for Skylark III's, starting in the lunch interval; Roger Mann won it and Geoffrey Stephenson took 5 minutes longer with 2½ hours.

For the Aerobatic Contest the Lockheed International Aerobatic Trophy Panel again very kindly acted as judges, with A. W. "Bill" Bedford as adviser on gliding; members of the Panel were:—Maj. Oliver Stewart (Chairman), Capt. H. S. Broad, J. K. Quill, Sqn. Ldr. C. K. Turner Hughes, G. A. V. Tyson, and Air Cmdre. A. H. Wheeler. This time they rated the competitors on a points system and the first four were:—

Flt. Lt. B. B. Sharman (Andover) ..	247
Peter Dirs (London)	238
Lt. Cmdr. H. R. Dimock (Portsmouth)	232
Flt. Lt. D. S. Bridson (London) ..	230

Flt. Lieut. Sharman was awarded the Jack Hanks Trophy, and the first three received additional cash prizes from a generous donor, Mr. J. B. Emmott, of Kenilworth. Mr. Emmott, in a letter thanking the London Club for their hospitality, adds:—"I thought that the display as a whole was an example of perfect organization and the competitors set such a high standard that the judges must have had a very difficult task indeed."

We are indebted to Major Oliver Stewart for the following report on the individual performances, which is signed by all the Judges but one (who has gone abroad).

REPORT OF THE JUDGES

The judges have the honour to make the following report to the Chairman, the London Gliding Club.

THE WEATHER.—Conditions remained good throughout the contest, although the background varied according to whether the competitors were performing against a dazzling bright cloudless sky or against the curtains of strato-cumulus cloud that occasionally drifted by. For most of the contest there was a flat calm, but in the middle of the afternoon light airs were recorded.

THE ORGANIZATION.—Again the contest was run smoothly. The tug aircraft did their work efficiently and their pilots deserve commendation for their time-keeping. Once only was there a minor difficulty when a release nearly overlapped with a spot landing. This did not, in fact, cause difficulty. Tug aircraft should clear the aerobatic area immediately after the aerobatic aircraft is released and should avoid doing spins or other aerobatics when they are losing height. The competitors were divided into two groups, one of eight, performing in the morning, the other of seven performing in the afternoon. This arrangement eased the judges' task by reducing the periods of continuous concentration.

The paper cones used for indicating the position of the spot point were an admirable novelty, helping both competitors and spectators.

THE RULES.—These again followed the pattern of the first contest of 1957 except that the full set of compulsory manoeuvres —namely a chandelle to the right and loop and a chandelle to the left and loop, were imposed.



Aerobatic Winners: L. to R.—Peter Dirs (2nd), B. B. Sharman (1st), and Humphry Dimock (3rd) —*(see opposite page)*.

Courtesy "The Aeroplane & Astronautics"

THE STANDARDS.—The judges found that the general standard of the competitors was somewhat higher than in previous years, but that there was a disappointing absence of ambition. Competitors seemed content with former routines and did not appear to the judges to have contributed much in the way of invention or originality. To obtain high marks a competitor should extend his aircraft to its reasonable limits in planned manoeuvres; these must be accurately done and form a complete, well-thought-out sequence; they must be placed in the correct area in front of the judges. Additional marks are awarded for all forms of originality either in presentation or in individual manoeuvres.

GENERAL COMMENTS.—At the briefing competitors were instructed about the positioning of their performances and in the event they showed that they had, in general, understood what was required. At the same time the judges feel that a large scale map illustrating diagrammatically the preferred presentation region would be helpful in the future.

The Individual Displays

J. R. AYRES (Olympia 403).—This competitor was extremely accurate in his compulsory manoeuvres, his spin was well developed and his four-leaf clover clearly defined. Moreover his continuity was good. It seemed that this competitor although reaching a high standard did not extend his aircraft to the utmost. Landing range 11.5 m. (37 ft. 7 in.).

D. A. SMITH (Skylark II).—This competitor released rather early and consequently much of his display was too much to the south. During it the sky became overcast, which was in some ways an advantage, for the aircraft movements could be studied more closely. Partly because of the distance from the judges' stand there was a delay between the final manoeuvre and the spot landing. As was to be expected from a former winner, the piloting standard was high. Landing range 14 m. (45 ft. 10 in.)

J. E. G. HARWOOD (Swallow).—There was a flat calm while this presentation was done. The competitor spent too much time after release positioning himself, and his display, in the judges' view, tended to lack overall coherence. The chandelles were not fully developed. Landing range 41.5 m. (136 ft.).

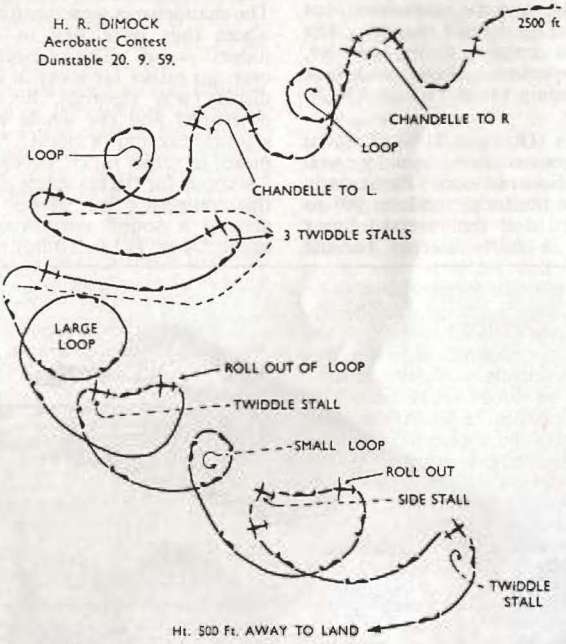
D. H. G. INCE (Olympia 403).—This competitor disappointed, because the judges were hoping for a repetition of the exceptionally high standard of this performance in 1958. He did no inverted flying, although the aircraft was cleared for it, and one manoeuvre at least was insufficiently developed. There was bright sunlight during most of this competitor's display. Landing range 6 m. (20 ft.).

P. C. DIRS (Olympia). SECOND PLACE.—Positioning was good throughout, although at one moment there seemed to be a risk that this competitor would come too much overhead. He contrived however to recover from this tendency by extracting his aircraft from a spin on a westerly heading. His half-roll off the top of a loop was well done and the whole performance gave the impression of being virogous and of exhibiting

good continuity. Landing range 4.2 m. (12 ft. 2 in.).

A. W. DOUGHTY (Kite 2).—A good start was made by this competitor and his steep stall with vertical recovery was effective. His spin was also well developed and the clean recovery with its immediately following loop were appreciated. In a few instances his accuracy was somewhat at fault. Landing range 11.6 m. (38 ft.).

H. R. DIMOCK (Sky).—THIRD PLACE. This competitor showed an advance upon last year's performance. He was well positioned and enjoyed the advangate of a white cloud background. His loops were well controlled and the time he took to complete the circle was in fact longer than



that of other competitors, being in the order of 10 or 11 seconds. His half roll off the top of a loop was enterprising, and in fact that word typified the whole of this display. At one moment he came a little too far overhead. Landing range 39.3 m. (30 ft. 8 in.).

B. B. SHARMAN (Olympia 419). FIRST PLACE.—This was a well defined, well knit presentation and included an inverted flight with a well banked inverted turn and a stall out. The four leaf clover was well executed. Accuracy, artistry and originality were all marked high. A delightful display which concluded with the best spot landing up to this point. Landing range 0.9 m. (3 ft.).

L. KURYLOWICZ (Olympia 2B).—This competitor had the good sense to appreciate that, as the sun moved round, so it became necessary to position the aircraft more to the north. Unfortunately he went rather too far away. During his presentation a light southerly wind had sprung up. He had a clear blue sky as background. His spin was well developed. A bright display without great scope. The spot landing result tied with that of Sharman as the best of the day. Landing range 0.9 m. (3 ft.).

D. W. JOHNSON (Skylark II).—Two good spins were shown by this competitor but otherwise his scope was not highly marked and there were one or two inaccuracies in some of his manoeuvres. His positioning against the brilliant sky was good throughout. Landing range 4.2 m. (13 ft. 10 in.).

R. DUNN (Olympia 2A).—Though well positioned at the start this competitor went too far to the south during his display. He did, however, seem to have observed that the judges' stand had been slightly adjusted in position to meet the movement of the sun so as to promote a free view of the competitors. His spin from a stall on the top of a loop was sound but he did not show great originality and he was not marked high under the heading of scope. Landing range 14.8 m. (46 ft. 3 in.).

P. W. WILLIAMS (Skylark II).—The wind had again dropped and there was a flat calm. The obligatory loops were well done and the judges were particularly pleased with the stall turns shown by this competitor for the aircraft was on each occasion brought fully over and the manoeuvre was executed in a clearly defined manner. The presentation as a complete entity, however, was not highly marked. There was a lack of variety. Landing range 11.1 m. (36 ft. 6 in.).

D. S. BRIDSON (Olympia 419). FOURTH PLACE.—This presentation was a well positioned and vigorous one. Particularly noteworthy were the loops made at 90° to the judges' stand and the inverted flying which included a fairly steeply banked inverted turn through 360°. Altogether this was one of the highlights of the afternoon's flying. Unfortunately the placing of this competitor was affected by his poor spot-landing. Landing range 60.4 m. (198 ft.).

J. D. SPOTTISWOOD (Olympia 2B).—Here was another good display though it failed to obtain high marks for originality and scope. Moreover the pilot started his performance a little too much overhead. His loops were accurate and well placed. And in the latter part of the display the positioning was extremely good. This competitor deserves a special mention although his total marking did not give him a placing. Landing range 3.8 m. (10 ft. 3 in.).

A. GOUGH (Olympia 2A).—A well placed start was followed by a sound presentation. The manoeuvres were positioned down sun where they were well in view from the judges' stand. The competitor did, however, go rather far away at one point. His display was vigorous, his spin was well developed and the whole ruotine showed smoothness and firmness. The loops were pulled in rather much, occupying as little as 7 seconds for the complete circle. On scope this competitor lost marks. But it was in general a sound performance. Landing range 5.4 m. (17 ft. 10 in.).



The Hartman Ornithopter described on the next page: showing the "feathers", the outer main bungy, and the diamond-shaped strut incorporating a horizontal bungy which stretches as the wing goes down

The Hartman Ornithopter

by Don Campbell

THIS Experimental Man-Powered Ornithopter was designed and constructed to ideas presented by Mr. Emiel Hartman. Messrs. Aviation and Engineering Projects of Hounslow carried out the main stressing to British Civil Airworthiness Requirements for gliders, with additional factors to cope with the extra loads imposed by flapping the wings.

Preliminary investigation was started in February, 1958. Messrs. Saunders Roe assisted with general advice and Peter Scott with many books on bird flight. Previous work on ornithopters was studied, notably that of Küchemann and von Holst in Germany and Cone in America.

Drawings were prepared at Hungerford, and construction of the fuselage started in August, 1958. Conventional glider construction was followed as far as possible. The fuselage is of bulkhead construction with ply skin. Wings are of main spar and torsion-resisting leading edge type. The leading edge skin is of 1/16-in. diagonal ply. The torsion is taken off by a diagonal spar and ply box to the rear root fitting in the usual manner.

The wing root section is Göttingen 535, tapered to an almost symmetrical section similar to R.A.F.30 at the tip. The washout is 6 degrees.

Rib construction is of ply web and spruce strip and was adopted to speed construction of the tapered wing and provide a convenient method of attaching the feather "quills". Each completed half-wing weighs 56 lbs.

The feathers proved to be the most difficult construction job in the whole machine. There are 8 secondaries and 7 primaries on each wing. The air loads on each feather were calculated for 40 m.p.h. and for the amplitude of beat corresponding to each feather position on the wing. The rate of beat is one complete cycle in 2 seconds. The maximum movement of the wing is 30° up and 10° down. The ash "quills" for the 8 secondaries were cut to size and tapered to give the correct amount of bend and only a small amount of twist sufficient to open and close the valve overlap between the feathers. The valve action was achieved by off-setting the quill from the centre line of the feather in plan view. Working out towards the tip, the primaries are calculated to have increasing twist and less bend until the tip primary is reached, where almost all twist takes place and very little bend. The difficult job of covering the overlapping feathers was done by Mrs. Campbell. Pre-doped madapolam was used.

The main wing support bungy joins the wing at a point 6 ft. out from the root and is reacted by a bungy across the parallelogram of the operating strut assembly.

A conventional tail unit is used, but elevator booster tabs are fitted to assist the pilot's control, which is by twist grip.

Nose-wheel steering is coupled to the rudder control, which is operated by turning the pilot's control assembly.

A simple release hook is fitted for car towing, and is operated by tilting the left foot pedal. The right foot pedal tilt operates the nose-wheel brake. The foot pedals are on slides and are coupled by cable to a point on the wing spar near the top of the operating strut. Pushing both feet and hands forward assists in the downstroke (power stroke).

Taxi trials were started at a disused airfield near Hungerford on 1st September, when speeds of 25 m.p.h. were reached in tow and flapping trials started.

The machine was delivered to Cranfield on 16th October, together with a large number of spare bungies of various lengths and tensions, as it was evident that the major development still to be done was to progressively change the bungies to obtain the desired rate of beat and amplitude.

The machine in its present form is not expected to accelerate from rest in still air, but with final adjustment of the bungies it should accelerate from a 15 m.p.h. tow or from rest against a 15 m.p.h. head-wind.

Design, drawing and construction were completed in 4,624 man hours. The total cost up to the first trials on 1st September was £2,362 1s. 6d.

The span 36 ft.; wing area 144 square feet; and empty weight 282 lbs.

News from Leszno

by Roman Zabiello

I—SPRING SOARING

THE Soaring Centre at Leszno is well known as the site of the 1958 World Championships, but it is believed that the soaring activity of this spring gives us a world record for cross-country mileage. The Leszno speciality is speed and distance flying. From 8th April to the beginning of our Nationals on 7th June, 295 cross-country flights gave a total of 37,449 kilometres (23,270 miles) flown in 1,810 hours. Of this number, 25,828 kilometres were completed in successful out-and-return and triangular flights. This gives an average distance of 127 kilometres (79 miles) per cross-country flight.

Since the 1st January this year, the Leszno Centre came under a new form of organisation, becoming the Central Soaring School. The plan was a big one, to prepare and test new instructional methods, to organise training courses for new instructors, and to gather experience in competition flying, etc. During the winter, new personnel and equipment were introduced—we received some new gliders, tow-planes, a Link trainer and a technical library. At the same time a wave-exploring camp in the Tatra mountains was run, and new Polish national altitude records set up. Mr. Niechwiejczyk, with a Jaskolka, reached the absolute altitude of 9,100 m. (29,856 ft.) and Miss Antoszewska, on a Mucha-100, 8,650 m. (28,379 ft.).

The organisation of flying in the Centre for the high-performance group very much resembles permanent competitions. Every morning after met. briefing the task of the day is announced and 20-25 gliders start on the same flight. Trainee pilots come to the Centre for courses of two weeks or a month, from any of the Regional Aero Clubs. Both flying and accommodation are free.

A very representative day was, for example, 20th May. The weather was fine without any wind and a triangular course of 100 km. was declared. Observers left at 09.30 for the turning points, and after the return of their aeroplanes the launching began. The 100-km. course was flown by 24 pilots once, by 14 twice, and by 3 three times. The best speed was 86.7 km./h.—the worst 45.0. Only 4 pilots failed to complete the course and they were quickly retrieved by the tugs.

This spring weather was fine for soaring, but mainly east and north winds made 500-kilometre flights from Leszno almost impossible, and most of our course pilots waited especially for this Diamond leg. At last, on 21st April, a goal flight to Budapest was declared (520 km.). After receiving permission for crossing two borders, the launching began at 09.00. A north wind of about 20-25 knots and cumulus cloud streets encouraged us. Unfortunately over Czechoslovakian territory the wind became weak and nobody reached the goal. The two best landed after going 465 kilometres near the Czechoslovak-Hungarian border, and the adventure ended as a friendly visit to Czechoslovak Aero Clubs.



Mrs. Pelagia Majewska

But, in spite of all this, one 500-kilometre flight was made. On 5th June, Jerzy Adamek got his third Diamond in a rather unusual flight. It was just before the Nationals, but the weather was so fine that three pilots, Mrs. Majewska, Mr. Gora and Mr. Kirakowski, started for a 300-km. triangle, and the fourth, Mr. Adamek, declared that after completing the two southern legs of this triangle he would reach the 500-km. goal by flying to Szczecin airport on the Baltic coast. After covering the two legs by 3 p.m. he informed us by radio that he had reached Poznan and had only 180 km. to go—we immediately sent one of our CSS-13 towing planes to Szczecin. Mr. Adamek was quite startled when, after landing, our tow pilot congratulated him on his success and towed him back to Leszno. It was the first 500-kilometre flight in this country from which the pilot was back home by 9 p.m. and had the pleasant opportunity of taking wine with the whole party in our café. On the same day Mrs. Majewska, in a Jaskolka, realised an average speed of 56 km./h. on a triangular circuit of 300 km., but unfortunately it cannot be confirmed as an International Record because of the lack of a barograph.

We must say that April and May were very active for cross-country flying not only at Leszno, but all over the country. For instance, on 12th May Mr. Kirakowski, with his passenger A. Wisniewski in a Bocian, started for an attempted out-and-return world record on the route Leszno-Lisie Katy (also a soaring school)-Leszno, 488 km. The previous record of 436 km. belonged to Mr. Dommisse. When in the evening, after the successful landing of Mr. Kirakowski, I telephoned to the C.F.I. of Lisie Katy to tell him about the success, there was not much enthusiasm in his voice. He explained that their pilot Dabek had also set out to beat this record on the route Lisie Katy-Warsaw-Lisie Katy, but that his distance was only 450 km., so the record had only half an hour of life. According to tradition a great fancy cake was the School award for record-breakers.

II—THE NATIONAL CHAMPIONSHIPS

This year the experiment was made of holding the Nationals longer than usual—for three weeks. The reason was to have every chance of becoming independent of the weather, and to eliminate the factor of luck as much as possible in the selection of the national team for next year's World Championships.

There were 41 pilots in one class only; of this number 32 were flying the Jaskolka, 8 the Bocian two-seater, and one an Austrian MG-23. Pilots from any of the Polish Aero Clubs were selected in the following manner:

The national seeded list of 13 pilots.

The best 24 pilots of the All-Year competitions.

Four foreign pilots represented Austria, Czechoslovakia, Jugoslavia and Hungary.

In our All-Year competitions every good flight received points; for example:

For goal flights over 300 km., 1,000 points plus 14 points for every kilometre over 300 km.

For free distance flights over 500 km., 3,000 points plus 10 points for every kilometre over 500 km.

For speed flights at over 45 km./h. on a 100-km. triangle, 1,000 points plus 12 points for every 0.1 km./h. over 45 km./h.

The scoring system allows also for 200-km. and 300-km. triangle and out-and-return flights. Each pilot counts his best flights in each category.

Some figures illustrate the flying experience of competitors for the Nationals. All competitors must have the Gold C badge. In addition, 16 pilots had three Diamonds, 15 two, and 10 one Diamond. Two pilots had over 1,500 hours of soaring, 8 over 1,000 hours, and 16 over 500 hours. The smallest amount was 260 hours, but the youngest pilot, 20-year-old Mr. Bzyl, had 430 hours of soaring experience. There was no separate classification for the two women pilots, Mrs. Pelagia Majewska and Mrs. Lucyna Bajewska. The rules and marking system were the same as for the 1958 World Championships.

The organisation of the Championships was in the hands of the Leszno staff. Director of the Championships was Mrs. Irena Zabiello, Chief of the Centre, and the Task Setter was Mr. Jozef Dankowski, Chief Flying Instructor of the Centre.

For launching and for retrieving we used a fleet of 15 CSS-13 biplanes, and one Stol aeroplane, Jak-12, for towing out of very short or soft fields. Usually, when retrieving from airfields, two gliders were towed by the CSS-13 and three by the Jak-12. Generally, except for the free

distance days, all pilots were back at Leszno and slept in their own tents every night.

Here is a brief summary of each day's results.

7TH JUNE.—After a short opening ceremony, a training 103-km. triangle course was announced. Weather: wind S., 12 knots, 4/10 Cu clouds. 33 pilots completed the task once and 9 twice. The best speed of 76.1 km./h. achieved by H. Zydorczak.

8TH JUNE.—The first contest day, and the mandatory task of free distance was declared. The longest distance from Leszno is about 540 km. in E.N.E. and E.S.E. directions. In good soaring conditions with favourable wind probably all competitors would land on the border with nearly 1,000 points each. This is the reason for which free distance in our conditions is rather embarrassing for the task setter and must be so used that even the best cannot reach the frontier.

MONDAY, 8TH JUNE seemed to be a real day. Medium soaring conditions, south-east wind, stronger near the eastern border, and a prospect of bad weather for several days was the deciding factor. Launching began at 11.00. After three hours with no news we sent the fleet of towing planes to Torun and then to Olsztyn, 300 km. north-east from Leszno. By evening we had a complete picture of the situation. The winners were Makula and Gorzelak with 495 km. each. Only 2 pilots covered distances below 300 km. (238 and 248 km.), 3 between 300 and 350 km., 3 between 350 and 400 km., and the rest of the pilots (23) between 400 and 500 kilometres. The difference between the winner and 32nd place was not more than 200 points. The problem in our Nationals, if free distance must be mandatory, is still unresolved.

14TH JUNE.—After a bad weather period we had our second contest day, a goal race to Mieroslawice, 99 km. The organisers did not wish to declare such short tasks because of the high luck factor, but the met. situation gave no other possibility, as we were between two fronts with a strong wind. The winner, T. Dabek, had a speed



Met. briefing at Leszno before take-off

of 110.4 km./h. 37 pilots reached the goal.

15TH JUNE.—A triangle of 302 km., Leszno-Ostrow-Mieroslawice-Leszno, was announced, but the met. forecast failed, and as a result the task-setters over-reached themselves. In the afternoon conditions suddenly changed, and the wind became stronger with stable air. The longest flight was made by L. Legenyei (Hungary) with 229 km. The race was marked as Distance along a Line.

17TH JUNE.—Goal race, Leszno-Lodz, 200 km. Weather: wind 10-15 knots, W., 3-5/10 Cu clouds. The young pilot A. Kmiotek made the best speed of 110.0 km./h. 35 pilots completed the task.

18TH JUNE.—The task was a 208-km. triangle race, Leszno-Kobylnica-Witaszyce-Leszno. Weather: wind S.W., 6 knots; no cumulus clouds at all—"dry" thermals. The winner was J. Wojnar with 69.0 km./h. 27 pilots of the 38 starting completed the course.

19TH JUNE.—Triangle race, 103 km., Leszno-Kotla-Wroniawy-Leszno. Conditions rather poor, "dry" thermals and weak lift. Launches began at 13.30, and at about 15.00 everyone noticed a very interesting phenomenon: wave clouds had appeared in the western half of the sky, extending in a north-south direction. A great number of pilots found typically smooth wave lift of 1-2 m./sec. on the second N.-S. leg of the triangle. This wave motion in quite flat country was probably caused by a low-pressure centre forming at the time near Berlin. The greatest speed, 61.5 km./h., was made by J. Pieczewski. 30 pilots out of 39 covered the course.

20TH JUNE.—Out-and-return race in a north-east direction, Leszno-Fordon-Leszno, 364 km. Weather: wind N., 10 knots; soaring conditions began very late, and 1-3/10 Cu clouds had only 3 hours duration. One world record, and as usual Mrs. Pelagia Majewska! She is actually the holder of six international records—a number which nobody has had before. Knowing her splendid performances, it seemed to be rather strange for many glider pilots that she was not awarded the Lilienthal Medal last year. The best speed of the day, 66.0 km./h., was made by H. Zydorczak. The task was completed by 32 pilots out of 39. In the evening a great fancy cake again—this tradition seems to be getting expensive these days.

21ST JUNE.—303-km. triangle on the route Leszno-Ostrow-Gniezno-Leszno. It was in fact the hardest task of the whole Championships and a high level of pilot skill was demonstrated. Pure thermals, without a single cumulus the whole day. Twenty pilots (out of 39) completed the task. The best speed, 53.9 km./h., was by Makula; 2nd Witek; 3rd Gorzelak. Mrs. Bajewska achieved an airspeed of 50.2 km./h., Mrs. Majewska 49.8 km./h.

23RD JUNE.—Out-and-return race, Leszno-Ostrow-Leszno 184-km. Weather: wind E.N.E., 10 knots; dry thermals and later 2/10 Cu. The Austrian pilot, J. Fritz, achieved the best speed, 65.3 km./h. Only one pilot failed to complete the task.

24TH JUNE.—Triangular race of 215 km., Leszno—Zielona Gora—Lwowek—Leszno Soaring conditions began very late, but thermals were strong. The winner, I. Kucharski, with a speed of 72.5 km./h. on a Bocian, established a new Polish national record in the two-seater category. 34 pilots (out of 39) completed the task.

27TH JUNE.—Out-and-return race, Leszno-Inowroclaw-Leszno, 320 km. Fine cumulus weather, wind N.E. and somewhat strong for such a long flight. 27 pilots (out of 38) completed the task. The best speed, 64.1 km./h., was for the second time in this contest made by J. Fritz. During the Championships J. Fritz set up four new Austrian national records.

So after eleven contest days the Polish Nationals concluded on 28th June, the leading total scores at the close of the contest being:

1.	J. Popiel	9,008
2.	J. Pieczewski	8,900
3.	Z. Kirakowski	8,783
4.	J. Adamek	8,771
5.	A. Witek	8,655
6.	H. Zydorozak	8,414
7.	E. Makula	8,392
8.	P. Majewska	8,090
9.	J. Fritz (Austria)	8,981
10.	L. Legenyei (Hungary) ..	7,977

The new Polish Champion, Jerzy Popiel, is 26 years old; he has 1,450 hours soaring experience and the Diamond C badge. He won the Nationals in 1953 as well, and is actually the holder of an international record. Jozef Pieczewski is 27, has 700 hours and the Gold C with two Diamonds, and it was his first entry in the Nationals.

Zbigniew Kirakowski is 30, has 800 hours and Diamond C. In 1957 he was second and is the holder of an international out-and-return record for two-seaters.

During the Championships 100,157 kilometres (62,235 miles) were flown in 2,656 hours in eleven contest days.

The weather, as always, during competitions was worse than expected at this time. We still had hope that during the nationals there would be an opportunity to set up some international records and to fly such tasks as 500-kilometre out-and-returns and 500-kilometre triangles. (In our opinion the 500-km. triangle should in the near future be included in the international records list). But reality was not so exciting—the east or north-east wind, the old continental air masses, and mainly "dry" thermals made our plans impossible.



One of THOSE Days

by Philippa Chubb

"WELL dear," said my mother, "I do think George is being very unfair to you—taking up gliding at *his* age! After all, what about you and the children?"

"Oh, we don't mind; in fact, we rather enjoy going," I replied hastily as I saw the hairs on the back of George's neck bristle—a sure sign that he is having difficulty in counting ten.

"That's all very well," mother plunged on, "but who is going to provide for you when something happens to him?"

"It's *not* going to," George spoke with exaggerated care. "Gliding is a very safe sport, and anyway I am insured."

"Fifty pounds isn't going to bury you" retorted Mum, "and anyway you might not actually die—you might lie crippled, *useless* for years!"

"Mother dear," I tried to pour oil on to troubled waters, "no one ever crashes in a glider and we all enjoy it; you'll see how lovely it is when we reach Lasham."

We travelled in silence for a while.

"What happens if the wind drops and you can't get back?" she asked, "you might even get carried away over the Iron Curtain and never be heard of again."

"You bet I would," retorted George, "no Russian is going to stop me claiming my Diamond C if that happens—and anyway you don't need wind."

"Now George, I am perfectly well aware that you think I am stupid, but you have no need to be sarcastic. Even I know you can't stay up without wind!"

Fortunately we arrived at the airfield and George was able to make good his escape. We settled down to watch the flying; an hour passed.

"George seems to be taking a long time to get into the air; what's up with him?"

"You have to take your turn," I explained; "the Duty Instructor will decide when he is to fly."

"Humph! I didn't realise we should be here for several hours. I think I'll stroll over and have a closer look."

Knowing Mother in this mood, I hastened to follow. She spied Les Creed wearing the official red arm-band.

"Ah—young man"—Les looked flattered, "will you kindly take my son-in-law up *now*, I don't wish to wait much longer."

To his eternal credit, Les remained calm.

"Actually, he is driving the winch, but I expect he will be back soon," he explained optimistically. "When his turn comes, it will only take about four minutes a trip."

"Four *minutes* at 5s. 6d. a time?—and to think he moaned about my daughter's new hat! Why can't he stay up longer? I heard someone called Syd say he had been up for five hours."

"One has to be here on the right day," I said, guiding Mother away from the launch point. "Some days are better than others."

Mother was rather silent going home, and funnily enough she said no more about gliding. Funny, because I had a letter from her this morning. This is what she said:—

"Dear Philippa: I am sure you and George will be surprised and pleased to know that yesterday I completed the tasks for my Silver C. I was so interested when you took me to Lasham, six months ago, that I popped in at the club near here for instruction. Of course I *have* been able to come on good days, but I am sure George will admit that I have done quite well.

"I am so sorry to hear that he is still on T-21's, but I am sure he will have some luck soon."

Oh, well, I suppose it will be a piece of news to tell George to-night when I visit him in hospital. It was unfortunate really—he was driving to Lasham very early one morning on what proved to be the *day* of *days*, admiring the beautiful formation of clouds, when he forgot the corner and drove straight into the ditch!

190 Miles in a Prefect

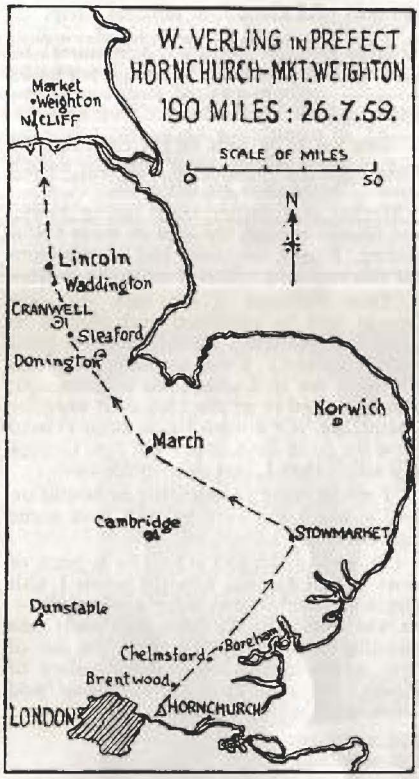
by W. Verling

For several years I have been working out ways and means so that I could complete my Gold C. Until this year the possibilities of doing the 300 kilometres seemed to be about as near as the chance of sending a man to the moon. However, we do have a standard Prefect, without trimming devices, and with an open cockpit. It also has various instruments, namely an A.S.I., altimeter, Cosim variometer, electric turn-and-slip indicator, a car-type compass, and, most important, a barograph.

Early in July I had completed a triangular flight from Hornchurch, of 71 miles, in two-and-a-half hours. This brought the possibility of a Gold distance, using the Prefect, to within reasonable limits, so various plans were made. Sunday, 26th July produced a reasonable forecast, and plans were made for a triangular flight from Hornchurch, using Stowmarket and Stamford as the turning points. Within a very short time all was ready, except for the two most important items—thermals and food. The thermals arrived about half-past eleven, and so I took off.

Lift seemed to be fair, and I soon climbed to 3,000 ft., though searching round for more thermals caused some concern, as the down-draughts and distance between thermals were greater than I expected. Nevertheless I soon completed this task, and set course from Hornchurch at 4,000 ft.

A friendly farmer near Brentwood saved



me much embarrassment by burning his straw at the right time and in the right place, for the altitude quickly climbed from 2,000 up to 4,500 ft. Visibility was good, and it was easy to follow my track, as this was only just to port of the A 12. Lift became adequate until just before our Graveyard—which is the Chelmsford locality. This area seems to have a built-in downdraught, and has caused the downfall of several promising flights in the past.

Having tried all the normal sources of lift without success, I flew on to the north-east side, and passed close to Boreham, coming down steadily. I chose a convenient field, circled it hoping for something to save me, when at 900 ft. the red ball sank to the bottom of the tube. Circling in this area of no sink, it was possible to inspect the field, which seemed to be of good size. Several people came out of a near-by farm house and gazed up, so I knew that help would be readily available if required. My luck held, because after what seemed a lifetime, the area of no sink gradually developed into a reasonable thermal. I left this at 5,600 and continued on my way.

The next few miles to Stowmarket passed easily with lift really abundant. In fact, anything less than 10 ft. per sec. was ignored. To ensure adequate recognition I descended to 3,000 ft. and circled the road junction which was the actual turning point. During this first stage of the flight the wind had been quite light, blowing from the south; in addition there had been very few clouds, most thermals being "blue". However, to the north of Stowmarket clouds could be seen building up with a base at about 5,500 ft. and with top about 7,500 ft.

Setting course from Stowmarket, strong lift was encountered, and I was soon up to 5,000 ft. underneath a poorly defined, ragged-based cloud. As this cloud seemed to be in the form of a "street", pointing only slightly to the right of my proposed track, I decided to fly along under this, and I found that by doing so I was able to cruise at speeds up to, and sometimes in excess of, 55 knots, without losing height; even jumping between breaks in the cloud caused little change in height.

With one or two exceptions, mainly when I tried to get closer to my required track, the sky seemed to be full of lift. However, on every occasion when I did try to return, little or no lift was found, so I decided to continue with the long line of lift. With this I progressed very rapidly to just past March. Whilst on this leg, however, the high cloud, which was coming in from central England, was causing me much concern. It seemed that I would be unable to make Stamford, so I decided to continue in a northerly direction and see if the distance could be made along a line.

Shortly after making this decision, the main source of my lift faded out, and from cruising at 55 knots above 5,000 ft. I was soon gliding down at 30 knots. At 1,800 ft. I entered the smoke sent up from another straw fire, and worked this strong lift up to 5,000 ft. For several miles, lift came when required and a fairly high ground-speed was maintained. Donington provided what was almost the last good thermal. At

5,000 ft. visibility was very poor and the sky almost completely covered with a most depressing-looking cloud. A steady glide took me to Sleaford, and until some weak lift appeared I had considered landing at Cranwell. Once again I crept up, this time only to 3,000 ft.

As there seemed to be little opportunity of proceeding very far, it seemed advisable to fly from airfield to airfield, because I was bound to be in for a long wait, and life is far more pleasant resting inside a hangar than hanging on to a wing in a field.

With this in mind, I set course for Waddington. On the way, visibility improved and Lincoln showed up in the distance. A more interesting feature was large dark cumulus cloud which looked almost lifeless under the now complete cover of high cloud. This seemed to be my only salvation, and as I was fairly certain to reach an airfield if necessary, I made for this cloud.

At 1,700 ft. weak lift, about 2-3 ft. per sec. was encountered. This proved to be quite a wide area, but nothing would induce more than 3 ft. per sec. from it. The lift itself was going up to the northern edge of the cloud which was the only real cloud to be seen. Very slowly the Prefect climbed. At 6,000 ft. I switched on the turn-and-slip, and at 6,500 ft. entered cloud. The lift was very smooth and still quite wide. The only difference on entering cloud was that the green ball went to the top, and the needle on the altimeter seemed to go round about as fast as the second hand of a watch. 10,000 ft. quickly came, and passed. At



11,000 ft. mild icing started, and lift started to get rough. 12,000 ft.—and it was decidedly cold. Icing increased, but we were still climbing rapidly. At 13,500 ft. it was really rough, and icing was severe. The A.S.I. and variometer ceased to function, so I decided to level out on a northerly heading. Settling down, I found that I was now up to 14,000 ft.

Most of the rest of the flight in cloud was straightforward. I had some fun in practising recovery from inadvertent unusual attitudes with the aid of primary intruments, but without an A.S.I. At various times in the cloud, heavy hail or sleet was encountered, and I was glad of the protection of my sun-glasses. Some of the sleet did dissolve and go down my neck, so I was very pleased to come out of the side of the cloud at about 8,000 ft. The icing soon cleared away, but neither the A.S.I. nor variometer returned to normal for the rest of the flight.

There were now several other large clouds around, but without an A.S.I. it would have been inadvisable to enter cloud. Heavy rain was encountered at various times, and it was obvious that all I could do was to stretch the glide as much as possible—this was helped by a strong tail-wind. Visibility was about 2 miles, and after crossing the Humber, I found a reasonable road running north, and followed that.

At 1,500 ft. indicated, because of obvious pressure changes, I was actually quite low, and consequently chose a field and circled it. In the middle of the field was a cricket pitch, whilst at the side was a large farm house. As it was now raining heavily, I made the landing on the cricket pitch, which should have been smooth, particularly as it was in Yorkshire. However, there were one or two very rough patches close to the table which gave me quite a bumpy landing. The farmer, who soon appeared, told me that these bumps also played tricks with the ball. He also told me I had landed at North Cave, Market Weighton.

As is usual in Yorkshire, I found marvellous hospitality, and in fact, when we left, well after midnight, we had the most magnificent farm supper I have ever had.

Some details of the flight: the total distance was 190 miles; total time 5 hours 30 minutes and maximum height 14,000 ft.

Gliding Certificates

DIAMONDS FOR GOAL FLIGHT

No.	*Name*	*Club or School*	*Date*
232	P. Scott	Bristol Gliding Club	19.7.59
233	J. G. Croshaw	Wessex R.A.F. Gliding Club	9.8.59
234	M. P. Garrod	London Gliding Club	23.6.57
235	B. B. Sharman	Wessex R.A.F. Gliding Club	31.8.59
236	A. H. Warminger	No. 611 A.T.C. Gliding School	3.9.59
237	G. S. Neumann	Cambridge University Gliding Club	29.8.59
238	F. D. Cretney	Windrushers R.A.F. Gliding Club	30.8.59
239	M. Randle	Midland Gliding Club	12.6.59
240	E. G. Shephard	Army Gliding Club	18.8.59

GOLD C CERTIFICATES

No.	*Name*	*Club*	*Date*
50	J. G. Croshaw	Wessex R.A.F. Gliding Club	9.8.59
51	B. B. Sharman	Wessex R.A.F. Gliding Club	31.8.59
52	G. S. Neumann	Cambridge University Gliding Club	29.8.59
53	F. D. Cretney	Windrushers R.A.F. Gliding Club	30.8.59
54	M. Randle	Midland Gliding Club	12.6.59
55	C. Wills	Surrey Gliding Club	4.8.59
56	E. G. Shephard	Army Gliding Club	18.8.59

SILVER C CERTIFICATES

No.	*Name*	*Club or School*	*Date*
834	J. R. Chandler	Moonrakers R.A.F. Gliding Club	2.8.59
835	T. Greenwood	Wessex R.A.F. Gliding Club	2.8.59
836	R. H. King	Moorakers R.A.F. Gliding Club	31.7.59
837	D. H. Williams	Army Gliding Club	4.8.59
838	F. D. Ward	Derbyshire & Lancashire Gliding Club	2.8.59
839	A. D. Marshall	Crown Agents Gliding Club	2.8.59
840	W. J. Hyde	No. 614 A.T.C. Gliding School	31.7.59
841	J. Davidson	Surrey Gliding Club	18.6.59
842	R. Taylor	Home Counties R.A.F. Gliding Club	5.8.59
843	B. W. Adams	H.Q. 2nd T.A.F. Gliding Club	8.8.59
844	T. G. Turner	Coventry Gliding Club	8.8.59
845	A. B. Newman	H.Q. 2nd T.A.F. Gliding Club	26.7.59
846	L. G. Kiloh	Newcastle Gliding Club	19.7.59
847	G. M. Bowman	No. 622 A.T.C. Gliding School	6.7.59
848	R. H. Holmes	Cranwell Gliding Club	8.8.59
849	J. R. Young	H.Q. 2nd T.A.F. Gliding Club	26.7.59
850	C. E. Passmore	No. 614 A.T.C. Gliding School	16.8.59
851	J. Baker	Surrey Gliding Club	30.7.59
852	P.E. Dale	N.A.E. Aero Club	16.8.59
853	P. A. Hearne	London Gliding Club	8.8.59
854	S. E. Marples	No. 641 A.T.C. Gliding School	5.8.59
855	P. Pozerskis	Northamptonshire Gliding Club	16.8.59
856	P. J. Pearce	Scottish Gliding Union	7.8.59
857	G. R. Christophersen	Surrey Gliding Club	8.8.59
858	L. Creed	Surrey Gliding Club	15.8.59
859	W. Stachowiak	London Gliding Club	15.8.59
860	J. H. Blackmore	N.A.E. Aero Club	19.7.59
861	P. Wildbur	Southdown Gliding Club	2.6.59
862	K. R. Pearson	Northamptonshire Gliding Club	29.7.59
863	S. V. Swallow	Surrey Gliding Club	28.8.59

864	B. N. Bennett	Army Gliding Club	29.8.59
865	I. H. Agutter	Southdown Gliding Club	5.6.59
866	L. Watts	Coventry Gliding Club	31.8.59
867	J. O. M. Wedderburn	Yorkshire Gliding Club	16.8.59
868	R. F. Brigden	Surrey Gliding Club	29.8.59
869	M. Bird	London Gliding Club	29.8.59
870	J. C. Strugnell	East Anglian R.A.F. Gliding Club	11.9.59
871	T. Kasperkiewicz	Polish Air Force Association G.C.	17.9.59
872	M. J. C. Wright	Surrey Gliding Club	30.8.59
873	J. Ellis	Oxford Gliding Club	29.8.59
874	J. S. Ruskiewicz	Polish Air Force Association G.C.	14.9.59

C CERTIFICATES

Name	*Gliding Club or A.T.C. School*	*Name*	*Gliding Club or A.T.C. School*	*Name*	*Gliding Club or A.T.C. School*
G. D. Tester	Aberdeen	L. Tjernstrom	Oxford	J. R. Kent	Coventry
R. H. M. Richard-son-Bunbury	Kent	F. A. O. Gaze	Bristol	R. A. Young	Surrey
R. G. Williamson	Scottish	J. R. Garrood	Cambridge	D. Pascall	621 G.S.
D. P. Croser	Midland	P. O'Donald	Cambridge	E. J. F. Hall	Surrey
K. G. Counsell	634 G.S.	S. J. Curtis	Midland	J. McVittie	645 G.S.
P. Head	Midland	E. A. Hull	London	C. N. Remnant	East Anglian
M. P. Sayer	612 G.S.	C. B. J. Davis	Imperial Coll.	W. E. Derby	644 G.S.
S. G. Nordsted	Northampton	J. W. Jarmin	Wessex	K. Allen	621 G.S.
M. T. Hughes	631 G.S.	F. I. Welch	H.Q. 2nd T.A.F.	R. G. D. Hawkings	Northampton
D. W. Woodford	Northampton	P. Aknai	Kent	J. D. Sherry	Avro
G. E. Rogers	611 G.S.	F. A. Wills	Surrey	K. A. Barrow	Northampton
T. E. Clarke	Northampton	D. H. Laver	Surrey	J. E. de G. Bromhead	Cranwell
W. Mason	Northampton	R. T. Bowring	East Yorks.	G. M. Morris	Northampton
R. F. Walker	614 G.S.	M. D. Favell	Midland	H. R. J. Hall	614 G.S.
P. J. Hamilton	614 G.S.	W. N. J. Wilson	671 G.S.	H. G. Vaughan	Midland
M. L. Aspinal	Coventry	R. J. Chenery	611 G.S.	J. E. Kyne	621 G.S.
J. M. Simpson	Kent	P. D. Ellis	Sylt	N. Spencer	Midland
S. A. Southam	Oxford	G. N. M. Mellersh	Lasham	M. C. Andrews	East Midland
J. D. Cardiff	London	E. Dancer	Derbyshire & Lancashire	H. J. Freymuth	Oxford
J. D. Kerbyson	Imperial Coll.			D. H. Baker	Crown Agents
J. P. T. Robson	East Anglian	G. A. Grant	Northampton	S. K. Haviland	Cambridge
R. S. Stephens	East Anglian	S. L. Booth	621 G.S.	A. F. Bampton	Derbyshire & Lancashire
D. A. Hibbert	621 G.S.	A. J. Glover	Coventry		
J. Clarke-Irons	621 G.S.	D. B. Lewis	621 G.S.	A. K. Frost	Kent
M. F. Dawdry	Red Dragon	M. H. Gagg	Coventry	R. S. Lamplugh	Midland
A. F. W. Tarnow	London	H. G. Westlake	614 G.S.	G. McLaughlin	611 G.S.
W. Nutter	Wessex	C. W. Petch	Northampton	M. C. Jones	Bristol
G. R. Pitchfork	614 G.S.	M. F. Lowe	Surrey	R. McLuckie	Moonrakers
R. E. Spokes	Northampton	F. C. Main	Aberdeen		
O. C. S. Dobbie	Wessex	D. E. Tomlin	Imperial Coll.		

A New Approach to Gliding

by Thomas I. Q. Hall

In recent years, it has become apparent that one of the limiting factors in the growth of gliding as a sport (B.G.A. statistics 25% per annum) has been lack of aircraft. This lack has been due to the relatively large cost of the aircraft and their associated equipment in terms of the funds available to the clubs, notwithstanding the great generosity of Lord Kemsley. Similarly, private or syndicate owning has been limited by the same difficulty. Most gliding enthusiasts are in the age group where marriage and home building are prevalent, and in consequence the large capital outlay involved in the purchase of a glider coupled with the subsequent running costs cannot be accepted, no matter how keen a pilot the enthusiast may be.

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This state of affairs has given birth to a new idea in gliding that is an old idea in other sports, simply the renting of sailplanes to the gliding public. This idea is based on the theory that while the running of a sailplane the whole year round may be too expensive, the hire of a sailplane for a week or fortnight's holiday would be acceptable to most enthusiasts provided that the cost of a holiday of this kind would not exceed the cost of a normal holiday or preferably be less. As an idea it offered several advantages additional to increasing club flying, principally the possibility of increase in visits to clubs other than those with which one's own club had reciprocal membership agreements with a consequent gain in experience to hiring pilots, also the possibility of a greater number of pilots being able to enter for contests such as the Nationals.

However, if this scheme was to be successful it must not only pay its way but also show a profit, otherwise the capital to initiate it would never be forthcoming. So, in pursuing the idea, the originators conducted a wide investigation covering not only the basic business aspects of capital costs, running costs, probable market, etc., but also liaison with clubs and the B.G.A., safety of operation within B.G.A. rules, and last but by no means least, customer requirements—this last point covering a multitude of sins that led to the adoption of an additional idea that may well be the making of the entire scheme.

It was established that in other similar fields, such as yachting, the cost of a holiday normally worked out at about £15 per head per week, and this was accepted as the figure to aim at, but how could it be achieved? The cost of the holiday was broken down as follows, since it was agreed that no charge should be made for flying time, rent of glider, transport to and from site, launch fees and accommodation. Of these the first was fixed by the capital investment and running costs, the second and third were items which would depend entirely on the individual and could not be influenced, leaving only the third for the schemes to play with the item which is yachting, the vehicle itself supplied, and it was here that, in modern parlance, a major break-through occurred. It was found that for a relatively small increase in the capital investment, the aircraft's trailer could be redesigned to make it a full-scale holiday caravan with accommodation for four persons including cooking stove, wash-basins, crockery, folding table, bunks, lockers, the lot, exactly as in a modern caravan of the popular types. Also that a fully rigged aircraft could be picketed out, provided special picketing gear was made, and weatherproof covers for the aircraft manufactured.

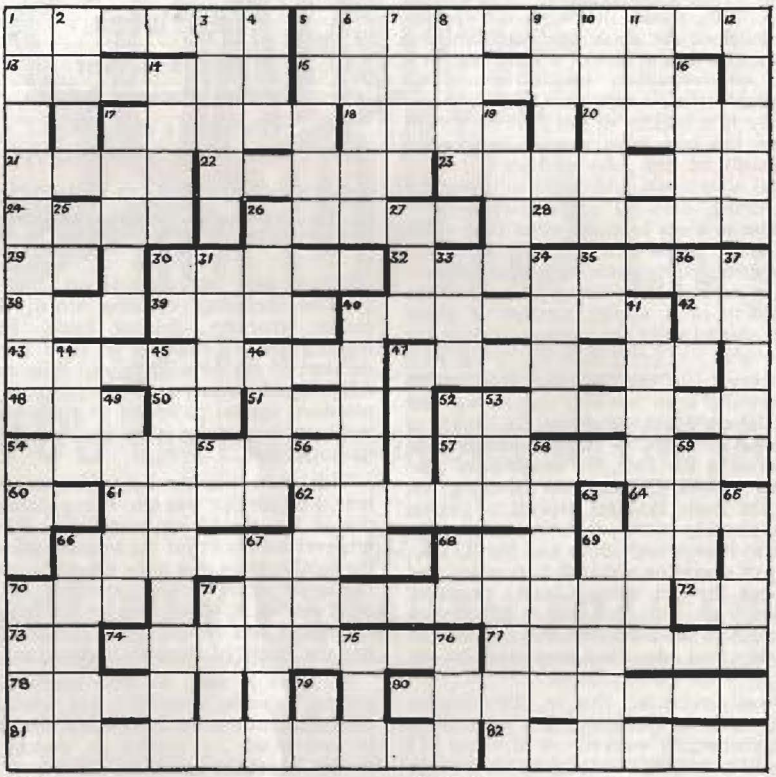
Rika and Godfrey Harwood
send to all their
Gliding Friends Hearty
Christmas Greetings
and their Good Wishes for
the Best of Luck in 1960

This, then, was the answer to the problem: a trailer that was also living accommodation for the hiring party as well as a retriever transport for the aircraft, enabling the total holiday cost to be brought down to the target figure of approximately £15 per head per week, depending on the distance the trailer was towed to its operating site and the length of retrieves undertaken.

So there it was, the new approach to gliding, a system by which it was possible to offer gliders on economic period hire terms to individuals or parties as desired; although, since the operators considered that the optimum number of people in a private syndicate was four, all planning was based on parties of four friends sharing costs and crewing for each other. All that remained was the obtainment of capital and selection of aircraft. The first having been obtained, the second was easy; the requirement was for an aircraft with a reasonably good performance that the greatest number of pilots would be able to fly, and there was only one answer, the Olympia 2B, the old faithful of so many clubs. With that last point cleared, work went ahead and a limited company was formed with the descriptive yet fanciful title of Soaring Holidays (Glider Hire) Ltd., whose advertisement will be found for the first time in this issue of SAILPLANE AND GLIDING.

Gliding Crossword

The solution will be published in our next issue



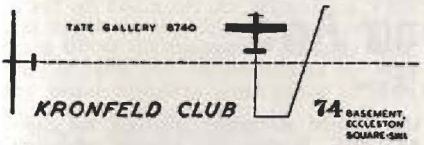
ACROSS

1. Glider polish (6).
5. Suburb where David Lived? (10).
13. It helps glider pilots to be, many think. (6).
15. Launch (9).
17. Launch (5).
18. Second half of 54 (4).
20. In the pyramids (4).
21. 27, 16 down. Club phone and aircraft number (4, 3, 4).
22. Learner 7 (5).
23. Re-enter (anag). (7).
24. A crazy mixed-up 60 (4).
26. Launch (5).
28. Reduce (5).
29. 25 down. Double-existent goddess (4).
30. Ship in backwaters (5).
32. Drug (8).
38. Mannering (3).
39. Ship (4).
40. It is bad to do it to the pass (7).
42. 35 up.
43. Better than no bread (4, 4).
47. Banker (7).
48. For the middle distance (3).
50. Here (2).
51. Legume (3).
52. Stabilising failure (7).
54. TESPST (4, 4).
57. Guts (7).
60. Right Back (2).
61. See 24 (4).
62. Dimensions (6).

64. Unit of the R.N. (3).
66. Erif (8).
68. Particularly high in members of 67 down? (2).
69. Incompetent joint (3).
70. Found in 32 (3).
71. High flying shape (10).
72. Cockney 68 (3).
73. See 55.
74. 54 down, 31 down. The dream of many. (8, 7).
77. 65 down. 51's are proverbially (3, 3, 4).
78. See 33 down.
80 Ultimate (4, 4).
81. Our wish to you (1, 5, 4).
82. Lightly considering (6).

DOWN

1. Record (3, 6).
2. In the moon, to be sure (4).
3. Often associated with gliding (5).
4. Not elsewhere indicated (3).
5. Launch (5).
6. Found in 23 (5).
7. Pundits (4).
8. In case (4).
9. Launch (5).
10. Earthly halo (5).
11. South African pawnbroker (3).
12. Aged tree (5).
14. 26. Launch (4, 3).
16. See 21.
17. Launch (5).
19. Rent (4).
25. See 29.
26. See 14.
27. See 21.
30. Ship (2).
31. See 73.
33. 78 across. He fell among thieves (3, 4).
34. French companies (4).
35. 42 back (2).
36. Samaden is on it. (3).
37. Youngsters (5).
40. Editorial roofer (6).
41. Brother 7 (8).
44. Air observation post (3).
45. Worked by a rope (9).
46. Championship class (4).
47. Swanee River? (4).
49. Song time (5).
52. Tweak (3).
53. Emmet (3).
54. See 74.
55, 73. Or not? The great Danish question (2, 2).
56. 74 to many (5).
58, 63. Intoxicated Sarah cannot make up her mind (6,-6).
59. Austen girl (4).
63. See 58.
65. See 77.
66. Amber fish (5).
67. Stratford near Dunstable (5).
68. See 68 across.
70. Anag. of 78.
71. Up line (4).
75. American pawnbroker (3),
76. Opposite of 42 (3).
79. No vote for this beast (2).



THE Annual General Meeting was held on the 14th October and Mike Gee the Club's Auditor presented the Accounts. The profit from the Bar is down compared with last year as the gross turnover is not as high. However, a reasonable profit has been made from the Thursday lectures, thanks to the hard work of Harold Tarnow.

The following were elected to the Committee: Yvonne Bonham, Ron Willbie, David Smith, Dennis Monkton and Cliff Tippett. Hugo Trotter was re-elected as Hon. Secretary.

The Club is holding its Christmas Party on Wednesday the 16th December and this is to be a combined function with the British Women Pilots' Association.

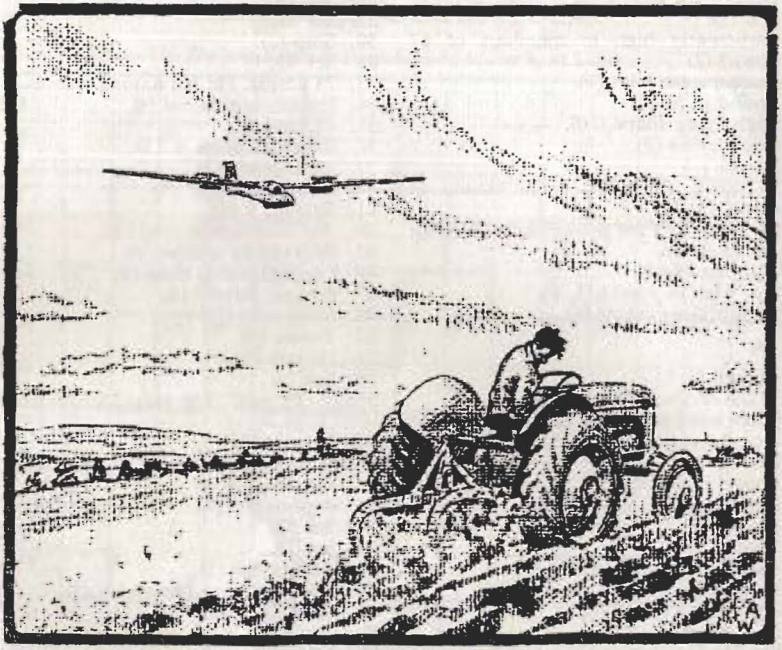
Subscriptions should be sent to the Hon. Treasurer, The Kronfeld Club, 74 Basement, Eccleston Square, S.W.1 by 1st January.

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

Nov. 25th	Peter Brooks on B.E.A. Entry in Bleriot Air Race.
Dec. 2nd	English Electric Films.
9th	Film "Earth and Sky".
16th	Christmas Party.

PRIZES at the Kronfeld Club's Exhibition of Aeronautical Paintings and Drawings held early in November, have been awarded by the Judge, Michael Turner, as follows:—

1st—Ann Welch: "Summer '59".
2nd—John Blake: "Loss of Coastal Airship C27".
3rd—Yvonne Middleton: "Last Flight".
4th—V. H. Veevers: "Silent Flight".



Many readers who received this card from Ann Welch last Christmas must have wondered what was going to happen next. So did Lawrence Wright, who sent Ann the prompt rejoinder printed on the opposite page

In the Long Ago

by C. A. Kaye

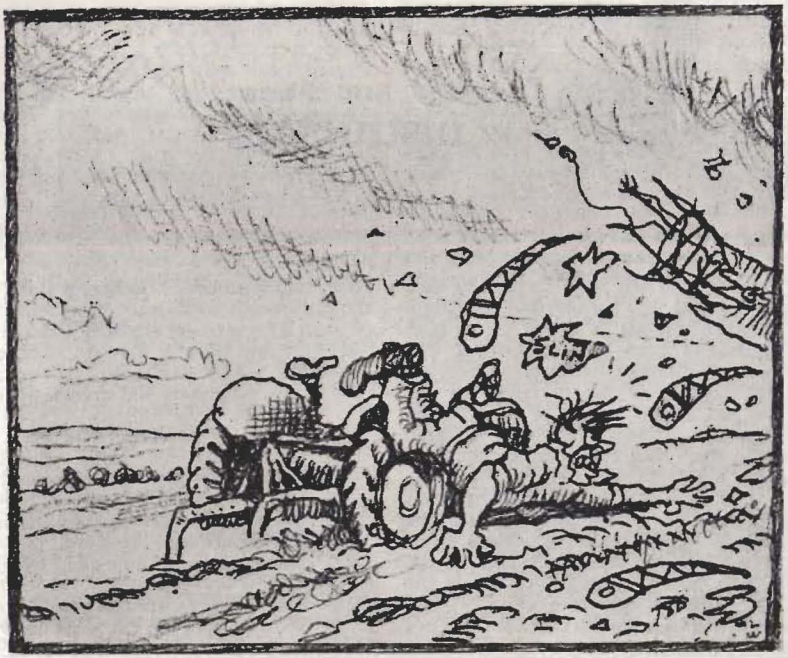
THE tale begins one bright day when, all the Camphill aircraft (i.e. one) being broken, it was thought a good thing that the trainees should be given a demonstration of auto-towed two-seater training at Woodford, where the Lancs. component of Derby and Lancs. were still in operation.

At Woodford there lived a formidable BAC 7, which was a tandem two-seater with a dual control and a proper undercart—"like a proper aeroplane"—with doughnut wheels, axle and all.

The Camphill contingent presented themselves with due respect at Woodford, were briefed on the intricacies of auto-towed dual, and were then marshalled around the formidable BAC 7 which stood ready on the airfield boundary manned for flight by one Binder—of sainted memory. Binder, so named because of a certain predilection for inveigling the less wary into consuming liquid nourishment, described as "binders," at all hours of the day and night, was to give a solo demonstration of what the Camphill B's and C's had coming to them.

All set, afar off the Chrysler tow-car (later to become our first winch) rumbled into life, the driver turned his cap back to front for maximum performance, the tow-cable was attached, and the signal given to "go, and dwell not on the order of thy going".

The tow-car disappeared in a distant



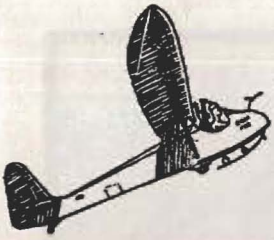
cloud of smoke and dust, the tow-cable grew tighter and the doughnut wheels—and axle—began to turn. The initiates goggled wide-eyed at this demonstration of the power of machinery to accomplish what they had been able to accomplish only by much labour on the ends of a bungy rope. They goggled even wider-eyed as the long and uncut boundary grass began to wind round the rotating axle.

Slowly and inexorably the doughnut wheels came to a halt. Not so slowly, but with equal inevitability, the tow-car charged on. The high nose bowed towards the ground, the tail rose majestically, whilst from within the deep cockpit came urgent cries as to the whereabouts of the cable release. The nose dipped further, the tail rose higher, the cries from within the cockpit grew more urgent, and noises from rending timber began.

The initiates continued to observe this spectacle with wide-eyed wonder but with the beginnings of doubt as to the total superiority of auto-towing over other methods. The tow-car driver also began to entertain doubts concerning the acceleration being achieved and, glancing over his shoulder, was in time to see a plan view of the BAC 7 as the nose began to separate from the fuselage and the tail reached maximum elevation. The tail dropped with a magnificent crash as the tow-car driver released his cable and the separation of the nose from the fuselage became complete, to an accompaniment of breaking timber and the entombed pilot's muffled cries "*I can't find the b—— release, I can't find the b—— release*!"

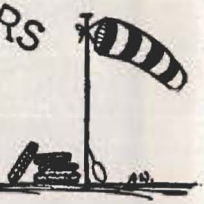
A hush ensued. The cries had stopped, the tow-car had stopped, the initiates preserved a tactful silence. The tall and purposeful figure of the Chairman appeared as by magic from the distance; observed the scene, enquired with masterly brevity "Why?", listened with admirable restraint to the explanations given, leaned over the dismembered cockpit and, pointing to a certain object, said "*There is the release, where it's always been, and you take off with it in your hand, chum—see*?"

Reproduced with acknowledgements from Camphill News



ITS - ALL - YOURS

For and About Instructors



IN this country we have some very fine gliders, and the proportion of high-performance aircraft to Silver C pilots is higher than in many other countries. The weather this summer has been wonderful, and the number of record flights by the pundits has shown what can be achieved with standard production aircraft. As well, of course, there have been a large number of excellent flights by the Gold C hopefuls, but I think it is true to say that there has been an even larger number of flights in the same types of glider on the same days which ought to be classed as failures, because the pilots have not had the ability to use the aircraft performance properly. (First cross-countries are special cases and are not included in this generalisation.)

Elsewhere in this issue are the 1959 results of Leszno in Poland and La Ferté Alais in France,* and although is it neither possible nor desirable for several reasons to make direct comparisons, there seems little doubt that the average level of competence of pilots flying performance gliders in these places is apparently higher than in England in terms of miles flown per cross-country take-off.

Gliding, as we all know, can be frustrating, particularly when cross-country flying is contemplated. Quite apart from the usual considerations of having a suitable glider at the right time on a good day, there is also the problem of the retrieve, and often only limited time available to the pilot. It is therefore highly desirable to make the best of such opportunities as exist. How, then, can the less experienced soaring pilot be taught more quickly to use the performance of his glider to the full, and thus waste as few good days as possible?

The ability to soar well can be broken down into a number of different skills, and the pilot needs to become proficient in all of them if he is to get anything like the best out of the day. Briefly, they are, in order:

(1) The ability to fly, and in particular turn, accurately and to land where he wants.
(2) The ability to centre in thermals.
(3) The ability to judge immediate weather trends, which requires a basic knowledge of met.
(4) The ability to select cumulus clouds and understand their development.
(5) The ability to navigate, by map-reading and compass.
(6) The ability to calculate glide angles, and speeds to fly, etc.; and finally—
(7) The ability to fly properly on instruments, coming out accurately on the intended heading.

As it is obvious that it would take a pilot a long time to learn these things on his own, it is clearly desirable that proper training should be available to him, preferably in his own club. This is, of course, where the difficulty lies, and the difference exists between many of the Continental clubs and ours.

We, in England, tend to be a country of elementary instructors. Very few of our C.F.I's. have more than Silver C's, and some have C's only. On the continent there is a very high proportion of Gold C C.F.I's, and consequently the whole training approach from the start is aimed towards high-performance soaring.

No blame is implied in this statement. Our clubs have had many more difficulties to overcome than their Continental counterparts, and there has been less money available for development. But, if we do want to use the fine soaring gliders we have got to the best advantage, then it is necessary for Clubs to extend their normal teaching to a much more advanced level.

*The latter are held over.—ED.

This teaching must, of course, be positive, and before clubs with little equipment jump up and state that for them it is quite impossible, I would say that this difficulty is well understood. The intention of this article is to try to state an aim, even though it is not possible for everyone to carry it out immediately.

The first item on the list, the ability to fly accurately, is straightforward, and is within the means of every club. It merely requires that pupils are taught to fly really well, and from the start every effort is made to develop their *judgement*. None of the "turn in at 300 ft. over that tree at 48 m.p.h." nonsense.

(2) Centring in thermals can be taught in T-21s with the pupil using a method of centering and applying it under the eyes of the instructor in the air until he understands fully what he is trying to do.

(3) The knowledge of soaring met. possessed, at least by instructors up for category tests, is virtually non-existent. Instructors should at least know the simple physics involved in thermal production and cumulus formation and growth, and have a working knowledge of air masses and their effect on soaring weather, particularly in regard to the various causes of inversions. When and if they know this properly, they can impart it to club pilots in the form of lectures and observations.

(4) Selection of good cumulus from useless ones can be done to some extent on the ground, but also requires some teaching given in the air near cloud base.

(5) Navigation can be taught by ground lectures, by insisting on pilots *using* a map on all local flights, and by flights in aeroplanes and gliders in which the destination and flight path is unknown to the pupil, who must draw on his map the track followed.

(6) The calculation aspects of soaring on the ground by lectures, after the pilot has done at least one cross-country. If it can be practised in the air as well on a dual flight in something like an Eagle, so much the better.

(7) Ideally Instrument Flying should be taught dual, although it is quite practical to teach it solo, if done slowly. But I feel strongly that pilots should not be allowed to go into clouds untaught to find out for themselves until they have quite a lot of experience. To begin with, it is folly to let pilots experiment in cloud until they are competent at field landings. It is not difficult to come out in the wrong direction, lost, and then be faced with a first, or even early, field landing. Further, I am sure that quite a number of pilots receive quite a set-back to their general progress by frightening themselves flying in cloud, before they have enough experience to be sure of their flying skill. Such incidents are often not reported to the instructors, for obvious reasons. On the Continent, pilots are usually not permitted to cloud-fly until they are somewhere between Silver and Gold C standard, and I feel that this is something which we could well do here, particularly in view of the risk of getting lost near airways, *unless* proper dual instrument-flying training can be given.

One problem which many clubs have is that the instructors have their hands quite full enough, without adding comprehensive soaring training to the list. It is not necessary, however, that this should be done by the elementary instructors, provided that the aim in the general teaching is to produce soaring pilots. Such training could well be taken on by a competent soaring pilot whose special job it is. He need not even be a full-blooded instructor, provided that he is able to impart his knowledge and works closely with the C.F.I.

A. WELCH.

THE ADVANCED INSTRUCTORS' COURSE

Nympsfield, 25th—28th September

THIS course, the first of its kind in this country, was blessed with fine weather and made most enjoyable by our hosts, the Bristol Gliding Club.

The object was to give some experience in the more advanced aspects of flying and teaching to instructors from clubs who had not yet such opportunities on their home ground.

Eight instructors attended for the full four days, and one for the Saturday and Sunday only. Four were C.F.I's. The course aircraft were two Eagles (the Army Club aircraft and the Beagle), the

Mackinnon/Masters Messenger, and we had the use of the Bristol Club T-21B and Tiger Moth tugs.

The first day was spent on familiarisation flights in the T-21B, general flying in the Eagles, and, as on all succeeding days, navigational flying in the Messenger. In the hazy air this was a most revealing exercise, and the more lost the navigator, the larger area of country his wavering pencil line covered. Saturday was used for aerobatics, spinning and any soaring that was possible, and that evening and Sunday for field landings. A genuine field was used with an approach over telephone wires. All the landings were of a high standard, and the course was still on its feet, and cheerful, after seven Eagle de-rigs, retrieves and re-rigs in one day!

On the Monday, the back seats of both Eagles were thoroughly lined with several layers of newspaper fixed in with masking tape, and instrument flying was carried out, following 4,000 ft. tows during which the victim had nothing to do except read the paper! Included were spin recoveries for those who were flying blind for the first time.

In the evenings we had supper together followed by lectures on subjects ranging from flight limitations to field landings and general instructing. The four days ended with a precision-flying competition on the T-21B.

The course was an experiment, in that we did not know really what would be the most useful things to lay on, but I think everyone felt it was both profitable and enjoyable and that they really learnt something from it. I know that we, as staff, felt that we had gained valuable experience. Certainly the enthusiastic and amusing instructors who came on the course were an encouragement to run a further one next spring.

An idea which developed during the course, and which we hope to try out this winter, is to visit clubs with a sort of Eagle travelling circus. I hope to have more news of this for the next issue.

A. WELCH.

LECTURES FOR INSTRUCTORS

Ann Welch, Chairman of the B.G.A. Instructors' Panel, will give a course of four lectures for Instructors at the Kronfeld Club on Mondays at 7.30 p.m., starting on 25th January. Registration fee 10s; single lectures 3s. Forms available from the B.G.A. or your clubs.

O.S.T.I.V. Prize

AT every General Conference of O.S.T.I.V. (*Organisation Scientifique et Techique Internationale du Vol à Voile*) held on the occasions of the World Gliding Championships, the O.S.T.I.V. Prize is presented. It is awarded to the person who has made the most important technical or scientific advancement in soaring flight.

The O.S.T.I.V. Prize is in the form of a plaque, silver on wood, and it will be remembered that the first award (in 1958) was to Dr. Joachim P. Kuettner.

O.S.T.I.V. now wishes to obtain nominations for this prize for 1960. In making such nominations, particular attention should be given to recent contributions to soaring flight by the nominee, although earlier outstanding work should also be taken into account. Those making nominations should give full details of their nominee's contributions to soaring and also a short biography. The nominee's full name and address must be given.

The names of all proposed candidates for the O.S.T.I.V. Prize should be in the hands of Mr. L. A. de Lange, OSTIV President, Kanaalweg 3, The Hague, Holland, early in January 1960. B.S.S.

OSTIV Organisation Scientifique et Techniqu Internationale du Vol à Voile

ASSOCIATE MEMBERSHIP in the International Scientific and Technical Organisation of Soaring Flight is now open to individuals, gliding clubs and libraries. The official journal of OSTIV is the "Aero Revue" and the subscription cost is included in the OSTIV membership fee. Members may purchase OSTIV books and publications at reduced rates.

Annual Membership Fee $4, £1-8-0 or equivalent

For information write to:

London Gliding Club, 22 Half Moon Street, London, W.1, England

Standard Class Specifications

THE Fédération Aéronautique Internationale have just issued a 1959 edition of the new Sporting Code, Section D, and many of our readers will be interested in the latest specifications for Standard Class Gliders. These are as follows:—

Object

Part III, Art. 2e.—The object of the Standard Class is to encourage the design and construction of gliders cheap to build and safe, cheap and simple to operate and repair, and thus to promote the expansion of gliding throughout the world.

Specification

Art. 31.—The O.S.T.I.V. will, at the end of each Championship, award a prize to the Glider which, in the opinion of its examining committee, most nearly achieves the object of the Standard Class.

Art. 32.—The following is the specification for the F.A.I. Standard Class Gliders:—

Section 1.—Obligatory Requirements

1.1. SPAN.—The span must not exceed 15,000 millimetres.

1.2. WINGS.—Flaps or other methods of changing the wing profile are prohibited. Ailerons whose neutral position can be changed in flight are prohibited.

1.3. UNDERCARRIAGE.—(*a*) No part of the undercarriage or its fairings may be retractable or extendable.

(*b*) The aircraft must be fitted with a landing wheel of at least 70 mm. in width and 250 mm. in diameter. (This requirement, 1.3(*b*), shall not apply to individual aircraft which have been built and flown before 1st January 1959.)

1.4. BALLAST.—Ballast which can be discharged in flight is prohibited.

1.5. CERTIFICATE OF AIRWORTHINESS.—The aircraft must have a certificate of airworthiness which permits cloud flying, when flown by a pilot weighing at least 90 kg. wearing a parachute weighing 9 kg. A certificate which is recognised by the country entering the glider will be accepted.

1.6. DIVE BRAKES.—(*a*) Drag parachutes are prohibited.

(*b*) The aircraft must be fitted with airbrakes capable of restricting the speed in a steady vertical dive to a value not more than the maximum permitted within the Certificate of Airworthiness with the brakes shut. The design and construction of the brakes must be such that they can be opened at any speed up to the maximum permissible with the brakes shut and closed at a speed of at least 75% of this value. In both cases the operation of the brakes must be effected in less than two seconds.

To ensure that this requirement has been met, a copy of the following document shall be submitted by each entrant:—

This is to certify that glider type....., No..... when flown by pilot .....at an all-up weight of .....kg. carried out the following tests on.....(date).

Test No. 1.—With the brakes open in a vertical dive through 1,000 metres the maximum speed attained was:—

.....k.p.h. Indicated Air Speed

.....k.p.h. Equivalent Air Speed

Test No. 2.—When dived at the maximum permissible brakes shut speed of ..... k.p.h. I.A.S.=.....k.p.h. E.A.S., the brakes were opened fully in less than two seconds and functioned satisfactorily.

Test No. 3.—When dived with the brakes opened at 75% of the speed given in Test 2, the brakes were shut satisfactorily in less than two seconds.

It is also certified that the test aircraft numbered above differs in no significant aspect from the aircraft entered: No.....

Airworthiness authority or signed.....for manufacturer.

Date.....

Section 2.—Recommendations

2.1.—It is recommended that the glider be cheap to make and that cheap materials and simple methods of construction be used.

2.2.—In order to make the aircraft cheap to operate it should be easily repairable, easily rigged and derigged, and simple to transport on a trailer.

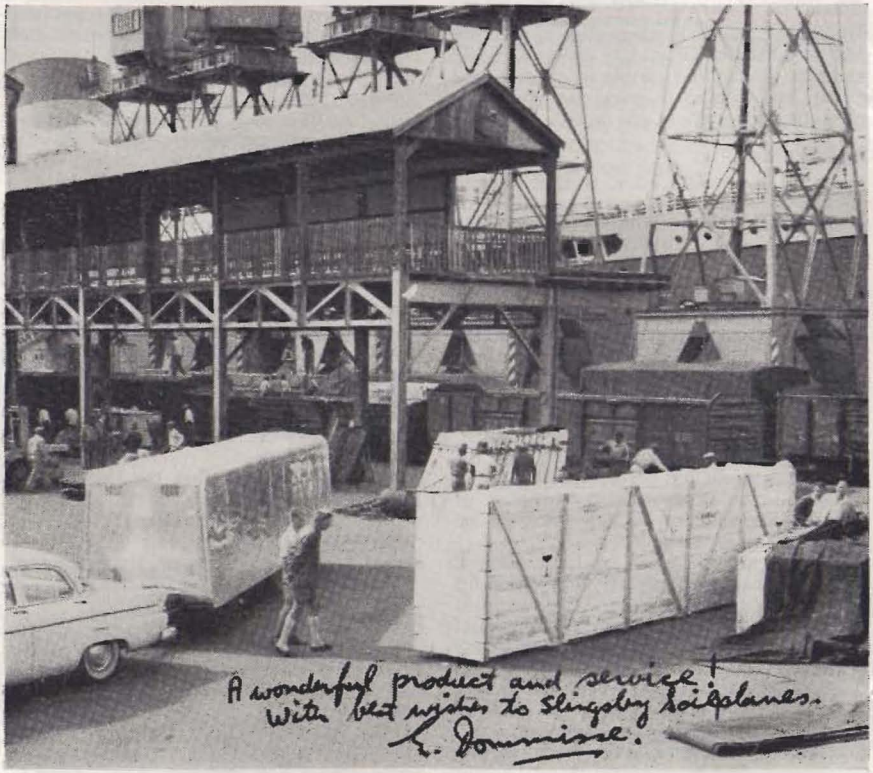
2.3.—The installation of a wheel brake is recommended.

2.4.—It is recommended that the cockpit be made of sufficient size to accommodate comfortably a man 1.90 metres in height (6 ft. 2.8 in.).

2.5.—It is recommended that the undercarriage be suitable for operation from rough fields.

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Cable Retrieving by Winch

by John Hickling

THE Midland Gliding Club has been successfully using a German-made retrieving winch for several months now, and it is fairly certain that others would find this device a help in their own operations. As is well known, our launching rate has not been very spectacular in the past, mainly due to the terrain, and anything which would offer an improvement was obviously attractive to us. A further attraction was the possibility of stopping the very serious damage which was resulting from the cable-retrieving vehicles running over soft, and often wet, ground.

However, when thought was given to the idea of importing this winch, several potentially dangerous snags were foreseen. The most obvious was that the Ottfur release mechanism might operate as soon as the back-pressure from the retrieve winch was felt. To investigate this, Jack Minshall built a "mock-up" consisting of a freely revolving drum and brake. When this was tried, the result was so conclusive that we ordered the winch almost by the next post. Not only did the Ottfur behave normally—it refused to back-release with the brake full on! Incidentally, we also laid low another objection, by showing that the height of the launch was quite unaffected.

The winch has now been in continuous operation since May, and has done over 4,000 launches. No unexpected difficulties have developed. On one early launch, due to faulty laying on, the wire on the retrieve winch snarled on its drum and broke, but with no effect on the glider being launched. Our fears that a 9 B.H.P. engine would not pull the cable through thick heather have not materialised.

Operation

The relative position of the retrieve winch and the glider to be launched is important. The winch is positioned one span clear, and to one side of the launch point. The retrieve wire tends in fact to stay on the ground until the glider is climbing well, so there seems to

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"Sailplane and Gliding" can be obtained in the U.K. at all Gliding Clubs, or send 17s. (post free) for an Annual Subscription to:—The British Gliding Association, Londonderry House, 19 Park Lane, London, W.1. Single copies and most of the back issues are also available, price 2s. 10d. post free. Enquiries regarding bulk orders of 12 or more copies, at wholesale prices, should be made to The British Gliding Association.

OVERSEAS AGENTS

AUSTRALIA:	Stockists: Hearn's Hobbies, 367, Flinders Street, Melbourne.
NEW ZEALAND:	Direct from B.G.A. or contact G. Hookings, 23 Yattendon Road, St. Heliers, Auckland, E.1. Send Postal Order £1.
CANADA:	T. R. Beasley, 1425 Painter Circle, St. Laurent, Montreal, Canada.
SOUTH AFRICA:	The Aero Club of South Africa, P.O. Box 2312, Maritime House, Loveday Street, Johannesburg.
U.S.A., & OTHER COUNTRIES:	Please apply direct to British Gliding Association. Single copies 2s. 10d. or 17s. annually. (50 cents or $3.00 annually).
SCANDINAVIA:	Hans Ellerstrom, Gronalundsgatan 9B, Malmo, S.V., Sweden.
HOLLAND:	J. VAN ECK. V.D. MEYDE straat 9a, Rotterdam. 4.

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be virtually no risk that tail skids will foul. The point of attachment for the two cables is 50 ft. from the aircraft. Briefly, we find that the operating advantages are as follows:—

(1) The main cable can be back at the launch point in 1¼ minutes from the moment of release, using normal 3,000-ft. main wire. In west winds, short launches over the edge are quite as quick as bungee launches.
(2) Cost is only a fraction of that required for a vehicle to do the same thing.
(3) Now the cable usually comes back straight. On several of our winch runs, when using a vehicle, a wide detour is necessary, with its resultant bow in the cable.
(4) Ground damage has, in fact, been almost eliminated.
(5) An unexpected advantage is the enormous improvement in cable life. However, how much of this is due to our cable-joining machine is difficult to assess, because both pieces of equipment came into operation at much the same time.

Features which are not favourable are the increased time sometimes taken to effect a cable repair, and there now has to be another skilled winch operator.

Mechanical Features

The winch looks simple at first sight, but on further investigation this impression is dispelled. This may account for the idea being rejected by people who have built over-simplified versions here. The heart of the thing is the extremely sensitive, automatic cable-tension-operated brake on the drum. If this is not set just right, the winch ceases to function as a useful piece of apparatus. A human operator just cannot react quickly enough to control the rapid changes in cable speed. Other features, which are obviously the result of years of development, are the multi-speed (m/c type) clutch, i.e. very smooth action, extremely free-running light-weight drum, along with the smallest possible cable to do the job. There is also a manual pay-on, and of course a two-stroke engine, which has given faultless service so far.

The only criticism is the rather below-standard material used in parts of the winch, and some reconstruction has been necessary.

MIDLAND EASTER RALLY

The Midland Gliding Club will be holding its 1960 Easter Rally at the Long Mynd from 15th to 19th April. Entries will have to be limited to perhaps 15 visiting aircraft. It is regretted that accommodation cannot be offered to pilots and crews, but caravan and tent space will be available, and meals in the clubhouse. Details will be sent to Clubs early in the New Year, and entries invited.—G.B.

Warren Storey

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has enjoyed excellent hill and thermal soaring this summer at Lympne Airport. New members and visitors always welcome. Club fleet includes two dual-control training machines.

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Flying in a friendly club atmosphere with first class facilities—hill site, hanger, clubhouse, full time staff, aircraft fleet of T21b two seater, Tutor, and 2 Olympia sailplanes.

Secretary: MRS. D. GLASSBOROW,
4 ELMER COURT, ELMER SANDS, BOGNOR

A Gliding Conference for Beginners

THE second Gliding Conference for Beginners will be held in London on Saturday, 30th January, 1960. This has been arranged by the Central Council of Physical Recreation and the British Gliding Association. The Conference, which will be held at the W.R.A.C. Drill Hall, The Duke of York's Headquarters, Kings Road, Chelsea, starts at 2.30 p.m.

Speakers last year included Derek Piggott, Ann Welch and Philip Wills. These and others have been invited to speak this year. Gliding films will again be shown and as last year we hope to have a glider in the Hall.

Anyone who would like to attend should write to the C.C.P.R., Gliding Conference, 6 Bedford Square, London, W.C.1.

It may not be generally known that the Central Council through the generosity of Colonel Whitbread makes sums of money available to *ab initios* under 25 years of age to help pay for their gliding. Details can be obtained from the B.G.A. office.

W. A. H. KAHN.

B.G.A. News

B.G.A. Ball

The Annual Ball of the British Gliding Association will be held at Londonderry House on Friday, 11th March, 1960. Tickets will be £1 per head, inclusive of supper.

Annual General Meeting

This will be held on 12th March, 1960, and the annual Instructors' Conference and also the Club Managers', Secretaries' and Treasurers' Conference will be held on the same day.

New Silver C Badges

The B.G.A. has often been asked to produce smaller Silver C badges. At last we have them! They are the size of the small C badge and can be had in stud or pin form. Duplicates will be supplied to any Silver C pilot on receipt of his Silver C number and 10s.

The World Championships

The World Championships next year will be from 4th to the 19th June at an aerodrome near Cologne. We do not know any more details as yet.

New Club

The Short's Gliding Club of Northern Ireland have been accepted to Associate membership.

Camping and Outdoor Life Exhibition

We have accepted an invitation to organize a stand in conjunction with the Royal Aero Club Aviation Centre at the Camping and Outdoor Life Exhibition which is being held this year at Olympia between 2nd and 9th January. We intend to advertise Gliding Courses, so we would like dates of Courses in 1960 and course brochures to distribute.

National Gliding Weeks

The National Gliding Weeks next year will be at Whitsun and August Bank Holidays, and we have had an encouraging number of clubs offering hospitality. When the arrangements are nearer completion, we will be able to let you know the dates and places of the meeting.

Christmas 1959

Christmas Cards @ 9d.
with 10% discount on 20 or more. Special rates for Clubs.

All the goods sold by the B.G.A. are listed and priced on the enclosed order form. PLEASE do not leave your orders to the last minute as confusion reigns supreme in Christmas Week!

Special Value. Undated left over Christmas Cards @ **3d.** each with envelopes.

We have large stocks of **WINCH CABLE** at low rates. Order now for next season.

Quality and specifications to suit all types of terrain and winches.

Also we have hanks (500-700) unmeasured lengths at 6d. per lb. which works out at £4 per 1000 yds.

For clubs and groups, you can now get
Quickly Adjustable Harness
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Parachutes in bags @ **£31 12 6.**

Documentation for Badges

To ensure that pilots who send in claims for Silver and Gold Badges and additional Diamonds shall attach to the claim form (or enter on the form if provision is made) the required proofs of their having made the necessary flights, the B.G.A. Flying Committee has been asked to define what documents are required. The following table shows just what documentation is necessary for each claim. Duplicated copies of it can be obtained from the B.G.A. office by official observers and others.

The same documentation is required for confirmation of record flights of similar nature, and in addition the F.A.I. Regulations for Records should be consulted.

	Certified barograph chart	*Calibration chart*	*Certificate of height*	*Goal declaration*	*Turning-point declaration*	*Landing certificate*	*Aero-tow or departure certificate*	*Arrival-at-goal certificate*	*Photographic evidence or turning-points observed*
Silver C									
HEIGHT 1,000 M. ..	Yes	Yes†	—	—	—	—	Yes	—	—
DURATION 5 HRS...	Yes*	—	—	—	—	Yes‡	Yes	—	—
DISTANCE 50 KM.									
Straight	Yes*	—	—	—	—	Yes	Yes	—	—
Triangle	Yes*	—	—	—	Yes	—	Yes	—	Yes
Gold C									
HEIGHT 3,000 M. ..	Yes	—	Yes	—	—	—	Yes	—	—
DISTANCE 300 KM.									
Straight	Yes	—	—	—	—	Yes	Yes	—	—
Dog-leg	Yes	—	—	—	Yes	Yes	Yes	—	Yes
Triangle	Yes	—	—	—	Yes	—	Yes	—	Yes
Diamonds									
HEIGHT 5,000 M. ..	Yes	—	Yes	—	—	—	Yes	—	—
GOAL 300 KM.									
Straight	Yes	—	—	Yes	—	—	Yes	Yes	—
Dog-leg	Yes	—	—	Yes	Yes	—	Yes	Yes	Yes
Triangle ..	Yes	—	—	Yes	Yes	—	Yes	Yes	Yes
DISTANCE 500 KM.									
Straight	Yes	—	—	—	—	Yes	Yes	—	—
Dog-leg	Yes	—	—	—	Yes	Yes	Yes	—	Yes
Triangle	Yes	—	—	—	Yes	—	Yes	Yes	Yes

*Not required if observed throughout. †Not required if gain of height is 3,800 ft. or more. ‡If applicable.

Conversions: 50 kilometres = 31.07 miles; 300 kilometres = 186.41 miles; 500 kilometres = 310.69 miles; 1,000 metres = 3,280.8 feet; 3,000 metres = 9,842.5 feet; 5,000 metres = 16,404.2 feet

Minimum Legs: For Silver C Triangle, 14 km. (8.70 miles).

For Gold C Distance, Diamond Goal and Diamond Distance Dog-leg, 80 km. (49.71 miles).

For Gold C Distance and Diamond Goal Triangle, 84 km. (52.20 miles).

For Diamond Distance Triangle, 140 km. (86.99 miles).

How to Find Thermals at Christmas

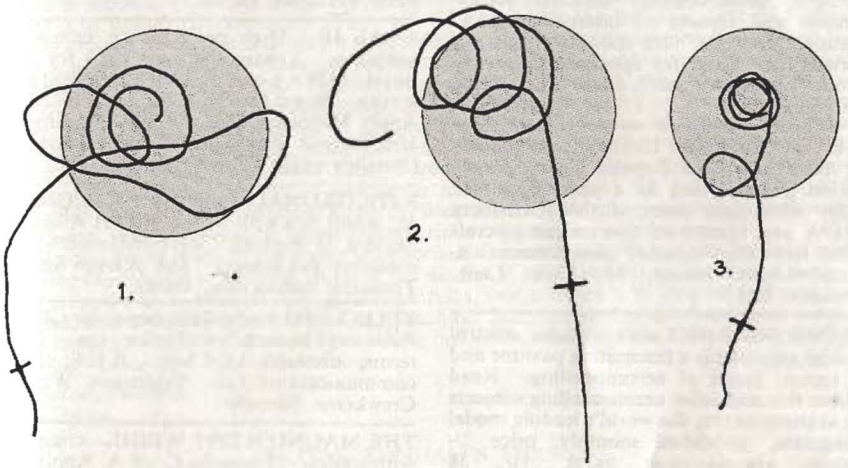
THIS is a very simple game in which any number can play. All you need is a pencil and paper.

First find your victim and draw for him a circle to represent the thermal. Give him a pencil with which he starts drawing a line towards the thermal, and then *shuts his eyes*. When the pencil point enters the thermal, you give one tap on the table. When the pencil point leaves the thermal you give two taps. When it re-enters, give one tap, and so on. This game was introduced by Barry Baker of the Oxford Club at the Advanced Instructors' Course, and brought the serious work of the moment practically to a halt.

A variation of the game is to draw a thermal circle ahead of the "pilot", *after* he has shut his eyes, so that he knows neither the size nor precise shape.

Drawings 1 and 2 show attempts by C pilots to centre, and drawing 3 one of the reasons for Philip Wills's punditry.

ANN WELCH.



Correspondence

THE STANDARD CLASS

Dear Sir,

Allow me a reply to the letter by Philip Wills on the Standard Class in your October issue.

Though I disagree entirely with most of his remarks, the general tone of the letter pleases me immensely, as it gives me high hopes that the F.A.I. may reconsider the matter of the Standard Class. To hasten such a reconsideration I would like to make the following constructive criticism:—

My greatest objection to the Standard Class is that they are flown during the World Championship, which should be exclusively devoted to unrestricted machines. Consider that in Germany, next year, only 60 entries will be accepted, of which the organisers hope to have two from each competing nation in the Standard Class.

This is most unfair and constricting on the so vital Open Class. It is also most frustrating to the dreams of all new and eager young pilots who see their dreams of ever flying in the Open Championship completely dashed. Equally frustrated would be the designers of new but untried machines. In fact, the greatest danger to the continuation of these Open

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PUBLICATIONS

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SLOPE SOARING with a radio control model sailplane is a fascinating pastime and a typical phase of aeromodelling. Read about this and other aeromodelling subjects in AEROMODELLER, the world's leading model magazine, published monthly, price 2/- MODEL AERONAUTICAL PRESS LTD., 38 Clarendon Road, Watford, Herts.

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AIRCRAFT TABLE MODELS Scale 1: 50 High-class finish, varnished in either natural wood or ivory. The base is rectangular with a stylised cloud. All types of sailplane cost only 8.50 DM. Flugzeug-Modellbau Werner Reuss, Göttingen, Fliederweg 4, West Germany.

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SAIL PLANE WITH TRAILER, Olympia or similar performance, price, particulars, Fisher, 207 Seabourne Road, Southbourne, Bournemouth.

PERSONAL

WILL gliding instructor interested in possibility of organising new South Coast Club contact advertiser, Box 55.

Championships lies at present in the limitation of entries to two, or, as seems likely in Germany, to one entry from each nation. To make the position healthy and of continuing enthusiasm to both pilots and designers, there should be at least four entries possible from each nation in the Open Class.

If you do not like this argument, I will turn it completely round for you: let us then have two entries in the Open and only one in the Standard Class. Now it is completely unfair to the Standard Class. In fact, it could even become ridiculous. Let us imagine that the Ka-6, only, is entered by Germany in such a case, and wins the OSTIV prize again. What earthly purpose would be served in the cause of progress?

I would like to ask why the Standard Class machines are flown at all? The OSTIV prize does not go to the winner of the flying event but to the machine most nearly approaching the "Objects" of the F.A.I. in instituting the class. So why not rather have a Glider Fair?

Alternatively, if you *must* fly them, then at least a sister ship to the one being flown should be made available for the exclusive use of the Judges, in order that they may make a proper and unhurried assessment. This will do away with the pathetic sight of Judges waiting around for a chance to get on with their job, such as nearly happened in Poland.

I would suggest further that more (or for that matter less) machines may be entered for the prize than are being flown. This would give a chance to such admirable types as the Swallow. Each entry for consideration should also be accompanied by an entry form on which the fullest possible details of the machine are given, plus blue-prints, strength calculations, factory procedure, materials and production costs, etc. The value of the judges' decision would be doubled if they were also obliged to give a full account of their findings, in which they should endeavour to point the true way for future success and attempt to lay down a specification along the lines of which new designs could be built with some better hopes of avoiding expensive experiment and achieving progress.

If only a tiny part of the above is conceded, it immediately brings the brilliant and revealing final thought: That the "objects" of the F.A.I. apply equally to the Open Class!

Let us do away then with all restrictive rules, under which it is illogical to hope for progress, and give the OSTIV prize to any machine, Standard or Open, which most nearly fulfils the objects of the F.A.I., as Philip Wills first envisioned them (in 1954) in his plea for "sensible" as against "exotic" machines.

E. DOMMISSE.

Rietfontein, Pretoria,
South Africa.

YVONNE BONHAM'S THANKS

Dear Sir,

May I take up a little of your space to say a big thank you following my retirement from the British Gliding Association.

I appreciate very deeply the wonderful gifts I have received from the members of the Council, the Clubs and certain individuals. I never expected anything quite like this. I also feel greatly honoured at having been made an honorary life associate member of so many clubs and know there are others whose rules do not make it feasible. I shall try to visit them all when I can.

If I can be of any use to the movement in the future, I shall be only too pleased to help. My one wish is not to lose touch altogether.

My 10 years with the Association have been great fun. I wish Anthea the very best as my successor and hope she enjoys the work as much as I have.

Once again, many, many thanks to you all.

YVONNE BONHAM.

EDITORIAL NOTE.—Readers would, no doubt, like to know of the gifts which Mrs. Bonham has received; they are:—

From the B.G.A. Council:—A large silver tray inscribed with the signatures of all the members of the Council, which was presented by Philip Wills at the farewell party at the Kronfeld Club on the 17th July.

From all the Gliding Clubs and some individuals:—

1. A Super-Frankarette Camera with range-finder and built-in exposure meter.
2. A cheque for £50.

CLUB AND ASSOCIATION NEWS



WITH the glorious summer we have had, now part of history, the current club news shows all too clearly what this has meant in terms of gliding.

Page after page of club news report gold and silver achievements and also word of many *ab-initios* who have found their wings.

This time two new clubs report, one from abroad and the other from Scotland. The latter has experienced a very frustrating summer, having 50 flying members with nothing to fly. How they must have cursed their lot! Nevertheless, they are keen and before long hope to put theory into practice.

To them and all other clubs, best wishes for the New Year.

Now a reminder to those hard pressed but considerate Press secretaries who have so often answered my requests at short notice. The last date for club news for February is Friday, 18th December sent to S.E. Ambulance Station, New Cross Road, New Cross, London, S.E.14.

COLIN MOORE,
Club and Association News Editor.

ANDOVER

THE club has been well in the limelight in recent weeks especially during August when we achieved 1,000 launches, 312 hrs. were clocked and 1,800 cross-country miles flown. A record number of certificates will be claimed.

Sqdn. Ldr. Croshaw and Flt. Lt. Sharman gained Gold C height.

John Thorne, Miss Leitch and Tony Leroy made cross-country flights, the last named landed on a cricket pitch. Dennis Banting remained aloft for seven hours and gained his certificate.

We were hosts for the eliminating trials of the British Glider Aerobatic Championships, the club being represented by Sgt. Gough, Flt. Lt. Sharman and Gp. Capt. Kearon. The finals took place at Dunstable on 20th September, the winner being a club member, Flt. Lt. Sharman.

Sgt. Brown made a flight to Seaton, where he dismantled his sailplane and parked it by the local churchyard—much to the astonishment of the retrieving crew.

Master Technician Eldridge gained a Silver C with a flight to Exeter.

Flt. Lt. Allen declared a "goal flight" to St. Just and landed close by at Penzance.

Flt. Lt. Sharman flew from Lasham to Perranporth gaining a Gold and Diamond C, he also gave an aerobatic display at the S.B.A.C. show at Farnborough.

At the R.A.F. Andover Battle of Britain Day, Sgt. Gough gave an outstanding aerobatic display which was well applauded by the thousands of onlookers. Cpl. Longley made his thrilling attempt to break the sound barrier in an old Primary—the sonic bangs made by the cartridges fitted to the glider were quite realistic. His "hands and feet off" exhibition caused the crowds to roar with laughter and his spot landing

at the end of the flight was greatly appreciated.

Some said it was a good thing that the cartridges were facing the right way or the old girl might have flown backwards when the bangs took place.

All club members are delighted now that "Tiny" Lawson has found ways and means of squeezing his massive bulk into the cockpit of an Olympia.

This must end on the sad note that our C.F.I. Flt. Lt. Sharman is posted. We thank him for all he has done for us and the gliding fraternity in general. We wish him every success in his new post where he will have plenty of opportunity for gliding. Luckily for us, he will still be a member of the club and we hope to see him frequently. From all of us, Good Luck "Bebe" and Mrs. Sharman.

J.D.

BLACKPOOL AND FYLDE

FLYING at Scorton has continued, but the sad news is that our Eon Baby failed to survive an outing to the Fells a few Sundays ago, and is now laid aside with a fractured bulkhead. The breakage is believed to have occurred when our worthy treasurer, Shirley Clapham, landed on a well-camouflaged boulder, and it merely underlines the amount of clearing up we have to do on this site. Alec Lunn has taken the opportunity to carry out other repairs on the Eon, and also to give it a C. of A.

Our A.G.M. took place on 1st October and after elections, an animated discussion took place on our future developments. There was also much talk of the formation of a syndicate.

On the following Sunday we were pleased to receive Bill Elrington on a goal flight from Camphill, in his Sky.

K.R.P.

BRISTOL

WITH the end of the soaring season, we find that we have so far this year, done more launches, flown more hours, and covered more cross-country miles than ever before in the history of the club. In addition we have collected the first club Diamonds and have a reasonable showing of certificates. July and August proved to be the best months this year with figures of 283 hrs. for 725 launches and 270 hrs. for 1,067 launches respectively. Cross-country miles were 2,134 and 709.

Summer courses have gone extremely well this year and it is surely a record that not one course has been rained off. Noel Harper has worked very hard as course instructor, and we are very sorry that he has now gone back "Down under". We hope he will be back again soon.

Due to the intensive use during the summer, the equipment has taken quite a beating, and we are now starting an overhaul programme on winches and aircraft. Several of the aircraft are due for the 10 year C. of A. so there is a lot of work to be done, under the able direction of Doug. Jones. In addition, spoilers are to be fitted to the T-31 and reserve Tutors are being readied. Among the private owners there is great rivalry at the moment to see who can build the best bubble for a Skylark, and there is a production line in operation.

With the Winter nearly here, we can now get down to some more site development, of which the first essential is to install drainage to prevent the hangar being flooded in heavy rain. In the very near future, mains electricity is to be laid on and this will be a considerable help all round. The valiant "plonk engine" will then be put to honourable retirement. Water still continues to be a problem, especially during dry weather, and any suggestions on how to tap springs would be appreciated. Further work is to be done on the car park to prevent it becoming a mud bath in the winter, and in due course it will be walled in to match the Parry Jones memorial garden, which is nearly finished.

Winter brings thoughts of social activities and it is proposed to hold a Christmas hooley on 19th December. Plenty of grog will be on hand and any visitors from other clubs will be welcomed. The Locals say we're in for an 'ard winter, so with any luck you might get snowed up if you come!

A.L.S.

CAMBRIDGE

NEVER has the weather offered us so many opportunities for enjoyable soaring flights as this summer and early autumn. With 1,090 launches, 173 hrs. and 660 cross-country miles, August was the most successful month in the Club's history. The culmination of the season was the last week-end in August when G. S. Neumann took the Eagle on a 200-mile goal flight to Winkleigh Aerodrome in Devon and thereby completed the first Gold C flown on Cambridge Club-operated aircraft.

On the following day, Sunday 29th August, Lionel Alexander convincingly demonstrated with a 100-mile goal flight to Lasham via Aylesbury, that he could have gone to Devon as well if he had been able to get his aero-tow early enough. To get aero-tows at the right moment has in fact been one of our major difficulties this year. On the same week-end Arthur Cruickshank became the Club's staunchest retriever-man of the year by logging 1,200 road-miles with trailer. He started by fetching the Skylark from Kirbymoorside on Friday, shared the Eagle's round-the-clock retrieve from Devon with R. G. James and finished on Sunday night by getting Pat Eyers back from his Silver C cross-country flight to High Wycombe.

Earlier in August, Peter O'Donald and John Garrood gained their Silver C distance legs, and Sigfrid Neumann attempted an oscillatory Gold C flight, Cambridge-Ludham-Cambridge-Ludham, but came down after 6 hours, having covered only 117 miles of the course.

In September we lugged all six aircraft up to the Long Mynd as usual, two of them on one trailer behind the tractor. Surprisingly, most of the 132 flying hours of this camp were done in thermals, including the two 5-hour flights by Fred Green in the Olympia and by Peter James in the Prefect. The most exciting day of the Camp was the 11th September when all aircraft were above 4,000 ft. by 11 o'clock and cloud base rose to 8,800 ft. a.s.l.

We can be sure that the weather will be less co-operative next year, but perhaps we can do equally well by developing a little more enterprise. The President of the Club, Dr. Pringle, has already shown us the way by taking the Olympia 58 miles to Daventry on 4th October in an almost cloudless sky.

At the moment the Assistant Treasurers, Anthony and Catharina Edwards, are working overtime, charging up the last few hundred of the 5,642 launches we did this year. Their job is harder but more satisfying than ever.

We are pleased to have Ernie Clarke back with us as an instructor and enterprising soaring pilot. At the same time we regret to see Gil Phillips leave us. Gil filled his jobs as Chief Engineer and Club instructor with great ability and enthusiasm, and it will be no coincidence to see a new gliding club sprout in Pembrokeshire where Gill has moved. G.S.N.

CHILTERNS

AFTER a summer of very restricted flying due to the C. of A.s. required by most aircraft, we are now coming up to full production. August launch rate was good, we had the Olympia, T-21 and the Grunau flying, September brought forth the T-31 recently rebuilt by the club. The old T-31 the first of our fleet has gone to Hornchurch, may it give them—a new club, as good a start as it gave us.

Sqn. Ldr. Potgeiter, our C.F.I., became the first member to gain a Silver C for the club, Fl. Lt. Kurylowicz (Lefty) was hard on his heels with his Silver C.

Recent changes in the committee have been Fl. Lt. Tony Ross to Deputy C.F.I., "Lefty" the hard working deputy, to Officer i/c. Gliding Club, W.O. Sam Sobey a founder member to Secretary, Fl. Lt. Osland, Treasurer, B. Thomas, Publicity Member.



Chiltern Club members at the bar

A social was held in the club room on the 18th of September when the local High Wycombe Film Unit produced a very fine film show, the air to air shots of the club gliders were first class, as were the colour slides of club activities shown by members Gibson and Fursman. B.T.

COPPERBELT

THE Copperbelt Gliding Club, here in Northern Rhodesia, is claiming a record. Not for height, not for distance, not for speed—but for originality in retrieving.

Vic Brierley, one of our instructors, landed the club L.O.100 on a road near the little mining town of Bancroft recently. He had to use the road as fields are almost non-existent in the thickly tree-covered bush round here. He had barely rolled to a halt when a lorry passed by and Vic, the great opportunist thumbed the African driver to a stop and persuaded him to lend a hand in the de-rigging.

Unlike cross-country landing helpers in any other part of the world the African had not thought it was a model aeroplane landing, he had not thought it was a jet crashing and he did not even presume that Vic had to land because the wind died down. He just helped.

He and Vic loaded the L.O.100 onto the back of the lorry and while Vic was looking for something to lash the glider down the African walked over to the nearest tree and stripped off 30 yards of bark and plaited it into a rough but effective rope. Half an hour later the L.O. 100 was safely delivered to the nearest airfield at Nchanga mine and Vic's own Tiger Moth was on its way from the club base 40 miles away at Kitwe to complete the retrieve. The incident was even reported accurately in the local Northern News the following morning. Reason for the unaccustomed accuracy: John Dickins, the club C.F.I., a former member of the London Gliding Club, is a reporter on the paper.

Another pongo pilot has also joined the club recently as an instructor, Dave Knox, a former A.T.C. instructor. A little-known machine, the L.O. 100 is German-built, has a tiny 10-metre wingspan, with flaps but no spoilers or brakes and is fully aerobatic. It is credited by the makers with a maximum permitted speed of about 250 m.p.h. but no one here has flown it faster than 250 m.p.h. It was bought originally because of its small span to make road landings feasible and according to Vic Brierley there was no tendency to run off the road because of the camber.

It is a pleasantly light and responsive glider to fly but is a little "twitchety" on landing because of the absence of brakes and because it floats seemingly for ever unless the approach speed is absolutely accurate.

The club's other glider is also German, a two-seater Bergfalke. This has a tubular steel, fabric-covered fuselage, but is otherwise orthodox and has done great work in training. It has a 28:1 glide ratio, the same as the L.O. 100. Both gliders have been completely stripped and are receiving a thorough C. of A. at the moment.

Our next machine will be a Slingsby Swallow which has been ordered by a syndicate and is expected by about Christmas. The Swallow will of course be able to make use of the magnificent cloud conditions we get here from November to March. The big snag to cloud-flying here though is that one might easily come out over virgin bush without a single landmark to pin-point your position and we are discussing the practicability of a fixed directional loop in the nose, a transistorised lightweight radio receiver, and a millampmeter to indicate the null as a means of homing on the local radio beacon.

J.D.

CORNISH

AFTER a wonderful summer we are taking a deep breath and getting down to serious planning for future development. The frequency of committee meetings must be a record.

Course bookings proved so heavy that we had to run them weekly, instead of fortnightly as originally planned, right through to the second week in October. Tony Edwards and John Harris, our two full-time course instructors, have done a magnificent job, and we are very lucky to have had them available to do it.

In August Jack Silley acquired an Eagle—to our great delight—and very generously made it available for Club use. With it, George Collins has been able to initiate many members into high performance flying, and has done a great deal of soaring, including an out and return to Lostwithiel, 52 miles at an average 48 m.p.h. Pip Phillips is now the proud owner of a Meise in place of his Grunau, and very nice it is. A new canopy has been obtained for the T-21 and should prove a blessing during the winter. Plans are afoot to build a Swallow early in the New Year, and the proceeds of the Christmas Draw (a mammoth one) will go towards it.

Visitors have been frequent, and very welcome. George Burton flew in from Lasham in a Skylark on 30th August, not long after Fl. Lt. Sharman had aero-towed Fl. Lt. Allen back to Andover, whence he had flown an Eagle to Gulval, near Penzance, the day before, and been retrieved

to Perranporth. The next day Bebe Sharman was back again, this time in an Olympia 419 from Andover. We were also pleased to see Ken Pearson, Jeff Pentelow, and John Evans.

Cliff soaring has been somewhat restricted by the relative infrequency of westerlies, but thermal activity has provided a good deal of fun. John Harris in the Olympia picked one off an auto tow at 600 ft. and whipped smartly to Silver C height (complete with barograph), while on 13th September a gorse fire on nearby St. Agnes Beacon produced a series of very fine thermals. Pilots were seen landing wearing broad grins and smelling faintly of smoke. September was a record month—1,228 launches, and flying every day. The break in the weather has brought the westerlies back, and Ron Brewer has duly chalked up his five hours. Throughout the summer and autumn Mike Armstrong with the Tiger has been invaluable for aero-towing, often at considerable personal inconvenience.

Social activity is increasing with the onset of winter. The Ladies' Committee are arranging socials, fireworks and a barbecue on 5th November, and of course there is the Annual Dinner and Dance coming up on 5th December at the Red Lion, Truro.

P.V.P.

COVENTRY

ALTHOUGH we cannot record any Gold distances in this golden summer, we can report some very good attempts. Alwyn Findon came frustratingly close to success on 17th August, when he flew his Olympia from Edgehill to Wyngate, near West Hartlepool—a distance of 297.7 km.!!

Alwyn had named Usworth as his goal, as had Howard Greenway, who ran out of land near Saltburn after making 174 miles from Edgehill on the same day. Having had his fill of the difficulties caused by the murk of the industrial North, Howard's next attempt, on 31st August, was towards Cornwall. On this occasion he landed short of Tavistock—165 miles from Baginton.

Our chairman, Dr. Gregg, has also been putting the miles behind him this season. On 19th July Doc. flew 53 miles to Aston Down, then had an aero-tow to Nympsfield and flew the 57 miles back from there; three weeks later he was retrieved from Sedgemoor (105 miles), and the following weekend, on 15th August, covered the 95 miles to Skegness at a speed of just under 40 m.p.h. from take-off to landing.

Doug. Cunningham and George Turner also flew south-west on 8th August, Doug. landing at Blakehill Farm after 54 miles in the Olympia, and George, in the Prefect, reaching his nominated goal at Staverton to complete his Silver C.

Another goal flight to Staverton on 31st August, by Laurie Watts, completed our third Silver C this year, and second legs have been logged by Peter Martin, who took the Prefect to Wymeswold on 25th July, and Mike Smith, who reached Kemble on 30th August, Mike gained his Silver height earlier this year, as did three Johns—Brooks, Colvin and Brownsden. Roger Thwaite and Reg. Ludgate have also gained their "heights"—a matter of third time lucky for Reg., who has managed it on two previous occasions without a barograph.

C flights have been made by Messrs. P. Smith, Agg, Bettoney, Reader and Clifton, and twelve members have made their first solos since our last report.

Two members who have put in a great amount of labour for the club have recently resigned from office: Gerry Harrison, our Chief Ground Engineer, and Doug. Cunningham, our Transport Officer. Gerry's job is now being jointly undertaken by Lou. Glover and Laurie Watts, and Reg Ludgate is now in charge of M.T.

Membership has now reached a record level—around 150, and the Club is now seeking a Tiger Moth as a permanent tug aircraft.

One further item which we feel should be placed on record is a flight by Ivor Tarver on 29th August. While posted to France on business this summer, Ivor managed to tie up his Gold C distance with a flight of 336 km. from Chavinay, near Paris, to his goal at Niôrt.

P.M.

CROWN AGENTS

THE flow of our overseas members visiting Lasham, notified in the October issue, has not slackened, and since September we have welcomed J. M. Ibbotson and A. Soutar from Kenya; H. E. Mason from Northern Rhodesia; I. F. Dadwallader from Tanganyika.

The continuance of summer weather right into October permitted considerable progress in flying training to be made.

Sir Alexander Clutterbuck has succeeded Sir Gilbert Laithwaite as Permanent Under-

Secretary of State at the Commonwealth Relations Office, and has kindly consented to become a Patron of the Club.

The Committee extends to all members, wheresoever situated, a Hearty Christmas Greeting and Good Wishes for 1960.

J.E.G.H.

DERBY. and LANCS.

After a rather slow start at the beginning of the year, cross-country flights became fashionable at Camphill and the total now stands at 3,900 miles. On the 20th June, Bob Frodsham completed his Silver C with a 58 mile flight to the Irish Sea and Bill Elrington and Brian Jefferson, flying the Sky and Skylark IIIB, reached their goal at Tebay. On the 19th July, Brian secured his Gold Distance leg with a 191 mile flight just short of his goal at Lympne, Bill reached his 87 mile goal at Ingoldmells while Michael Kaye and Karl Birkett made a 134 mile flight to Baginton and return in the T-42 at 27 m.p.h. On the 25th, Bill reached his goal at Sutton Bank (69 miles).

On the 2nd August, Denis Ward completed his Silver C while Bill and Brian both reached their goal at Ipswich, 153 miles. During August Bank Holiday, a visiting team from the Mynd recovered the Beer Tray in spite of the noble defence put up by Keith Johnston and Angus Thomson. The latter reached Luton, 116 miles, in the club Olympia. Angus obtained his altitude leg for the Gold C in a Cumulo Nimbus at the Nationals while flying the same club Olympia.

On the 16th August, Bernard Thomas reached his goal at Sutton Bank, 67 miles. On the following day, Peter Mackenzie made his first cross-country in the Krajanek. On the 19th, Stan Armstrong reached his 87 mile goal at Tebay.

On the 30th, Michael Kaye and Ernest Martin in the T-42 reached Dunkeswell via Billing some 229 miles. Walter Neumark, after experimenting with the centre of gravity control of the Hawk of 1899 during the previous month, returned to the more conventional controls of the club's Skylark II and flew 182 miles, just short of his goal, Exeter. Brian Jefferson in the Skylark IIIB flew 163 miles, John Tweedy in the Sky reached his 121 mile goal at Swindon, Stan Armstrong landed at his goal at Nympsfield (115 miles) and Angus Thomson flew 95 miles to Tewkesbury in the club Olympia.

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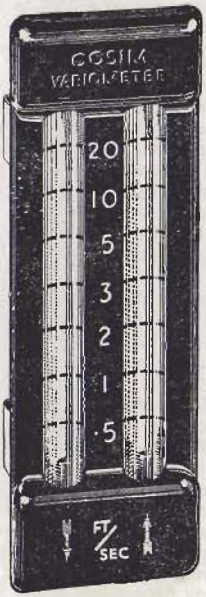
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On the 5th September, our C.F.I. Bernard Thomas, became the first pilot to reach the Mynd from Camphill thus winning the Chairman's £5 prize, while our Treasurer, Stan Armstrong, just failed to get enough height to land on the Mynd.

On the 26th September, Stan reached his 112 mile goal at Cambridge while Bill Elrington made 132 miles to Hatfield. On the following day the former landed at Kings Lynn (97 miles) and the latter reached his 87 mile goal at Ingoldmells. On the 3rd October, Stan flew 31 miles to Pontefract, while on the 4th Bill reached his goal at Blackpool (65 miles). Both are running so close for the Chairman's Annual Award that they will have to continue their cross-country flights up to the 31st of December. We are sure that Basil never dreamt that his prize would become a substitute for the old Winter Cross-Country Award! Beside these unusual numbers of cross-country flights, we recorded 6 marriages, 2 engagements and 3 births during the same period. It is truly remarkable what a little bit of sunshine will achieve. (Or was it the result of last summer's lack of sunshine.—ED.).

O.W.N.

DUMFRIES and District

IN this, our first report, we have no flying but plenty of progress to report. Our membership is recruited from a wide area, some from as far afield as Glasgow, Stranraer and Whitehaven in Cumberland. Numbers are encouraging considering that not a blow has yet been struck in the air, there being fifty flying members and over twenty associates.

Our site, at Townfoot, Thornhill, is on rough grazing land some 4/500 ft. above sea level which has been leased to us by the farmer, Mr. R. Weir, to whom we owe thanks for his co-operation. The site is backed by a south-west facing ridge, and we are all eager to see if it performs as well as it looks.

Site work is progressing each week-end, involving gate-hanging, fencing, road-building, etc. A silage cutter has been utilised for shortening the tough stubbly grass, and it effectively does so, removing in addition molehills and bumps.

Meanwhile our engineers are at work converting a 15 cwt. lorry to a two-drum winch, and hope to have the finished article ready for try-out in the next fortnight.

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Delivery of a new T-31 is expected by the time of issue—better late than never—while our syndicated Tutor will be dusted down and C. of A.'d as soon as practicable.

Finance, of course, is its usual problem, and our thanks are due to the Ladies Committee, who organised a most successful Coffee Morning in aid of Club funds, and who, we hope, will assist with our pending Jumble sale.

Regrets at missing the glorious summer nevertheless leave us a winter for experiment and exploration, which should stand us in good stead in the coming year.

FOUR COUNTIES

DURING the month of July we moved to R.A.F. Spitalgate, near Grantham. We were sorry to leave N. Luffenham where we spent fifteen months, achieving in our last full month there—May 1959—a record of over 600 launches and 48 hours. But the all grass airfield at our new site should make our cables last much longer.

Thunderbox the First, our two drum winch, has now completed 2,000 launches during its first eight months. The indefatigable Tony Lamb, one of its builders has since completed the major overhaul to our Wild winch.

S.A.C. Kemp and S.A.C. Bashforth have got their C's and Flt. Lt. Mugford has A. and B.

The first batch of Silver C legs for many months has at long last come. Flt. Lt, David Brooke, our new C.F.I. has made three efforts at various 50 km. triangles, but although he has been unlucky each time, he has gained his height leg. Stephen Hart has again reached 6,000 ft. in the Olympia, but once more without a barograph—it's either been in the Grunau or else lent to another Club! We have therefore started a fund for a second barograph. Sqn. Ldr. Roberts and Flt. Lt. Bradbury have been luckier, both getting height and distance in July.

S.A.C. Graham Martin, who got his duration in March, has now flown his height in August and capped this during his demob leave by setting up a club distance record of 79 miles to Huddersfield in the Olympia on 4th October. He thus becomes the second club member to complete his Silver C. We shall miss Graham, not only has he been a most regular instructor and enthusiastic hangar worker, but he has done stalwart work as co-editor of our newsletter. T.J.B.

HALIFAX

OUR newly constructed two-drum winch is now virtually complete and is working for its living with reasonably satisfactory results. One or two teething troubles of a minor nature are being sorted out and the launching rate will be stepped up considerably by using three cables. Up to now our first experience of solid cable has been fairly smooth and trouble-free; further experience will show whether it is the present answer to the cable question.

The membership at Ringstone Edge is increasing at a very encouraging rate and with the band of willing helpers growing larger the prospect of the numerous jobs still to be done seems to be much less formidable. Various sub-committees have been set up and we expect all Club activities to go with a swing under their leadership.

A number of members armed with the Tutor visited the Doncaster Club on their



Philip Wills took this photo of the Yorkshire Club at Sutton Bank as he arrived from the Lakes Club Rally in August, thereby winning the Lonsdale Trophy for the longest flight of the meeting. A Swallow is seen soaring over the west slope

Open Day, where they were received most hospitably. The day's flying was rounded off with a barbecue organised by the enthusiastic Doncaster types. S.C.

HANDLEY PAGE

DURING the past four months the club has been as active as ever. By far the most ambitious effort was the Portmoak Expedition at the end of July, when the whole Club and most of its equipment trekked Northwards 420 miles to the home of the S.G.U. Over 40 hrs. flying was accomplished during the week with 5 hr. legs being gained by Paul Langston and John Rymill in the Skylark. Both the T-31 and Rhonbussard performed well on the hill also, with the Bussard above all but our Skylark and the T-31 getting to 2,000 ft. above the site with comparative ease. In all everyone enjoyed this holiday and we only wish that Portmoak was not such a long way away! The S.G.U. members made us very welcome and their help and hospitality was simply wonderful.

Since Portmoak the Skylark has been active with Paul completing his Silver C by flying to Lasham, and Peter Neilson's excellent out-and-return flight at Dunstable to gain him 3rd place in the race held during the Aerobatic Trophy day. Other club successes have been the first solo by Jackie Brown, who with Ursula McCulloch looked after our meals so well at Portmoak. Another Portmoak visitor, Laurie Frakes gained his C Certificate soon after our return, having been sent solo at Portmoak, as was Barry Masters—congratulations to all.

Looking back on the past year, although its had its ups and downs, flying hours and cross-country mileage have risen markedly. The whole fleet has been given a very thorough overhaul and in all the year's end sees us settled down with our new equipment and looking forward to next year, which should be both interesting and promising.

Finally to all our friends, may we wish them a very happy Christmas and a bright soaring New Year. L.W.D.

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KENT

WHILE still waiting for news of a permanent site, the club is continuing to fly at Lympne, where there have been some good soaring flights recently. This summer has seen the biggest and most successful programme of courses we have yet undertaken; we hope next year to run them on an even bigger scale.

On 15th August, Peter Aknai gained his C with a flight of 33 minutes in the Prefect, and his example was followed the next day by Roger Bunbury. On Sunday, 30th August, Steve Green flew the Olympia to Wartling, near Pevensey. This was a very accurately judged Silver C cross-country—we are not sure yet whether his judgment was too fine! The retrieve, conducted by Hon. Chairman and Hon. Treasurer, went quite smoothly apart from an encounter with a herd of cows in a narrow Sussex lane. Fortunately Hon. Treasurer seemed to speak their language. While the Olympia was on the way to Wartling, Allen Frost was getting his C with 28 minutes in the Prefect. He has since converted to the Olympia.

Promising looking weather on Sunday, 27th September, produced two cross-country flights. "Bill" Bailey took the Olympia to Ticehurst; this was not quite far enough for Silver C, but he climbed to over 4,000 ft. on the way, gaining the height leg. At the same time the syndicate Skylark was on the way to the Southdown Club at Firle with Philippa Buckley on board. This flight gives her Silver C distance and height. It is also the third cross-country to be made over the Romney Marsh since the club moved to Lympne, which shows that those pessimists who thought that area unsoarable, were wrong! P.B.

LONDON

THANKS to the excellent soaring weather lasting through to the end of September we, like many other clubs, can record our best year for launches, hours and cross-country mileage. June, July and August

were successively the best months in the club's history for launches and hours.

The best week-end was the last in August when fifteen aircraft set out for Plymouth. Roger Mann in the Skylark II and our Chairman, Godfrey Lee in his Olympia, were successful on the Saturday and on the next day John Everitt in the Skylark III and Arthur Doughty in his Kite II reached the goal. Other good flights this week-end were by Mike Fairman, only twelve miles short on his second attempt in three days in the Meise, Peter Burford 156 miles in the Olympia, Colin Richardson in the Sky and on the Sunday, Chuck Bentson in the same aircraft who went 136 miles after a very late start.

The following week-end the north-easterly still persisted but with cloud base still only 1,800 ft. as late as 12.30 p.m. some people felt this wasn't good enough for a Gold C distance flight. Colin Richardson, flying the Skylark III this time, pressed off first and this time he reached the goal. Harold Tarnow and Mike Riddell in the Sky and Meise got 60 and 80 miles before being sunk.

The task on 16th August was a dog leg Gold C distance up wind to Fairford then back to Swanton Morley, Roger Mann made the best attempt at this with a flight of 150 miles in the Sky and he was foiled by having to wait, nearly two hours, for conditions to improve near Oxford on the way out.

The same week-end Geoffrey Stephenson did two out-and-returns, Swindon and back 116 miles on the Saturday and Great Malvern Beacon and return 158 miles on the Sunday.

John Jeffries, flying the Skylark III on 16th of September, made nearly 150 miles into Wales in an effort to reach the south-west coast for Gold C distance.

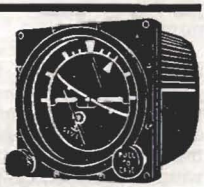
On 15th August, Wald Stack took the Prefect to Honnington, 65 miles, to complete his Silver C, on the following day, Ernie Williams flew the Prefect to Newmarket for his distance and Les Moulster took his Olympia to Wethersfield reaching 7,500 ft. on the way to complete his Silver C. The Prefect went away again the next day, this time to the Norfolk coast flown by Jim Contostavlos who took just over 5 hrs. to fly just under 100 miles and reaching Silver C height on the way. Jim decided to claim the distance and duration and completed his Silver C with a gain of height in the Grunau a few days later. Another Prefect Silver C was earned by Mike Bird with a flight to Membury of 52 miles, gaining his height on the way. Silver heights have also been gained by Guy Collinsplatt, Howard Brunt and Harry Simler in the Grunau Baby, the latter completing his Silver C, and by Geoff. Kerr and Charlie Barker in the Olympia.

On Aerobatic Sunday a task flight was set and six pilots set out to race to Kidlington and back, the finish proved very exciting with Roger Mann beating Geoffrey Stephenson by 5 minutes.

We were very pleased that Peter Dirs should come second to Bebe Sharman on his first entry into the Aerobatic competition.

We have flown every day for the last four months, a record that the weather has never permitted before. The soaring season, which surely must have been the best ever, seems loathe to leave us and even in October short cross-countries are being flown, but with the approach of winter, we are lucky to be able to turn towards the hill for soaring flights and as the prevailing westerlies have persistently not prevailed during the last few months, even the

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pundits will find hill soaring quite a novelty.

In the workshop, work is proceeding on the fuselage of the Kestrel which will be jointly owned by the club and Vic Ginn, who has been responsible for most of the construction. The new aircraft which is a tandem two-seater, with swept forward wings, should be flying early next year.

It has been a record year for courses with the average number of flights per person, over 25 and reaching on one course 31 in the five days.

J.F.W.

MIDLAND

THE summer about which so much has been said, has not, it is sad to report, caused us at the M.G.C. to cheer with enthusiasm.

A few very good days of thermal flying have appeared, such as the day in September when cloud base was reported as being 7,500 ft. a.s.l., and the day in August when a club member flew a triangle of about 15 miles, without a circle being made, and a loss of only 400 ft., at the end of it, but these days, and indeed, a normal thermal day, has been conspicuous, only by its absence. This goes too, for the westerly winds which give us our ridge soaring. Our Bungy launches to date this year total only 726 out of a grand total of 7,800, and the number of hours to date, 2,200.

We have produced this year, so far, 38 B pilots, 22 C, and 4 Silver C's. Woolley being the latest, with a flight to Leominster on 26th September.

Bob Swift had a nice flight on 16th August, when he did a 74 mile triangle, and all but got back on the top.

We were all very delighted to see Bernard Thomas in his Sky on 5th September, when he arrived from Camphill to collect a fiver from our chairman, for the first flight to The Mynd from The Derby and Lancs. Club. Stan Armstrong apparently didn't quite make it, but landed only a few miles short, on the same day. We have been trying to do the same thing in the other direction for some time, but just don't seem to be clever enough. Congratulations, Bernard.

Now that our Summer courses are over, run in a most efficient manner by Jack Minshall, trailer fettling is an important item on his Winter agenda, and work has started on rebuilding the T-21 coffin, which got into a shocking state and really is a major operation.

C.G.

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NEWCASTLE

THE anti-cyclonic weather we've been having lately may have been O.K. for the holiday-makers but on looking through the flying log I find that it hasn't been very good from a soaring point of view, at least at Usworth. There have been several good days however, and advantage has been taken of them both to increase the launching rate and the amount of soaring done.

The first of these good days was 19th July when Dave Wilson and R. Brecknell started off the good work with a flight lasting over an hour which caused much anxiety among the other two-seater pilots who were worried in case the thermals ran out before it came to their turn to fly. While the T-21 was out in the wild blue yonder and the Olympia and Tutor were doing extended circuits, the Skylark II flown by Les Kiloh was launched on a cross-country flight, he landed at Carlton in Yorkshire, a distance of 50 miles from Usworth. During the time he was away the good work was continued by Bob Fleuret with a 45 minute flight in the Tutor, Syd Brandon who was airborne for half an hour in the Blue Kite I and Andy Coulson who was launched at 2.45 and contacted what turned out to be the last thermals of the day and used them to do his usual couple of hours "local" soaring.

After that good start the log, like Cassius, had a lean and hungry look for the next month as it wasn't till 16th August that we got another day as good. It was an unusual day too, as the thermals which usually only last from 11 a.m. to round about 3 p.m., went on till nearly 7 o'clock with the result that there were several flights of over an hour, one of nearly three while of the rest there were quite a few round the 20 minute mark, the main flights of the day being Tutor:—Graham Garlick 1 hr. 15 mins., Bob Fleuret 1 hr. 5 mins. Olympia:—Alan Finlay 1 hr. 30 mins., Denis Driver 1 hr. 10 mins., Arthur De Redder 1 hr., Ian Paul did an hour and a half in the Skylark II, while Andy Coulson who was launched at 12.15 for a flight lasting 2¾ hrs. took another launch at 4.45 and stayed up for another 3 hrs. The last thermal flight of the day was started at the remarkably late hour (for Usworth), of 6.15 when the thermals would normally have been killed by the sea breeze, but on this unusual day Frank Rodwell soared the Tutor for an hour before they finally died away and he had to land.

L.A.C.

Bruce Coulson

We regret to hear of the death of Bruce, son of Andy Coulson, as the result of a road accident. Bruce always accompanied his parents to National Contests and on gliding holidays at Lasham, Long Mynd and Camphill, and since he "grew up" at gliding sites, he made many friends among the gliding community.

NORFOLK

WE are holding our first party in the clubhouse at Tibenham on Saturday, 17th October 1959. Since taking over the Control Tower we have completely rejuvenated the premises and installed a first-class bar—which any West End Club would be proud of, running water on tap and flush sanitation. Also we have installed a generator to provide electric light.

The T-21B we understand will be ready for collection from Slingsby Sailplanes on the 30th of October, so the whole club is waiting with great anticipation for this day to arrive.

The club Tutor has done a fair amount of local soaring by the few members who are qualified to fly, of course it is hoped that this number will be increased considerably in the near future.

Members from other clubs are most welcome to visit us, whether by air or road.

P.A.C.

NORTHAMPTONSHIRE

WE now have not merely an address, but somewhere for the postman to deliver the letters; in fact, after a year of nomadic adventures, the club is now established at Podington Aerodrome, near Wellingborough. We have been flying there now for four weeks, using auto-tows, and a Tiger which the Tiger Club has been kind enough to send over. Last week there was a sale of buildings on the site, and we became the owners of a range of buildings which are potentially some of the best club premises in the whole country. In addition to an extensive range of rooms, readily convertible into workshop, clubroom, and offices, there is a building 120 ft. by 27 ft., one end of which can fairly easily be opened to make a hangar.

Before finally turning the page on our

wanderings, we must thank Wing Commander McClure for allowing us the privilege of flying at the College of Aeronautics, Cranfield, throughout the summer; that we have taken advantage of his kindness is evidenced by the record of 16 C Certificates gained there.

Another Silver C has been gained, this time by Frank Pozerskis, and the following have got their C's:—A. Barrow, E. Clarke, F. Manning, G. Morris, G. Grant, R. Hawkings and R. Hastings. Penny Mallinson has her B, and D. King got his Silver C Height at Cranfield on the 25th July.

We hope shortly to add a Swallow to our fleet, to fill the gap between Tutor and Skylark II, at present filled, through the Chairman's generosity, by his Eagle, and it is hoped that the R.A.F.A. will shortly be forming a Gliding Club, which will share our site and facilities.

The complete change in our prospects is most encouraging, and we are in very large measure indebted to our C.F.I., Ken Pearson, who negotiated for the buildings, and to Philip Wills, whose intervention was ins rumental in obtaining the site.

OXFORD

SOMEONE should have said "News may be nonsense when it becomes history", for it could then have been aptly applied to our club notes published some time after the event complete with the author's errors.

We sympathised with our C.F.I.'s attempt, not because it ended 39½ miles away but only 31½. However, before our lament appeared in print John Ellis had flown his Gull III 115 miles to Colyton and one of Devon's smaller fields to complete our 4th Silver C this season.

The Skylark-builders have pointed out with due emphasis that theirs is no common-or-garden "B" version, but a straightforward "II". This aircraft incidentally gave an aerobatic display at R.A.F. Abingdon's "At Home" with a repeat performance at Kidlington the following day.

We have continued to make good use of the exceptional weather and Ron King's flight to Malmesbury, 45 miles in 2¼ hrs. with Silver Height made up a total for August of 150 hrs. by five of our aircraft.

September added a further 65 hrs. and—at last—aerotows, a competent service being provided by John Gibbons and Dave Roberts with the Kidlington Tigers.

Back from her wanderings with the White G.B., Anita almost immediately disappeared again from the top of a winch launch on a day which does not appear to have been used by anyone else. Three hours later, a clock which had been put forward in error and "mountains" which loomed through the haze prompted her to descend on an unsuspecting Craven Arms 75 miles distant. She reports a cordial welcome by the natives who were surprised to learn that she had not fallen from the top of the Mynd.

It has been our pleasure to welcome a number of visitors this year including Sidney Swallow from Lasham, Anthea Russell and Vic Carr and a number of Coventry's members. Lars Tjernström who came from Sweden specially to obtain his C, succeeded in so doing on his last day with us.

A special occasion for us was an airborne visit by Philip Wills who passing over on his way home from Camphill came back to join us in a cup of tea.

Looking back this would appear to have been our most successful season, and whilst the weather may be a considerable factor in the number of launches, flying hours and cross-country miles, we can claim credit for a wastage of members down to 3½%.

"WEAK LINK".

POLISH

FIRST, the results of our Silver C Stakes: first at the post Rusty-Ruskiewicz by a short neck from Kasper(kiewicz) with Ted Jerzycki a few lengths behind in the third place. Voytek Lewandowski having successfully leaped over the last fence (yes. the 3,281 ft. high, one) is now on the 50 km. straight, closely followed by Tadek Krzystek. Our Club's "baby", Fankie Wojewodka, got his C and thus joined the Silver Race.

So much for personal achievements of the club members, and now for the collective achievement of the club as a whole. *Bocian is here*! Yes, it arrived at last, straight from Warsaw firmly strapped to the railway wagon, and it brought us hearty greetings from Poland's gliding fraternity. Its arrival at Lasham almost coincided with the 30th anniversary of the founding of the Polish Aeroclub, and while in Poland this occasion was being celebrated, our Bocian was sampling its first Lasham thermals in the able hands of Lorne Welch and Frank

Irving, who were conducting C. of A. Tests.

Few mods. in instrumentation and equipment were necessary to enable Bocian to toe the British regulations; and then with a sigh of relief we heard Lorne say: Well . . . there's nothing wrong with it . . . you have a very nice plane here, so look after it, won't you?!" Here I would like to put on record our thanks to the two test pilots, for all the helpful advice they have given us regarding the flying and maintenance of our new acquisition.

Frank Irving offered to initiate some of us in the art of flying the Bocian (yes, it is a two-seater) and it was Kasper who out-tossed everyone to have the first ride. By now all of us and most other Lashamites have had a trip or two in it and everyone seems to be full of praise; particularly for its comfortable cockpits, excellent visibility and glossy finish of wings and fuselage.

Needless to say, through our own, nostalgia-polarised eyes, Bocian looks simply beautiful! J.S.R.

SCOTTISH G. U.

With the start of the autumn there has been a noticeable slowing down in the tempo of club life, small groups are gathering to discuss winch improvements, M.T. replacements and generally to take stock.

Results of this have been surprisingly good—new drums have been fitted to the Wild Winch and a new feed on device is in process of construction, after this the groups hope to tackle our Grey Winch for further modifications, which after the reports of the Four Counties equivalent, appears to be a little ahead of theirs in that the differential has not been modified, and has given about 20 months trouble-free running—it can be done!

Another major feat in engineering has been the transporting of a 40 ft. x 20 ft. hut from the top of the Bishop Hill to the Airfield, for erection as a maintenance area; many hair-raising tales have been told of this expedition.

Flying during August beat previous records and the hours logged exceeded 228 hrs., the best distance flight being made by T. Docherty (Swallow) to Fraserburgh, a distance of 115 miles. Bill McRaith, Francis McKay and Jim Jacob have gained A and B certificates and are now pressing on towards the next goal.

Records of flying during September are not yet available but towards the end of the month some excellent hill-soaring was obtained during the week-end 26th-28th and on Monday the 28th, the two T-21's and the T-42 operated a shuttle service to the hill and logged a creditable 13 hrs. showing how a small well-organised group can operate to best effect.

W.A.S.

SOUTHDOWN

August and September saw more heights, distances and hours flown than during any previous similar period at Firle.

Ron Walker, who has been doing such invaluable and unselfish work as an instructor, completed a well earned Silver C by flying 40 miles from Firle to Chichester. The position of Firle on the coast invariably precludes the more orthodox downwind flights and, as on this occasion, considerable effort is required flying cross wind. Ron in fact took 4 hrs. and 24 thermals to achieve his distance.

Dick Vanson also completed a Silver C distance flight to Beriton near Petersfield, but barograph trouble has prevented confirmation. Dick's height and duration had previously been completed at Firle.

Ian Agutter, fresh from Silver C Grunau flights in Spain, caught the cross-country spirit, and again cross wind, made the 40 odd miles to a landing near Godalming.

It was hardly surprising with the Olympia performing so well, that David Harris let valour get the better part of discretion by setting sail in the Tutor—upwind. After disappearing from sight, David began to realise the advantages of laminar flow, and decided to return, landing a few miles north of Firle.

The Tutor has also been used to good effect by Bill Williams, who achieved his Silver C height in it with a creditable flight to 4,800 ft.

Not to be outdone, the fair members have had their share of successful flying, Dawn Reynolds notably achieving her Silver C five-hour flight in distinctly turbulent conditions.

The modest cross-country traffic away from Firle has not been all one way, and we were glad to welcome Phillipa Buckley, who flew in from the present Kent Club base at Lympne in a Skylark II.

R.M.

SURREY

As this summer has been such a wonderful one for soaring and cross-countries, so many excellent flights have been made that space cannot be found for all of them on these pages.

On 4th August, John Corbett started the month well by doing an out-and-return to Dunkeswell for his Gold C. A tired, but happy John was asked to retrieve Bernie Davey who had also gone to Dunkeswell, but had landed at Merryfield on the return eg.

Saturday, 8th August, was a day of very poor visibility, but extremely soarable. Jill Walker, Don Snodgrass and Mike Gee set off for Perranporth, but all came to earth near Wellington, in Somerset. With her flight of 101 miles, Jill Walker broke the New Zealand Women's National Distance record.

On 15th August, Bill Wills flew his Olympia to Great Yarmouth via Kettering, for his Gold C. He was closely pursued by George Burton who arrived at Yarmouth via Banbury to gain points for the Jill Walker Trophy. Mike Gee was unfortunate in landing a few miles short.

On 29th August, Dennis Burns flew to Dunkeswell, Rika Harwood to Plymouth and Ron Willbie dropped in near the gaol at Princeton. Sunday 30th, was a little more rewarding for Dennis Burns, who did a dog-leg, Lasham, Lewes, Exeter for his Gold C and Diamond. Godfrey Harwood paid a courtesy call to the gliding club at Dunkeswell while Hugh Mettam carried on to Fowey. George Burton, who just likes flying distances for fun, proved it was easy to get to Perranporth just to add some more points to the Jill Walker Trophy!

After 22 years of hard trying, Ray Brigden has completed his Silver C. Another achievement is Ann Welch's Gold C distance, attained in France after two decades of trying in various countries.

Don Snodgrass did a remarkable flight for September by going to Fowey on 19th September, 164 miles. Hugh Dimock waved the flag by coming 3rd at the Aerobatic Competition at Dunstable.

October 3rd and the weather was still soarable as proved by Bill Tonkin who flew to Bagington, 85 miles, and Chris Healy-Hutchison who flew to Burford and landed from 6,000 ft. just to see some friends. Next day, Nigel Stevenson flew to Nympsfield.

After five years of service, Bill Gotch is leaving us to explore the canals of England. A farewell party was given for Bill on 10th October, when he was presented with a Pewter Mug and a ship's 8 day clock. The two Bills (Wills and Gotch) entertained us royally with some of their traditional songs on gliding and a few that were not so traditional.

The next generation of glider pilots is coming along well. Peter and Gillian Riddoch a daughter, Ann and Roy Procter a daughter, John and Thea Jeffereys a daughter, and David and Joyce Stevens a son. Congratulations!

Our congratulations also go to the recent marriages of Gaynor Austin to David Darbishire and Annie Newton to David Hooper.

The Surrey Club's 21st birthday dinner is definitely being held on the 4th December at the Eccleston Hotel, S.W.1., the time being 7.30 for 8. The price is 25/- a head. We are hoping to get hold of as many ex Surrey members as possible, particularly those who were at Redhill or who were pre-war members.

C.J.W.

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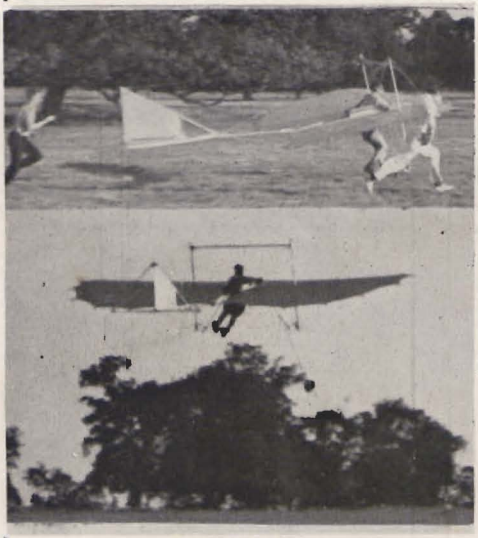
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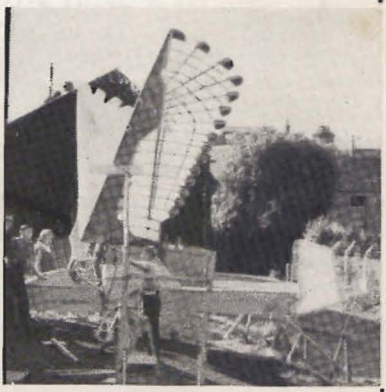
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