

# SAILPLAN

OCTOBER  
1937  
Vol. 8 No. 10

## AND GLIDER

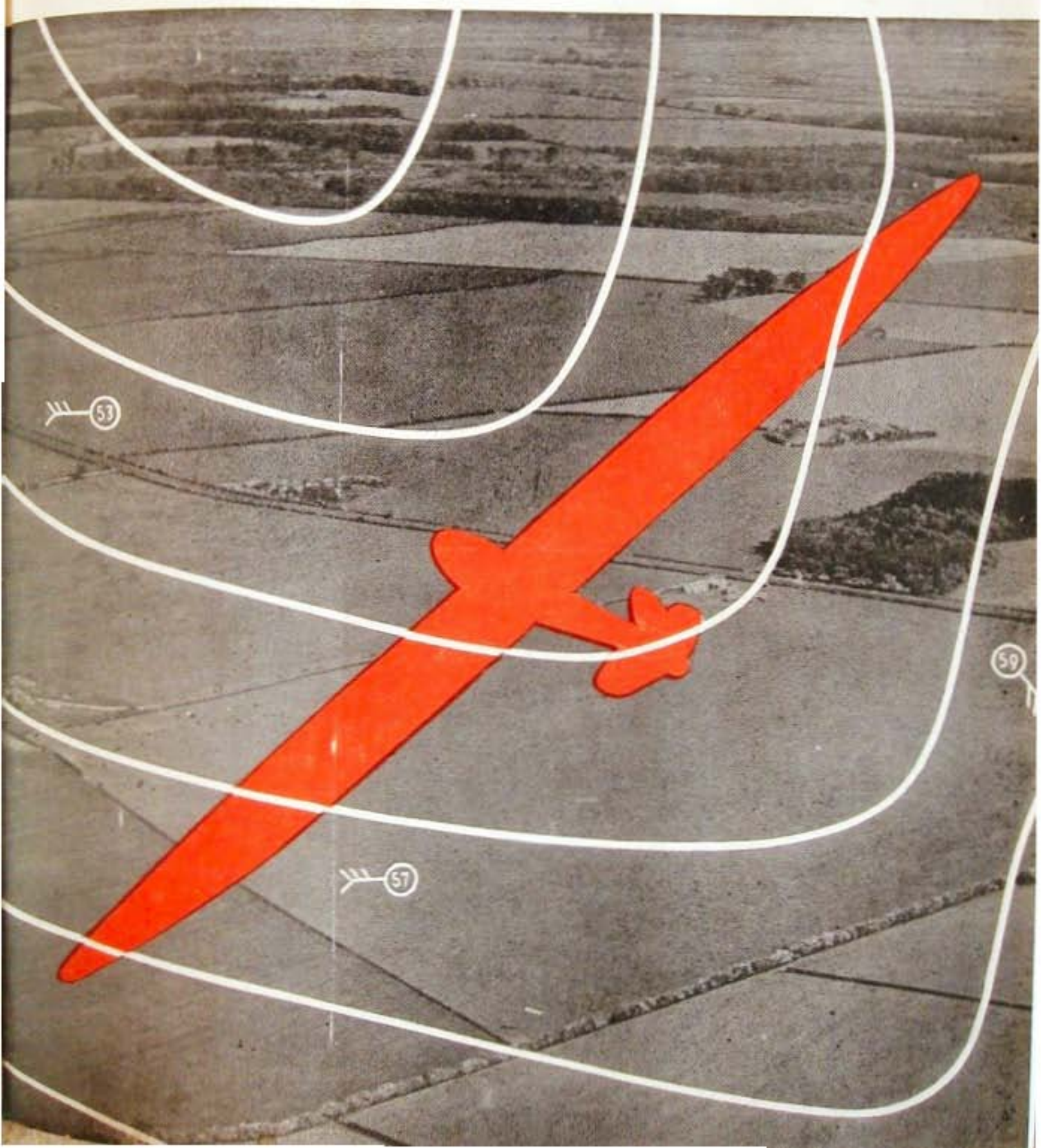
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## Cross-Country Flights at the National Competitions

**D**URING the eight days of the National Soaring Competitions at Bradwell Edge in Derbyshire, from August 29th to September 5th, there were only four on which pilots could find any lift other than that caused by the wind blowing up the hill. But so much use did they make of the opportunities which came on these four days, that 43 cross-country flights were made and an aggregate distance of 1,489 miles flown. With so much awaiting description, we can spare no space for general comments, but will have to plunge straight away into the story.

### Sunday, August 29th.

On this day there was only a light wind from between south-west and west—so light during most of the day that at times its direction was actually reversed at places where the air was being drawn into a thermal current.

Launches began at 10.30, but the first pilot to make contact with a thermal current was K. Lingford in his KIRBY KITE. Launched at 11.34 on a 3,500-foot winch cable, he cast off at about 800 feet, but found no lift at first. He had got down below 300 feet and was manoeuvring to land over the north-western corner of the landing ground, when he suddenly got a strong thermal which took him rapidly up to 2,500 feet; whereupon he set off towards Blackpool, 65 miles away, with the *Daily Dispatch's* £100 prize in view. There were some cumulus clouds about underneath a broken sheet of alto-cumulus. After using two of these, Lingford arrived at Kinder Scout (2,088 feet above sea level) with 200 feet to spare. There was a cloud above it, but he saw another cloud to the west which looked good; alas! it was dead, and being by this time below the level of Kinder Scout, he was unable to return to the cloud still poised over its summit. So there was nothing left to do but glide on down the valley and land at New Mills, 12 miles from the start, an hour after taking off.

Returning to look for his machine after telephoning, Lingford could just distinguish a wing-tip sticking out above a vast sea of mill workers. It was their lunch hour.

Philip Brown took off in his FALCON nine minutes after Lingford, cast off at 500 feet, and, he writes, "connected with a weak thermal which slowly took

me to 1,000 feet. After that there seemed to be plenty of lift and much stronger thermals. Cloud base was reached after half an hour; here Rushton came out of the cloud with great speed and a bit too close for FALCON visibility, so I moved over to the Barrel Inn. The next half hour I wandered over the district losing height. I found it more rough flying through a thermal than circling in one." At about 12.10 we timed the FALCON's circles at 14 seconds per revolution. The pilot landed back on the club ground at 12.57, having been up over 3,000 feet during the flight.

B. H. T. Olver, although only up from 11.56 to 12.03, managed to hold his height for a short time by circling the H-17 in some thermal lift.

J. V. Rushton, launched at 12.14 in the White GRUNAU, was next to catch a thermal. He rose straight up from the cast-off at 800 feet, and reached cloud base at 3,300 feet. He was drawn 200 feet into the cloud, found it very rough, and, having no parachute, side-slipped to get out again. He came out of the side of the cloud instead of the base, and then set off towards Blackpool. But there seemed to be no lift away from the home site, and he had to land near the Derwent Reservoir. As this is at the bottom of a very narrow valley, the only safe place to land on was up on the hills, so the GRUNAU had to be dismantled and carried down 700 feet of steep mountain side to reach the nearest road alongside the reservoir. It was midnight before he and his retrieving party got back to Camphill.

Another pilot to find good thermal lift was K. W. Turner, launched at 12.23 in the Cambridge KITE. He cast off at 800 feet, lost 300 feet, and then began going up at seven feet per second till he reached 2,500 feet. He landed again on the site at 12.10, at the precise moment that Rushton was landing eight miles away.

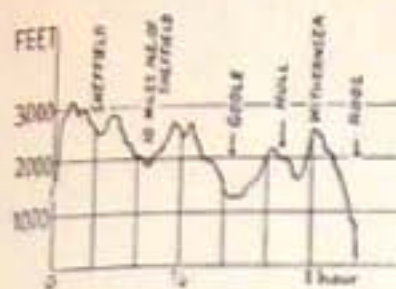
It was nearly two hours before anyone else could connect with a thermal. It had been noticed that, while all this thermal flying was going on, an almost stationary cumulus cloud overhead gradually spread eastwards until it hid the sun; quite possibly it was this which put a stop to the thermals.

The next thermal flight was by R. S. Rattray, who deliberately set out to catch a thermal in which three gulls had been seen circling. From his launch at 14.18 in the CAMBRIDGE II, he rose to 3,600 feet and won the Daily Prize. He soared for an hour and a quarter,









COPY OF BAROGRAPH RECORD  
J.V. RUSHTON  
IN "GRUNAU BABY"  
BRADWELL EDGE TO ROOS  
76 MILES  
SEPT. 2ND. 1937

while flying over the south bank of the Humber, across from Hull, I remembered that I had declared Skegness as my goal. With beginner's pessimism I had not studied the map before starting and could not remember if Skegness was north or south of the Humber. I tried to get at my map but eventually gave up the struggle and decided that it was north.

The Humber looked very wide from a height of about 1,500 feet. I thought there would probably be down-draught over the water and that I would be let down as I was the previous Sunday over Derwent Reservoir. However, I tried it and there was lift. The rules for lift appear to be most inconsistent.

Still cloud-hopping, I reached the sea with the town of WitherNSEA below. Having no idea what town it was, I made a further effort to get the map I was sitting on. At last I succeeded, but it was open for the Derbyshire district.

During the map struggle, little attention had been given to flying, and 1,500 feet are easily lost. Well over 1,000 feet had been lost anyway, and half a minute later I had made my landing with about four hours of excellent soaring conditions still left to go. According to my watch I had been in the air 70 minutes. According to my sensations it felt like 10 minutes.

I would like to thank Hannay, Wynne, and Everall for inviting me to use their BABY GRUNAU.

J. V. RUSHTON.

We will describe the various flights, not in the order of launching, but in the estimated order in which the pilots left the site to go across country.

During the day four pilots landed at Doncaster, 30 miles away; three on the aerodrome and one on the race course just across the road. E. J. Furlong was first to arrive, at 12.30 in the CAMBRIDGE II. Being in no hurry to get back, he gallantly used his trailer to rescue Mrs. Price, who had landed some miles to the south, near the road to Maltby, at 12.50. She was relieved to see her KIRBY KITE stowed safely away from admiring crowds.

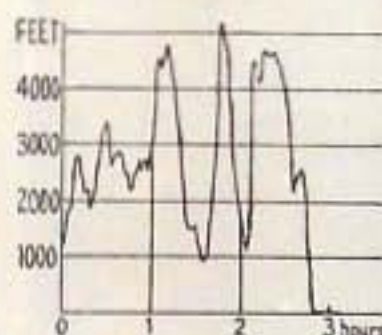
Meanwhile, S. C. O'Grady made a goal flight in the Newcastle KITE to Finningley R.A.F. Aerodrome, 32½ miles away and therefore just conveniently above the minimum for "Silver C" distance. He used three thermals to get there, but, he says, no cloud streets.

P. A. Wills left the site about 11.45 under a short cloud street in company with another machine, probably that of Mrs. Price. He landed the Hjordis two hours later at North Coats R.A.F. Aerodrome, just on the coast. He had attempted to reach Skegness 26 miles further to the right, but the high wind carried him to the seaside so fast that it left no time for working that much across wind.

The next flight, also to the seaside, was by J. E. Simpson, who describes it himself:—

### 78 Miles to WitherNSEA.

Immediately after being launched in the Cambridge University Gliding Club's KIRBY KITE I flew straight up-wind under a cloud street for five minutes, gaining 1,500 feet. I returned to the hill and spent some time working out routes between the almost solid mass of sailplanes in the air. I was anxious to get away as soon as possible and so decided to go as soon as I



COPY OF BAROGRAPH RECORD  
J.E. SIMPSON  
IN "KIRBY KITE"  
BRADWELL EDGE TO WITHERNSEA  
78 MILES  
SEPT. 2ND. 1937

could reach the cloud base. Just under one hour from the start I found a good thermal—at 5 feet per second—the strongest yet that morning, which took me to cloud base at 3,000 feet in eight minutes. Before switching on the turn-and-bank indicator and entering the cloud, I noticed a huge black Venturi a few hundred feet below, with Lingford and his KITE attached to it. I had hopes of the two Cambridge KITES setting off together, but this was not to be, as Lingford thought it was too early to leave Camphill.

The cloud was not very thick, and I could soon see a bright patch above me where the sun was shining. I came out of the side of the cloud and continued to circle round close to it, still rising at 1 foot per second until 3,600 feet. I left the cloud just before Sheffield, and this was where I made my first mistake. I was



A cloud street photographed from Camphill on Thursday morning, September 2nd, about the time Mr. J. V. Rushton was landing at Roos, 76 miles away. It is moving from left to right in the direction of its length.





The upper photograph, taken at 12.53 on September 2nd, shows the cloud under which Mr. J. E. Simpson got away across country. He was skirting its base at the time, and Mr. Lingford's "Kite" and the "H-17" were also under it. The lower photo, at 12.57, shows the same cloud just left of the centre; it now forms part of a short "street" which is travelling away down wind.

rather frightened of flying right over the centre of the town with no landing field obviously within reach, so I flew round the south edge of the town and missed any thermals Sheffield may have had to offer.

The next 20 minutes were spent flying down-wind in absolutely calm conditions, until with the altimeter reading minus 300 feet I prepared to land. A football match in the field next to the one I had chosen was stopped, and the players lined up at the fence to watch me land. At about 400 feet the variometer woke up at last, and I spent an anxious three minutes at the same height with one eye on the variometer and the other on possible landing fields. Eventually I worked my way into the strongest part of the thermal and 15 minutes later was back at the cloud base, 5,200 feet above sea level.

I now had time to get out the map and found that the River Trent was below me, and the town of Scunthorpe straight ahead. From 1,000 feet over Scunthorpe I climbed to a cloud street at 4,600 feet, under which I flew for 10 minutes at 65 m.p.h. without losing height—definitely the High Spot of the flight.

At the end of the street I turned to the N.E., where conditions looked best, and crossed the Humber at 4,000 feet a few miles east of Hull. I continued in quieter conditions down to 2,300 feet, where I found a small thermal which I left after only gaining 400 feet. I flew along above a railway line, passing several villages with good landing fields until I arrived at the terminus, which was Withernsea, with 1,500 feet in hand.

The beach looked rather too narrow for landing, so I picked a ploughed field just inland of the High Street. I spent a few joyous minutes playing about over the

town, disorganising the traffic, and approached over the houses with the lighthouse-keeper looking down on me.

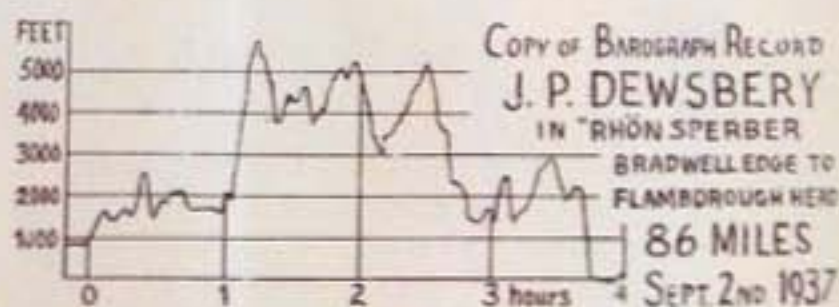
I landed at 2.40 p.m., 2 hours 55 minutes after the launch, having spent 1 hour 55 minutes on the actual journey, giving an average speed of 40 m.p.h. for the 78 miles.

J. E. SIMPSON.

K. Lingford, who, as stated, left the site later than Simpson, evidently found conditions more difficult, for, though he was almost as long on the journey, he only got 47 miles, landing at Luddington, near Crowle, at 15.15.

P. Davis, in SCUD II, after soaring for three hours over the site, got away about this time on an attempt to reach Grimsby, but came down on Doncaster Aerodrome at 15.00.

The longest distance flight of the day—and of the meeting—was made by J. P. Dewsbery in the RHÖNSPERBER. Both he and Mr. Wills realised that the shortest distance to the coast lay directly down-wind, and that, to get any further away from the site, it would be necessary to work across wind as much as possible during the flight. But whereas Wills edged to the right, Dewsbery went left, with the result that he finished up at Dotterell Inn, north of Flamborough Head, landing there at 16.40. Most of his cross-wind flying was done early in the flight, when conditions were good, and he passed well north of Sheffield. Later he got too low to risk going much across wind; this is seen in the barograph record, which also shows that he cruised around for an hour before getting a thermal which took him up 3,800 feet in eight minutes, the first part of the lift being at 20 feet a second. Somewhere near Sheffield he encountered Davis in the SCUD, who dived under the SPERBER to avoid a collision.



C. A. Kaye, secretary of the Derbyshire and Lancashire Gliding Club, flew his own KIRBY KITE 41 miles to Melwood Grange Farm, near Epworth. He did the journey in an hour and a half, after soaring for two hours over the club ground. Unfortunately only the distance will count for a "Silver C," as, although he got up to 4,000 feet, his barograph ceased to work at half that height.

E. Thomas, after soaring for over two hours at the site, dashed off 11 miles down wind in his CONDOR and landed at Dronfield Hallows, near the golf course, at 16.40.

C. Nicholson was very kindly lent F. C. Coleman's home-made GRUNAU BABY, expecting to do a bit of slope-soaring. But he got up so high that he was tempted away to Doncaster. Arrived there at 15.15, he landed on the race course in preference to the aerodrome, but wished he hadn't when there crowded round



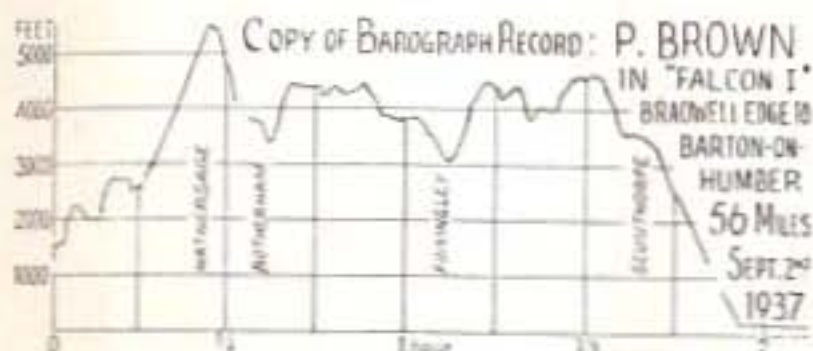
the GRUNAU the biggest and most densely-packed crowd of children he had ever seen in his life. Afterwards he could talk of nothing else but Mr. Coleman's unique and entertaining soap-bubble variometer.

Next away was P. Brown, who again treated his FALCON like a high-performance sailplane as will be seen from his own account of the flight:—

### 56 Miles to Barton-on-Humber.

After about five minutes hill-soaring, during which I encountered two 10-foot-per-second thermals, I decided that when the next one came I would try a circle. It came, I circled, and soon the hill was left behind (left it at 1,000 feet). This was the best thermal of the flight, beautifully steady right up to cloud base somewhere beyond Hathersage. The cloud was dark grey and at the base I was still rising at 10 feet per second. I kept out of the cloud and set off east on the compass, and promptly went down rapidly.

After the down-current I set off to cross Sheffield. Over the middle of Sheffield the altimeter read 1,500



feet. I began to get anxious. Then I saw another machine circling in the smoke over Rotherham, so I went and joined it. It proved to be Kaye in a KIRBY KITE. The thermal picked up here was very rough indeed. Perhaps I was flying partly in and partly out. Both machines left this thermal together and soon the KITE was several miles down-wind. I prayed for a speed range.

Then followed a long glide to Finningley Aerodrome. I arrived over it under the regulation 6,000, and had a bomber squadron for company. Altimeter read between 1,500 and 2,000 feet. Right over the aerodrome I had another thermal. For several miles I had weak thermals and then I saw the Trent. I made for Scunthorpe iron works, but all I got was "no-sink." I stayed with this for a short while and then had a long glide down to land, picking a beautiful field from about a thousand feet, complete with farmhouse, village and helpers. The village was Horkstow, near Barton-on-Humber, 56 miles by straight line on the map.

The flight lasted two hours. Towards the end the clouds were very small and flat. I landed about 4 p.m., so perhaps the time of the day had something to do with it. Those Slater-Cobbs are wonderful.

P. BROWN.

Two more cross-country flights were made before the day was out: M. F. Barnes, in the H-17, landed 11 miles away on the old racecourse at Redmire, two miles short of Sheffield; and A. L. Slater took the GOLDEN WREN to Doncaster Aerodrome, landing there as late as 18.28.



These are the clouds which helped Mr. P. Brown to get away on a flight of 56 miles in his "Falcon I" on September 2nd. The photos were taken, looking directly down wind, at 2.27, 2.32, 2.37 and 2.47 p.m. respectively. The letters and arrows help to identify the base of each cloud from one picture to the next; for instance, the "Falcon" was going up under the cloud base "B" when the first photo was taken; the cloud is over Sheffield in the last photo, by which time Mr. Brown had left it. Note that the street is not continuous, but is made up of several detached rows of clouds, more of which are added at its rear end (nearest camera) in each successive picture.



### Friday, September 3rd.

Cross-country flights on this day totalled 481 miles, as against 670 the day before. Cloud streets were again present, but were less regularly developed, and the sky was complicated by great towering masses of cumulus which grew into cumulo-nimbus and produced rain and other surprises for sailplane pilots.

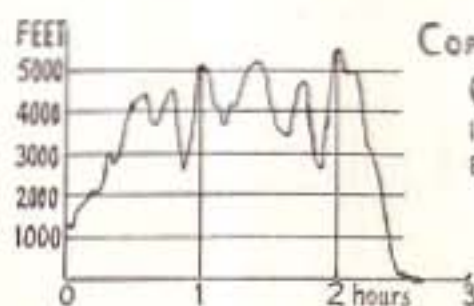
J. V. Rushton, with yesterday's adventures in mind, went away on his first thermal at 10.47, but was let down at Hathersage only 4 miles away. He had set his altimeter for sea-level, with the result that it falsely told him he was 2,000 feet up when it should have said 700.

Shortly before noon R. S. Rattray went off for a 26-mile jaunt in Doncaster direction. On the way he thought he would try a cumulo-nimbus cloud; it wasn't long before he came out of it again in a spin. At about the same time P. B. N. Davis went off too, but landed 11 miles away at Totley. After the landing he was noticed to have blood on his face, actually due to a cold, but the journalists were on his track in no time and demanded full details of the "crash"!

P. A. Wills, launched at 11.35, was away a few minutes later under a large mass of cumulus which, in passing over the site, had spilt a few drops of rain. He had announced the ambitious goal of Driffield, 72 miles away, and as this was somewhat to the north of the wind direction he did some blind flying in clouds in order to get enough height for going across wind. At one time he was up to 6,000 feet above sea level.

He had no idea how thick the clouds were until he met an aeroplane pilot afterwards who told him that some of the cumulus tops were at 11,000 feet. Just as he reached his goal, about 2½ hours from leaving Bradwell Edge, and was preparing to come down on East Driffield aerodrome, what should come along but a "front," which heaved him up rapidly in spite of repeated dives and side-slips on his part. It was impossible to get down to earth until the front had passed over.

C. Nicholson, in the *RHÖNSPERBER*, set out for the same goal about 20 minutes after Wills. He got mixed up in the same "front," which met him just as he was



COPY OF BAROGRAPH RECORD  
C. NICHOLSON  
IN "RHÖNSPERBER"  
BRADWELL EDGE TO  
LECONFIELD  
67 MILES  
SEPT. 3RD. 1937

half-way across the Humber and at once began lifting him up at 18 to 20 feet a second. It had approached from the N.W., and was quite short—in fact, he could see its southern end. He set off due north over a railway line in very gusty air in the hope of reaching Driffield before the lift gave out, but was obviously not going to make it, so turned back and landed on an aerodrome at Leconfield which he had previously noticed. After the front had passed over there were



The cloud used by Mr. P. A. Wills to set off on his flight to Driffield on Friday, September 3rd. The larger panoramic picture, taken at 11.47 a.m., shows the cloud very near, with a larger mass of cumulo-nimbus far off near the horizon on the left. The smaller picture, taken four minutes later, shows Mr. Wills's cloud rapidly receding towards Sheffield; it looks smaller because it is further off, but actually is growing rapidly, as can be seen by the complexity of its dome-shaped tops.







Two pilots were just going off across country when this cloud was photographed at 3.57 p.m. on September 3rd, though both are too far off to show. Mr. G. M. Thompson is in the upper part of the picture, while Mrs. J. Price is at the further end of the cloud. A distant cloud "street" is seen just left of the centre.

only some rags of cloud which were no use; but three-quarters of an hour later Nicholson saw, from ground level, some birds again starting up in a thermal.

R. M. Smart, flying away next with the Newcastle Kite, used three or four clouds and charged through some rain; finding himself over Doncaster with Finningley aerodrome within reach, he made for it, knowing it to be just over the "Silver C" borderline.

G. A. Little completed his "Silver C" within two days by taking his veteran TERN 34½ miles to Barnby-upon-Don. His first thermal, soon after the launch at 12.33, took him up to 3,400 feet above cast-off, by which time he was over the Marquis of Granby at Bamford. Working round to the north of Sheffield he found smaller thermals, and another north of Mexborough, each of which lifted him about 600 feet.

K. Lingford, the only pilot to go across country on four different days, did the shortest flight of the four and landed at the same spot as the H-17 on Thursday. He had tried to find lift in front of a rain storm, but failed to do so. Evidently not all showers behave like "fronts."

W. G. Edwards took the H-17 on the longest flight of its career, 21½ miles to Bramley.

While the last two pilots were going off down-wind, K. W. Turner left the site in the opposite direction and flew out to meet a large cumulo-nimbus. He was in and out of it for 20 minutes, with the variometer sometimes reading 20 ft. per sec. up and sometimes 20 ft. per sec. down. He then proceeded up-wind to another cloud, and finally to a third which, however, let him down so fast that he was unable to get back to the site

and had to land in the valley. He had been up to 3,900 feet.

F. C. Coleman and D. G. Hiscox, each in his own machine, were launched about 1 p.m. and went away after about an hour to land somewhere near Rotherham. Hiscox had seen a thermal coming off a colliery but was unable to reach it before it gave out.

L. R. Robertson, in the RHÖNBUSSARD, went 56 miles to the Humber, a magnificent distance for a first cross-country flight. He was off soon after his launch at 14.10, and on the journey used five different regions of cloud lift; such cloud streets as there were had lengths of only up to 2 miles, and other clouds were isolated ones. He put up his speed to 55 m.p.h. to keep below the clouds, and did not find it very bumpy.

L. C. Withall, who went away at the same time in the old CRESTED WREN, had arranged to keep with Robertson so as to "fly on his variometer," having none in the WREN; but before reaching Sheffield he became impatient and went ahead, with the result that he had to land at a colliery near Rotherham, 21 miles from the start. He had used one big cloud to get to Sheffield, but on arriving there saw blue sky all around except for a small cloud forming 2 miles to the north, which he went to and used; then another one formed 3 miles to the south and he used it also. But that was all.

Of other pilots, E. Thomas landed at Tickhill, 26½ miles, at 16.55, and Mrs. Price near Doncaster at 16.30.

G. M. Thompson managed his "Silver C" distance and height, 32½ miles and 4,000 feet, by going on the principle of only circling if the variometer showed more than 10 feet per second rise!

Finally, C. A. Kaye made another attempt on his "Silver C" height, achieved it with 4,800 feet, and landed at Coal Aston, the Sheffield aerodrome, to find that his barograph had stopped again.

After 3 p.m. there had been no more cumulo-nimbus, the clouds were flatter, and cross-country aspirants were evidently finding it easier to get away.

### Saturday, September 4th.

The clouds, when we got up at 6.30 a.m. to see R. P. Cooper into the air on his regular morning constitutional, were broken alto-stratus. There was small cumulus to the north at 8.30, becoming more profuse but ragged at 10, and showing a tendency to street formation by 11 o'clock. But for most of the day it remained a mere tendency.

C. Nicholson and P. A. Wills got away together at 11.45. Nicholson found the clouds easy; each one was heralded by a preceding down-draught, and every one worked. But when he reached the Trent everything seemed to change. Even large masses of cloud were no good; further east the sky looked dead, and he had to keep going back westwards over the Trent to get little bits of lift. He landed at Scampton at 13.35.

P. A. Wills made another successful goal flight, paying a second visit to North Coats. Yet it was a near thing, for at Sheffield he was right down to 300 feet above the aerodrome before a thermal saved him and took him up again to 4,000 feet. Arrived at this height, he entered a cloud and continued climbing, finding very smooth lift at first, at 10 to 15 ft. per sec. Then it began to rain (it was dirty rain), although there had been none below the cloud. Arrived at 7,000 feet above sea level, Wills decided to come out into the open



again. Conditions were difficult north of Lincoln, but then he got lift again in clear sky and soon a new cloud formed above him at 4,000 feet. He rose 400 feet into it, but after that the air became stable until he neared the sea, when he got a thermal over an R.A.F. football match, which had already been stopped at his appearance. This took him up to 1,200 feet, but he was soon down to earth.

Three flights of over 70 miles each on three consecutive days, with a good night's rest between each, had been made possible by Mrs. Wills, who would invariably set off with the trailer for points east before her husband was even out of sight.

Considering that the average distance for this day was much lower than before, the day's total being 317 miles, this flight and that of Mr. Lingford, which he will now describe, were remarkable achievements. Mr. Wills, incidentally, performed the highest flight of the year, but his barograph most annoyingly refused to work beyond 2,800 feet.

### 80 Miles to Easington.

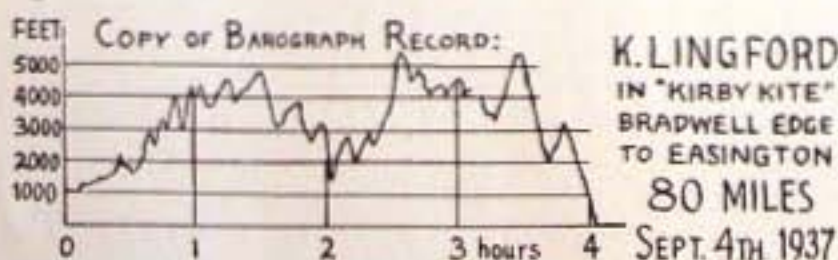
"Doncaster will do for to-day," I replied, when asked to declare a goal on the Saturday of the National Competitions. On the two preceding days that madness which seizes a sailplane pilot when he sees a cumulus cloud riding down a westerly wind had led me to declare for distant goals. These had proved to be beyond the reach of my inexperienced fumbings, and I decided on caution for once.

Caution was also the policy for the first half-hour in the KITE over Bradwell Edge, when, profiting from my lesson of the previous day (a premature departure which resulted in an ignominious descent at Sheffield), I several times left thermals to make a safe return to the hill.

At last a good one carried us up to cloud base at 3,000 feet and we were off. (This is not an editorial "we"; I always look upon a flight as a joint effort by the sailplane and the pilot, and who dare say that a sailplane is an inanimate object?)

A race to a better-looking cloud was won by the CAMBRIDGE II, which promptly disappeared inside it, and I retired in some haste to my original cloud, under which I stayed until it broke up over Sheffield. Here, thermals could be both seen and smelled, and cloud base was soon reached again. We passed Peter Davis in his SCUD travelling at speed in the opposite direction and at the same height, while a long way below another KITE was nosing around after lift.

A promising storm cloud was responsible for some sticky moments when it provided beautiful mammatus formations and a steady down-current of 20 feet per second. At last the green ball staggered upwards, and we with it, at six inches rise towards a little puff of cloud forming far below the large mass. So



The clouds on Saturday, September 4th. Above is the White "Grunau Baby," its polished wing surface reflecting its sunlit nose. The type of clouds is seen, and their distribution shown by their shadows on the ground. Time, 11.30 a.m. Below is shown the actual cloud under which Mr. C. Nicholson and Mr. P. A. Wills went away just after noon; the type is now tending towards cumulo-nimbus.

emotional had the last few minutes been, that when I looked at the ground again Finningley Aerodrome was almost immediately below, with Doncaster just visible a few miles to the north. I estimated that with the height I had, and nothing too frightful in the way of down-currents, it was comfortably within range. Actually we encountered a small thermal on the way, and arrived with 1,500 feet to spare.

Once at my goal it seemed a pity to land after so short a time in the air. Surely, I thought, the roofs of Doncaster will be sending up thermals. Almost at once I found two, each taking me up about 500 feet, after which I worked back into wind for another. Then came the dream-thermal, large, smooth, and about ten feet per second all the way from 1,000 feet to cloud base at 4,600 feet (above start). Cumuli were popping up all around, and a long dark shadow stretching away to the east made a thirty-mile goal flight seem merely silly.

It was almost impossible to go wrong now, though plenty of circling was necessary once the first short street was left behind. Landmarks dropped behind slowly; the field where I had landed two days before, at Luddington, but viewed this time from 5,000 feet; the Trent, the Humber, Hull, then that thin blue line which means journey's end for the sailplane pilot. As I flew across the Humber in dead air 5,000 feet up, I managed to get a map open and make some rough



calculations. I was now within gliding distance of any point on Spurn Head, but to get any further I must make 20 miles northwards to Flamborough Head. This, apart from purely personal reasons of cold and hunger, was going to be difficult, as activity was obviously decreasing, and the wind was still fairly strong. Another look at the map showed a bulge just north of Spurn Head itself which seemed to be the furthest point from Camphill, and a short way inland was a village, h. and c., and beer.

We were over the coast just south of Withernsea, when a thermal presented itself. A psychologist will doubtless point out that circling a sailplane is a reflex action stimulated by the sight of a rising green ball. Anyway, we gained a thousand quite unnecessary feet, and set off southwards a mile or two out to sea "just to see what it was like." Very pleasant it was, and all too soon there was the bulge, and the village.

A brief survey of possible landing fields (the tide was too far in for a beach landing), a sudden surprised upturning of faces on the beach, a scrape in over the low cliff to come to rest a few yards from the edge, and we had landed near Easington, 80 miles from Camphill, having taken four hours over the journey.

Hospitality of the most satisfying kind was forthcoming, and greatly appreciated, while that most unenviable of jobs, retrieving, was very nobly undertaken by John Simpson.

The lesson learned from this trip seems to be that England is so small that, given a good day, a sailplane of only moderate speed range can reach the coast from most soaring sites without much difficulty. So if lift is plentiful, don't be lazy; navigate, whether you are making for a goal or not. If I had got my map out at Doncaster instead of at Hull, I should have turned northwards and *might* have made Flamborough Head.

K. LINGFORD.

Of the three pilots seen by Lingford in the neighbourhood of Sheffield, D. G. Hiscox flew 16 miles to Ulley, E. J. Furlong 10 miles to the Lodge Moor Fever Hospital (why?), and P. B. N. Davis 20 miles to (not into) Pebley Pond near Worksop, having had his first experience of using blind-flying instruments on the way.

G. O. Smith flew Mr. Thomas's CONDOR to Doncaster, and S. C. O'Grady went 18 miles to Rotherham.

The final adventure was that of G. Shepard in the RHÖNBUSSARD. He was looking for a landing place beyond Rotherham when he caught sight of a wind sock in a large field, just within gliding distance down wind. All was going swimmingly when an aeroplane took off out of the field directly towards him—Shepard had gate-crashed into a flying display! He turned to his right; the aeroplane turned to its left; he did a complete circle and then found the air was clear of aeroplanes at last but he was much lower down than before. He scraped in over the hedge, stalled in the act, and sat down heavily in the display field with a loud noise—the star turn of the day.

## Correspondence

### Dart Aircraft Designs

SIR,

With regard to your last number mentioning our CAMBRIDGE General Utility Sailplane, we think it worth while stating that this sailplane—as well as all our sailplanes and power planes—has been designed by Mr. A. R. Weyl, A.F.R.Ae.S.

As regards former notices as to our firm's activities, we should like to add that Mr. J. B. Keeble has contributed to a great extent to the development of our TOTTERNOE Secondary Trainer Sailplane.

Mr. A. R. Weyl has been Technical Manager to Dart Aircraft, Ltd., as well as to our former firm of Zander & Weyl Light Aircraft, Dunstable.

(For and on behalf of Dart Aircraft, Ltd.)

A. R. WEYL, *Director*.

## Where to See "Plane Sailing"

Oct.	25	6 days	Assembly Rooms, Leeds.
"	28	3 "	Casino, Liverpool.
Nov.	1	6 "	King's Palace, Wimbledon.
"	8	3 "	Kursaal, Southend.
"	8	6 "	Grove, Ilkley.
"	8	6 "	Grand, Huddersfield.
"	11	3 "	Picture House, Pudsey.
"	15	3 "	County, Marlow.
"	15	3 "	News Theatre, Victoria Station, London.
"	25	3 "	Winter Gardens, Eastbourne.
"	29	6 "	Savoy, Grimsby.
"	29	6 "	Odeon, Lancaster.

**Dunstable Glider Firms.**—Two new firms have commenced operations in Dunstable for the manufacture and repair of gliders and sailplanes: Messrs. Zander and Scott, of 32, Lovers Walk, Dunstable, Beds.; and Mr. H. M. Hedges, The London Gliding Club, Dunstable, Beds. (Tel.: Dunstable 419).

## Reversed Controls

We regret to report a fatal accident on Monday, August 16th, whereby Mr. Eric Maule, aged 25, lost his life. He was an aeroplane pilot having his first glider launch from the winch at Sutton Bank; after dropping the cable the machine was seen to perform the first half of a loop and then dive to the ground. On inspection of the machine it was found that the elevator controls were reversed. Evidence at the inquest was to the effect that the controls were previously found in order by the instructor in charge, and that the deceased and another club member had subsequently disconnected the controls to make an adjustment at the wing root, but had disconnected each separately so that they could not become reversed. The evidence was therefore inconclusive.





The Yugo-Slav entry at the International Meeting in July. It is of the Polish "Komar" type.

## Some Technical Points at the International Meeting

THE majority of the machines seen at the Wasserkuppe were of the middle or shoulder-wing type; a number, including the British KING KITES, being fitted with flaps.

All flaps were of the plain type except on the CECIV (Czecho-Slovakian) which was fitted with split flaps. This machine was also fitted with Frise ailerons. The plain flaps on Kurt Schmidt's ATALANTE could be operated individually which, it was stated, assisted when performing tight circles. Nobody, except perhaps Schmidt, seemed quite clear whether they should be used to hold off bank or hold on bank.

Another Czecho-Slovakian machine, the MARIO, had an interesting arrangement for aileron operation. Light tubular steel shafts ran through the length of the wings behind the secondary spar. Universal joints were fitted at the bend of the gull wings and the shafts were mounted on ball bearings. The whole was remarkably free from backlash and was light in operation. The machine was also fitted with conventional spoilers on the upper surface.

Regarding spoilers—the REIHER, flown by Hanna Reitsch, was fitted with double spoilers which opened above and below the wings and were therefore balanced for operating loads. This machine also had flaps which continued round the curve of the gull and were in short sections at this point to allow the trailing edge to telescope when the appropriate lever is pulled. These flaps are intended to vary the characteristics of the wing section rather than to be used as landing flaps. The landing skid of the REIHER is built into the fuselage, and the fuselage covering at this point is flexible, so that in flight the oval section of the fuselage is unspoiled by any skid protuberances. All control surfaces are operated without any external horns, but we were unable to see what system was used. The elevators

are mass-balanced and fitted with a trimming tab which can be adjusted from the cockpit.

All the Polish machines had elevator trimming tabs, those on the two PWS-101 machines being cockpit controlled, and the remainder had aluminium tabs which were bent to trim the machine to suit the weight of the individual pilots. The elevators on all the Polish machines were carried some twelve inches above the fuselage on "stalks." The tail and landing skids on the PWS-101 machines were pneumatic, being fitted with an inner tube inside the skid proper—the conventional leather fairings being laced up throughout their length. These machines all had hinged covers covering holes about 3 ins. square on both sides of the nose of the fuselage through which a square wooden handle could be passed for carrying the machine—English designers, please note.

A Swiss machine, MOSWEY II, was fitted with an interesting arrangement whereby the position of the rudder pedals could be varied by turning a handle on the instrument board. Another refinement was the use of stainless steel for the metal fittings.

We notice that the plywood leading-edge of the MINIMOIA was put on with the outer grain diagonal, the better to resist torsional loading. The Czech machine, OLOMOUC, also had the leading edge ply fitted in this manner, but the panels were fitted in halves above and below the spar and joined along the leading edge member.

The venturis for driving the turn and bank indicators on the MINIMOIA and MOAZAGOTL were retractable and invisible when retracted. We also noticed that many of the German machines had control pulleys of "Micarta" or similar moulded compound which is self-lubricating.

Many of the trailers were of triangulated welded steel tube construction, fabric covered, resulting in a very light and robust job.

B. T. OLVER.



## Gliding Certificates

The following gliding certificates, for which qualifying flights were made on the dates given, have been granted by the Royal Aero Club:—

### "A" Certificates

No.	Name.	Club.	Date.	No.	Name.	Club.	Date.
732	G. A. Hinchcliffe	Yorkshire	17.5.37	697	R. J. Mullaney	Midland	3.8.37
733	G. Dyson	Yorkshire	26.6.37	612	J. G. Nyberg	Midland	6.6.37
734	G. R. Gadd	Southdown	28.3.37	672	G. C. Wynn	Midland	25.7.37
735	J. V. Rushton	Derby and Lanes.	1.4.37	768	B. G. Piddocks	Yorkshire	25.7.37
736	A. S. F. Anderson	London	7.7.37	699	S. A. Cox	Southdown	2.8.37
737	F. G. Mackenzie	London	11.7.37	769	A. R. Burn	Yorkshire	11.8.37
738	G. H. Mitchell	Yorkshire	7.2.37	771	J. F. Whalley	Midland	4.7.37
739	J. R. Kayll	Newcastle	28.7.37	688	F. W. King	Southdown	6.6.37
740	R. Haslinger	Yorkshire	11.7.37	772	J. W. M. Graham	Midland	4.8.37
741	H. B. Dunn	London	12.7.37	779	W. Schittig	London	20.8.37
742	H. S. Tovey	London	18.7.37	774	S. E. F. Curry	Yorkshire	20.3.37
743	G. E. J. Reynolds	London	3.8.37	783	F. Dungs	London	24.8.37
744	D. G. Randall	London	3.8.37	775	H. S. Duxbury	Yorkshire	11.8.37
745	W. A. S. Blackden	Yorkshire	1.8.37	776	M. S. Roberts	Newcastle	16.5.37
746	R. J. O'Neil	London	8.8.37	784	H. Bergter	London	20.8.37
747	D. H. Whitlock	Midland	6.6.37	778	W. D. H. McCulloch	Yorkshire	11.8.37
748	B. G. Piddocks	Yorkshire	25.7.37	785	J. Benemann	London	19.8.37
749	A. R. Burn	Yorkshire	10.8.37	786	E. Scharrer	London	23.8.37
750	A. H. Wilson	London	8.8.37	787	H. M. Latto	London	18.8.37
751	J. F. Whalley	Midland	19.7.36	788	R. H. Shaw	London	19.8.37
752	J. W. M. Graham	Cornwall	6.9.36	790	O. H. Furlong	London	25.8.37
753	J. D. Phillips	Derby and Lanes.	3.8.37	791	F. D. Forester	London	18.8.37
754	S. E. F. Curry	Yorkshire	7.3.37	792	Miss A. C. Edmonds	London	20.8.37
755	H. S. Duxbury	Yorkshire	6.8.37	793	J. R. Gardiner	London	23.6.37
756	M. S. Roberts	Newcastle	24.7.37	794	T. T. Davies	London	20.8.37
757	G. H. Lee	Imperial College	2.8.37	795	N. S. R. Ball	London	25.7.37
758	W. D. H. McCulloch	London	10.8.37	641	R. C. H. Pinchin	London	20.8.37
759	W. Schittig	London	Germany	577	W. H. Benson	London	17.7.37
760	H. Schacht	London	Germany	712	N. McClean	Newcastle	30.5.37
761	O. Dumke	London	Germany	656	J. Everall	Midland	15.8.37
762	J. J. Bitter	London	22.8.37	671	W. E. Hardwick	Midland	3.8.37
763	F. Dungs	London	20.8.37	796	M. Savage	Yorkshire	3.8.37
764	H. Bergter	London	22.8.37	665	J. G. Ross	Yorkshire	17.7.37
765	J. Benemann	London	17.8.37	616	E. R. Jarvis	Newcastle	10.7.37
766	E. Scharrer	London	17.8.37	802	H. W. Thorburn	Essex	11.8.37
767	H. M. Latto	London	19.8.37	644	Miss E. Fox-Strangways	London	8.7.37
768	R. H. Shaw	London	20.8.37	681	V. H. Green	Newcastle	29.8.37
769	M. M. Waghorn	London	17.8.37	803	W. C. Sharpe	Yorkshire	12.9.37
770	O. H. Furlong	London	19.8.37				
771	F. D. Forester	London	17.8.37				
772	Miss A. C. Edmonds	London	17.8.37				
773	J. R. Gardiner	London	20.8.37				
774	T. T. Davies	London	19.6.37				
775	N. S. R. Ball	London	Germany				
776	M. Savage	Yorkshire	1.8.37				
777	Miss Z. Paddon	London	18.7.37				
778	P. H. Cribb	Yorkshire	3.8.37				
779	G. T. Cummings	Newcastle	20.6.37				
780	G. L. Creighton	Ryedale	11.7.37				
781	J. V. Campbell	London	9.8.37				
782	H. W. Thorburn	Yorkshire	10.8.37				
783	W. C. Sharpe	Yorkshire	12.9.37				

### "C" Certificates

629	S. H. Rutherford	London	25.7.37
753	G. Dyson	Yorkshire	21.7.37
756	A. S. F. Anderson	London	10.7.37
755	J. V. Rushton	Derby and Lanes.	30.5.37
741	N. H. Fresson	Yorkshire	1.7.37
652	L. A. Read	London	10.7.37
704	R. F. James	Midland	3.1.37
302	W. J. S. Hammond	London	10.7.37
760	R. Haslinger	Yorkshire	21.7.37
639	J. P. Lassau	London	24.7.37
397	G. T. Rubick	Southdown	31.7.37
631	J. Wareing	Yorkshire	7.8.37
765	W. A. S. Blackden	Yorkshire	6.8.37
467	W. L. Foster	Yorkshire	7.8.37
767	D. H. Whitlock	Midland	24.7.37
672	G. C. Wynn	Midland	25.7.37
612	J. G. Nyberg	Midland	25.7.37
585	A. A. J. Thorburn	Yorkshire	8.7.37
688	F. W. King	Southdown	21.8.37
748	C. R. Gray	Yorkshire	7.8.37
802	H. W. Thorburn	Yorkshire	15.8.37
754	G. R. Gadd	Southdown	31.7.37
768	B. G. Piddocks	Yorkshire	7.8.37
769	A. R. Burn	Yorkshire	15.8.37
771	J. F. Whalley	Midland	4.7.37
689	S. M. Spence	Yorkshire	7.8.37
775	H. S. Duxbury	Yorkshire	15.8.37
774	S. E. F. Curry	Yorkshire	21.4.37
776	M. S. Roberts	Yorkshire	15.8.37
780	H. Schacht	London	17.8.37
781	O. Dumke	London	19.8.37
782	J. J. Bitter	London	17.8.37
788	R. H. Shaw	London	19.8.37
790	O. H. Furlong	London	19.8.37
792	Miss A. C. Edmonds	London	19.8.37
683	J. F. P. Matthews	London	25.7.37
671	W. E. Hardwick	Midland	15.8.37
656	J. Everall	Midland	28.6.37
796	M. Savage	Yorkshire	7.8.37
798	P. H. Cribb	Yorkshire	7.8.37

### "B" Certificates

736	J. C. Lawson	London	24.7.37
745	C. R. Gray	Southdown	24.7.37
733	G. Dyson	Yorkshire	17.7.37
732	G. A. Hinchcliffe	Yorkshire	18.7.37
735	J. V. Rushton	Derby and Lanes.	30.5.37
736	A. S. F. Anderson	London	8.7.37
737	F. G. Mackenzie	London	17.7.37
734	G. R. Gadd	Southdown	15.7.37
760	R. Haslinger	Yorkshire	28.7.37
759	J. R. Kayll	Newcastle	11.7.37
726	P. G. Tovey	London	18.7.37
715	N. P. Anson	London	25.7.37
761	H. B. Dunn	London	2.8.37
731	H. Bowler	Derby and Lanes.	3.8.37
765	W. A. S. Blackden	Yorkshire	3.8.37



## News from the Clubs

### List of Gliding Clubs

The last list of British Gliding Clubs and their Secretaries was published in the August issue of THE SAILPLANE. The following changes should now be noted:—

**Tees-side Gliding Club.**—Secretary: T. Anderson, 49, Wellesley Road, Middlesbrough, Yorks.

**Rochdale Gliding Club.**—Secretary: A. Claypole, 17, Agnes Street, Castleton, Rochdale.

**Cotswold Gliding Club.**—Change of site: gliding now takes place either at Minster Lovell, near Witney, or Pewit Farm, Wantage, Berks.

**Workington and West Cumberland Gliding and Flying Club.**—Secretary: W. L. Foster, c/o The United Steel Co., Moss Bay, Workington, Cumberland. Primary training ground and club house at Siddick, Workington. Soaring site at The Hay, Cockermouth.

**Scottish Gliding Union.**—Proposed site at Gartcarron Hill, Lurg Farm, Pintry (on the Campsie Hills). Workshop in Tennant Street, Townhead. Secretary's name not announced.

The following new club has been formed:—

**Fife Gliding Club.**—Secretary: Alex. M. Aitken, 14, Kinnear Street, Buckhaven. Proposed flying ground, two miles north of Kirkcaldy.

### London Gliding Club

The third week in August, during which members made 14 cross-country flights totalling 450 miles, could only be described last month in catalogue form, except for three flights which were described by the pilots in another part of the paper. This month we include pilots' descriptions of three more flights owing to their special interest: that of Stephenson on August 17th, during most of which he was accompanied by Rattray, who described his flight last month; the flight of K. G. Wilkinson to Croydon on the 20th, which covered new ground and was only the second flight from Dunstable to terminate south of the Thames (Wills's of the previous Sunday being the first); and that of Ivanoff to Maidenhead aerodrome after an aeroplane-towed start—the longest distance flight yet made in this country after an aero-tow, though Kronfeld's flights over the Channel in 1931 cut it close (but they were pure glides down from an immense height).

#### Dunstable to Ford End.

This flight, in the grey KIRBY KITE, secured G. H. Stephenson his "Silver C." It will be remembered that R. S. Rattray saw a cloud street stretching away to leeward as far as the eye could see: having reached its end near Chelmsford, he was dropping rapidly when he caught sight of Stephenson circling 2,000 feet higher up; whereupon he joined the same thermal and was saved. Stephenson has furnished the following notes on his flight:—

Ridge-soared for 45 minutes at 600 ft. Found thermal lift to 1,200 ft. Worked my way back up-wind towards the hill but soon found more lift.

At 2,000 ft. realised I could not get back, so followed thermal to 2,700 ft. where I lost it. Flew down-wind under promising-looking cloud street, losing height slowly to 1,800 ft. Circled for long period in weak lift to 2,500 ft. Flew straight along under street, slowly losing height.

Struck patch of lift at 5 ft. per sec., and circled to cloud base at 3,300 ft. Continued circling in zero rise, trying to get above cloud base, but failed. Flew towards front of cloud losing height slowly. Found some weak lift under indefinite cloud and circled.

Was thrilled to see Rattray appear flying down-wind below me. He started circling as I ran out of the lift and turned away. I learned afterwards that he reached 4,000 ft. in the thermal which I had abandoned.

Flew down-wind towards a well-defined cloud street, but arrived too late and too low to make much use of it. At 1,000 ft. spotted a landing field near a farm and then circled in zero rise while drifting about 3 miles towards a much better field which sloped up-hill into wind.

Landed at 16 hrs. 15 mins. after being away for 1½ hours. Discovered the delightful little village we were in was Ford End, near Chelmsford, distance 46 miles. Due to Greig's good organisation we were on the road 2½ hours later.

On account of the strength of the wind I was able to follow Rattray's excellent advice and make the best of every bit of lift, however feeble, and never intentionally forsake a thermal.

G. H. STEPHENSON.

#### Croydon Cameo.

I was winch-launched at 2.15 p.m. into a weak thermal, arriving over the hill at 700 ft., the wind being N.W. and scarcely scorable. When nearly down on to the hill I found my second thermal and, circling the KITE, rose slowly to 1,400 ft. At this point I stopped rising for nearly two minutes, but continued to circle, when the thermal started up again and carried me to 3,300 ft.; the kink is shown clearly in the barograph chart.

The sky was full of rather flat cumulus, and following roughly the direction of the Watling Street, I hopped from one to another, usually finding lift of some sort, and sufficient, by careful use, to keep me above 2,000 ft.

At St. Albans, being at 2,600 ft., I struck a beauty at about 10–15 ft. per sec. (although the wings didn't "bow fearfully"), which took me joyously to 4,100 ft., where I was still below cloud base. Here I steered almost due south to avoid the centre of London, passing over Edgware and Ealing, and still maintaining a height of over 2,000 ft.

The clouds were much taller now and covered a great portion of the sky, especially to the east, although I could detect no definite street formation. It seemed to me that clouds to the west were healthier and more clear-cut, suggesting better up-currents, but it is possible that the appearance was due to the angle in relation to the sun. A thick smoke pall covered London, making it look drab and inky; most unattractive after the clear air I had flown through previously. The Thames was but a few miles ahead and looked deceptively silvery.

Over Ealing I was down to 2,100 ft. and thinking about landing grounds, when another good thermal was encountered which took me surely to 4,500 ft. and into a large black cloud. This was the first cloud I had been able to contact, and I wished I could blind-fly. The cloud was a long one and took me safely over the river; I recognised Putney by the southerly trend of the river just to the west, and I decided to try and make Croydon.

There were plenty of fields now, and my mind was easy. I flew off towards a nice-looking cloud in the appropriate direction, but I was wrong—there was no lift. I found no usable lift from thenceforth, but there was no down-draught either, and I reached Croydon with 1,000 ft. in hand; searched round a bit for lift; found none, and slipped in to a landing outside Air France's hangars.

I had looked down on four air liners at various places from Hatfield.





It was 4 p.m. (or a little after), and the clouds still looked good to the west; perhaps I should have gone further had I steered south from Ealing. Anyway, in another half-hour everything looked dud. An ability to judge good or bad clouds should, I think, be cultivated; it's a matter of practice.

The final points—and very worthy of record—are the splendid assistance given me by Mr. Price and nameless friends at Croydon, and by Mr. Koch and the German lads who retrieved me.

K. G. WILKINSON.

### Dunstable to White Waltham Aerodrome: 28½ miles.

The flight was made from an aero-towed start. The day was sunny, and the visibility was fair, but at 3,000 ft. it did not exceed three miles. The wind at both the ground level and at the cloud base was about 5 m.p.h. It was blowing slightly down the hill—N.E. The conditions gave one the impression of a slight inversion, so that I did not expect the thermal lift to be good until after lunch, and put my name on the list sufficiently far down to take off about 2 p.m. A broken tow rope delayed the start until 3.15.

Observation of other flights showed that the lift near the ground was weak, which made it desirable to find a thermal before casting off. I selected a likely looking cloud and asked to be towed to it, casting off at 1,500 ft. north-west of Dunstable. The lift proved, however, to be non-existent. After cruising around for a while I turned towards the Cement Works and saw the smoke feathering slightly, as though flirting with a thermal. This looked like a gamble, but I made a bee-line for the smoke and reached it at 1,000 ft. The variometer showed a climb of 3 ft. per sec. The thermal was narrow, and every time the machine left the smoke, which at that height was only a slight haze, the lift disappeared.

At 3,000 ft. the lift vanished, but seeing the Hjorts circle under a cloud behind the hill I joined Wills and reached the cloud base at 3,200 ft. For a while we flew side by side in the mist which extended to some 300 ft. below the cloud base.

Having spent most of the morning watching the clouds drift overhead, I settled down to drift with mine, coming out occasionally to lose some height and going back into the mist to regain it. After an hour the GRUNAU was a mile or so south of Dagnall, i.e. some five miles from the point of casting off. As this rate of progress seemed too slow, I looked towards Ashridge and saw what appeared to be a singularly non-thermal country. Finally, I took a risk and flew towards a cloud which looked about three miles away and proved to be not more than one. Beyond it were other clouds. The rest was easy. I circled under every cloud right up to its base, which was at 3,200 to 3,600 ft., and flew slowly to the next one, selecting those clouds which looked misty underneath. The wind was too light to judge its direction by the cloud shadows, so having no map I flew for an hour by the sun. The flight was perfectly peaceful—I had even time to eat my chocolate.

The end came near Maidenhead (I was quite lost by then) when the cloud I selected cracked and came apart in me 'ands or, at least, as I was getting near it. Underneath was an aerodrome. The flight ended at 5.35 p.m. The thermal conditions lasted for another hour, but I heard since that at Dunstable the lift petered out soon after I left.

Within two hours of my landing Burnett and Sproule were there with the trailer. That's efficiency for you!

A. IVANOFF.

Of the other cross-country flights during that week, a few incidents may be mentioned. Several pilots now are in the habit of making for Hatfield Aerodrome as the first stepping-stone on their journey. On Sunday, August 15th, Turner, having left the club site at 3,400 feet, arrived at Hatfield at only 700 feet, but got the expected thermal and carried on another five miles to South Mimms. Hiscox did not quite reach it and had to land near Wheathamstead. P. Davis accompanied Hiscox in the SCUD II and got slightly further, landing, in fact, close by his own home, just in time for lunch. (This information was sent to *The Times*, but a sub-editor changed the name of the meal to "luncheon.") He put down the SCUD in a field next the church just as the vicar was coming out—a most embarrassing situation on a Sunday morning. On the same day Nicholson accompanied Wills for the first part of the latter's flight to Dover, but, in view of the coming competitions, decided not to risk the RHÖNADLER in a crossing of the London suburbs, and came down on Hendon Aerodrome from 800 feet. He saw a car driving out across the aerodrome, so landed beside it, and found to his surprise that it contained a former member of the London Gliding Club.



Miss Amy Johnson after taking her "C" at Dunstable.

[Photo by E. J. Furlong.]

Also on this day, Humphries was given the RHÖNADLER (which now belongs entirely to Fox) for the first time to play about with. He visited Ivinghoe Beacon, also the Maiden's Bower (the hill two miles to the N.W.), and fulfilled an ambition of many years by getting up in a thermal over the glass houses which are such a conspicuous feature in the view from Dunstable Downs. Fox previously took the same machine to 3,800 feet. Simpson's flight on the 19th was to Knebworth (not Neld-worth).

Visitors during the month were L. E. Baynes (who was told what a very good machine the SCUD III was, and asked if he couldn't produce more); C. G. Grey (Editor of *The Aeroplane*) with Thurstan James (founder of *THE SAILPLANE*); and John Grierson.

The German members of the Anglo-German Camp had a bit of luck on their journey home. By some misunderstanding their tickets for the train to Cologne were sent to Derby and failed to reach them in time; later it was heard that the train they intended to catch had suffered an accident, and several passengers had been injured and one killed. Then one of the Germans, who had stayed on at Dunstable owing to a sore leg, was to have covered part of the journey back by aeroplane; he missed it, took the next aeroplane, and on arriving at one of its landing places on the Continent saw the previous machine upside-down on the aerodrome; four of its occupants had lost their lives.

On August 19th, during the camp, 53½ hours' soaring were put up; contributing to this total were Stephenson (5 hours 3 minutes in grey KITE), Ivanoff (6 hours 3 minutes in Heath's GRUNAU) and Hiscox (7 hours 13 minutes in his KITE).

**September.**—Aero-towing was provided on Sunday, the 19th, pilots being pulled up to 1,600 or 2,000 feet, but there were no thermals to be found. Upon discovering this, many people apparently thought it wasn't worth the money, as only eight aero-tows were made. Yet less than a year ago there would always be an unsatisfied waiting list at the end of an aero-towing day, thermals or no thermals.

A remarkable flight was made on Saturday, September 4th, when Fox toured the countryside up-wind for 4½ hours in his RHÖNADLER, at one time being over 20 miles up-wind from the site. He will describe it elsewhere. Other long duration flights, not cross-country, were 3½ hours by Peter Davis on the 7th (the only flight of the day), and 5 hours 7 minutes by Dr. Edmunds on the 8th, on which day some good heights were also attained.

Miss Amy Johnson has joined the club; she obtained her "A" on the 12th, "B" on the 13th, and "C" on the 15th. This is her first experience of motorless flying, but by general agreement she handles the machines like an expert.

**"Silver C's."**—J. S. Sproule attained a height of 4,800 feet on September 4th, thus finishing off his "Silver C" at last. He had done the distance and duration last year at Sutton Bank. Now, having got a job at Luton, he is with us once again.

Altogether 10 club members have qualified for the "Silver C" this year. The names of J. S. Fox, R. S. Rattray, and P. B. N. Davis have already been published. G. H. Stephenson and K. G. Wilkinson finished theirs in August with the flights they have described above. At the Derbyshire meeting E. J. Furlong did the height and K. W. Turner the duration, both having made the distance flights from the London Club in



August. J. E. Simpson also completed the "Silver C" in Derbyshire. D. G. O. Hiscox has finished off his by doing the height recently, but we are not sure where.

Another member, E. E. H. Collins, did all three "Silver C" flights in Poland in July. He had previously walked most of the way there through Germany, visiting as many German gliding schools as he could on the way.

A number of other club members went to the Polish gliding school for the first fortnight in August: Lacey, Ellis, Bucknell, Kendall, and Frank West, together with Wordsworth, of the Yorkshire Club (who completed his "Silver C" there).

**Gems from the Public.**—Guaranteed genuine:—

(1) Pointing to an open primary: "Yer have ter sit right out on the front there with yer feet on the ailerons."

(2) "I was out here on Wednesday and there was one glider up in the air for nearly half an hour trying to get down and couldn't; then another glider went up and showed it the way down."

(3) "You see, the trouble about these things is that they've got no sort of brakes, while if an aeroplane wants to stop it can just reverse its propeller."

### Summary of Flying.

Date.	Ground-hops.	Winch launches.	Hilltop launches.	Flying Time.		
				h.	m.	s.
Aug. 29, Sunday ...	59	—	45	—	41	28
Sept. 4, Saturday ...	20	20	21	9	30	35
" 5, Sunday ...	68	18	—	9	50	0
Sept. 7, Tuesday ...	—	—	1	3	15	0
" 8, Wednesday ...	82	—	16	9	38	10
" 9, Thursday ...	64	—	—	—	—	—
" 10, Friday ...	65	—	23	—	40	21
" 11, Saturday ...	86	—	7	3	24	0
" 12, Sunday ...	73	15	68	7	20	7
Sept. 13, Monday ...	121	—	29	—	26	59
" 14, Tuesday ...	65	4	39	2	26	33
" 15, Wednesday ...	69	4	3	1	2	0
" 16, Thursday ...	71	—	2	—	1	14
" 18, Saturday ...	12	7	39	4	5	41
" 19, Sunday ...	31	—	—	—	—	—
" 19, Sunday, aero-towed launches	—	—	8	1	44	0
Sept. 21, Tuesday ...	—	1	—	—	25	0
" 24, Friday ...	—	1	—	—	52	0
" 25, Saturday ...	41	—	—	—	—	—
" 26, Sunday ...	96	31	—	1	26	0

### Certificate Flights.

August 29th.—Campbell, "B"; Spence, "A"; King, "A."  
 September 8th.—Emmett, "A."  
 September 10th.—Bee, "A"; Waghorn, "B"; Emmett, "B."  
 September 12th.—Wald, "A"; Rice, "A"; Lee, "A"; Faunthorpe, "A"; Miss Johnson, "A"; Matthews, "B"; Miss Paddon, "B"; Bee, "B"; King, "B"; West, "C."  
 September 13th.—Miss Johnson, "B."  
 September 14th.—Peacock, "A"; Sharman, "A"; Randall, "A"; Rice, "B."  
 September 15th.—Miss Johnson, "C"; Emmett, "C."  
 September 18th.—Whipple, "A"; Harrison, "A"; Prickman, "A"; Stuart, "A"; Prickman, "B."

### Totals.

Week ending:	Launches.	Flying time.	Certificates.
August 29th ...	354	7 hrs. 41 mins.	8
September 5th ...	147	19 hrs. 20 mins.	—
September 19th ...	504	11 hrs. 46 mins.	12
September 12th ...	500	24 hrs. 17 mins.	14
September 26th ...	170	2 hrs. 43 mins.	—

Totals since January 1st, 1937: 9,835 launches, 919 hrs. 43 mins. flying time.

### Newcastle Gliding Club

**August 22nd.**—Training at Cramlington as usual, while O'Grady and Smart visited Sutton Bank for the Open Competitions with the KITE. Roberts made a visit also and took his "C" certificate in the KITE with a flight of 3 hours 5 minutes. O'Grady and Smart both made flights of over 5 hours for the duration "legs" of their silver "C" certificates, O'Grady's 5 hours 12 minutes securing the duration prize for the meeting.

**Week ending August 28th.**—Forty-seven launches at Cramlington, including a "B" certificate flight by Vernon Green. The KITE was despatched to Derbyshire for the National Competitions with Smart, O'Grady and Hick. Certificates taken:—

"A" certificates: A. Leach, Lindsley, Ruck, Cair Ellisen, Kayll.

"B" certificates: Lindsley, Maclean, Kayll, Green.

"C" certificate: Roberts.

### Midland Gliding Club

#### Autumn Camp, September 5th to 12th.

The camp was honoured by the presence of some of the country's ace pilots, imbued with their successes at the recently concluded national meeting in Derbyshire, and determined to show our fellows what can be done from our site, and they did!

On Wednesday Capt. Rattray decided it was opportune for the first long-distance flight worthy of the name to be made from the Mynd. He took off at about 1.30 p.m., and in a very few minutes the CAMBRIDGE was out of sight. We learnt later of his arrival at the Tower, Broadway—a flight of roughly 60 miles.

Meanwhile Mr. Eustace Thomas had rigged the Cosdon and sailed away; he was next heard of at Ilmington, near Stratford-on-Avon, about 5 miles further than Rattray. Next time Mr. Thomas comes to the Mynd we hope to see something of him; he has shown us how to shake dust and feet and all that.

The next day was notable for the extraordinary conditions prevailing, it is assumed on account of the presence of lenticular clouds, and we hereby invite them to call again. Simpson went up in the Cambridge KITE and could not believe his altimeter, which registered 7,000 ft.—his barograph having failed at 6,000 ft.—much less persuade anyone else to believe it. Imagine his delight when Rattray brought the CAMBRIDGE back to earth with a barograph record of over 6,500 ft. They apparently found unavoidable lift up to 2,000 ft. above the clouds, a phenomenon not yet explained. [We understand this was on the same day as the cross-country flights, in the morning.—Ed.]

We were very glad to have with us also Turner of the Cambridge University Club and O'Grady of Newcastle, who astonished us by towing his KITE and trailer behind his 8 h.p. Nuffield Special, and also by his ability to find lift where there wasn't any according to the book of rules.

There was an aggregate of about one day's slope-soaring, which contributed to the amusement of the lesser fry, and most days those with us for primary training were given a smack at the gravy.

### Furness Gliding Club

Our S.O.S. broadcast in the August SAILPLANE has been answered. The pilot of the monoplane which gate-crashed on our activities during Sunday, June 27th, was none other than J. C. Neilan on his way to the Wasserkuppe; he now confesses to flirting with a powered "Hawk." No wonder the K.K.I. went up in the air, for it has been said that "Hell knows no fury like an old love scorned," and the KIRBY KITE is an old love of Neilan's. We don't want the KITE to get vicious, so will Neilan accept our apologies for not answering his letter earlier. We wish him success in his new venture.

**August.**—During this holiday month most of our members took the opportunity to visit other clubs in various parts of the country, and have benefited by the experience. On the 22nd, Charles, on a visit to Dunstable, had his first aero-tow, thanks to generosity of Dudley Hiscox and the London Club.

Stevens, Charles, and Smith, have each enjoyed good soaring during the month. On one occasion Charles reached 2,000 feet above the site, recorded on his new alitograph, and later the same day he flew nine miles across country, landing on the shores of Morecambe Bay. Smith has landed the KADET on site and had a good time along with Stevens in the Stevens Special.

**September.**—During this month there has been the usual amount of hill-soaring, which now-a-days seems so insignificant in view of magnificent achievements at the National Competitions and elsewhere. However, if we can keep the machines flying we are doing good work, and we still feel that cross-country flights can be done from the sea-side.

New members are having a better training now that organisation is improving, but we need a good winch very badly.



## Yorkshire Instruction Camp

August 1st to 14th.

**T**HIS year the Yorkshire Club's Annual Instruction Camp was an even greater success than last year. Twenty-one campers were present for instruction during the first week and twenty-two for the second.

Once again it can be said that every camper staying the full course went away with his "A" and "B" certificates, and this year four pilots who have never flown a machine before the camp commenced obtained their "C's." The number of *ab initio* "C's" would have been higher but, unfortunately, some members had to return home before the soaring wind arrived on the last day.

Instruction was in the hands of F. N. Slingsby, with Miss N. Heron-Maxwell and Messrs. C. D. Hartness and A. Cox as his assistants.

The camp opened with a light north wind and training commenced immediately. Cox and Hartness took turns training the beginners on the open DAGLING whilst Miss Heron-Maxwell and Slingsby concentrated on those pilots who had some experience, using the NACELLE DAGLING and KADET.

Cribb started the ball rolling with his "A" on the NACELLE, and before the day was out he had been followed by Savage, Bevington and Blackden.

Monday was a day of distress. The trouble started when Savage departed to the bottom in KADET. Haslinger then landed GRUNAU on one of our few remaining bushes.

After KADET had been rigged again Foster took her up for a circuit and attempted to land on the barbed wire fence which has only just been erected to prevent the Great British Public from offering themselves as sacrifices on the landing area. KADET finished up with her tail tucked under her wing, poor thing.

There is a young airman called Foster,

Who took up a glider and lost her;

You had best run away

If near him you should say,

You'd be asking the club what he coster.

To complete the happy day another pilot of experience proceeded to demolish a bit more of the wire fence in the nacelled DAGLING.

The open DAGLING hopped happily and without incident of note throughout the day—thank goodness.

The following day Savage, Bevington, Cribb and Blackden procured "B's," and the open DAGLING continued to hop without incident.

Wednesday was another day of activity on the two DAGLINGS. Bolton caused a few heart throbs by narrowly missing the hangar roof and removing the wind-sock when coming in to land in the NACELLE.

A spot-landing competition for "B" pilots was won by Spence. Atkin tried to fly into the hangar but found a trailer in his way.

On Friday pilots were introduced to FALCON I for circuits, and in the evening Blackden, in doubtful conditions, obtained the camp's first "C" with a steady flight in this machine. On Friday, too, the beginners started to come forward. Oliver, Duxbury and Pearson qualified for their "A's" on the NACELLE.

On the following day the promise of a west wind was fulfilled, and Bevington, Piddocke, Cribb and Savage all obtained "C's" with the aid of FALCON I before the wind dropped.

In the evening conditions improved again and most of the newly qualified pilots soared again; Oliver qualified for his "B," and Miss Heron-Maxwell soared the KITE.

There is a skilled glider called Maxi,

Whose gliding's so tricky and knacksy;

From one mile in the air,

She could reach anywhere

On the Red Sea or White Sea or Black Sea.

When flying had finished the club invited the campers to a social evening in celebration of the end of a successful first week. Everybody attended, and the party went on into the small hours of the morning in the non-stop way that successful parties have.

Sunday was a very busy day. The west wind continued to favour us, and a further squad of campers, Foster, Spence, Gray, Thorburn and Wareing, collected their "C's" on HOLS.

In comparison with the previous two days Monday was a day of rest. The only people with any energy in them were those who had just been promoted to the NACELLE DAGLING, which was on the move most of the day.

There is also a man called McCullough

Who treats his machine like a bullough;

What his energies need

Is a hand propelled steed,

To be rowed up the sky with a rullough.



Instructors in action at the Yorkshire Training Camp: above, Mr. F. Slingsby; below, Miss Naomi Heron-Maxwell.

The KADET, FALCON I, HOLS and NACELLE DAGLING busily circled throughout the day. Tremellen in the HOLS made an unconventional landing just above Roulston Scar resulting in a fracture to HOLS's five-barred gate.

Those who had qualified for their "A's" now received instruction in turning. Duxbury, on being launched for a circuit, delayed his turn so long that he had to go to the bottom.

Thereafter his turns were models of rectitude. Wednesday saw five "B's" gained, that procured by McCullough being a noticeably fine one in a good bunch.

In the evening the whole party went down to Kirbymoorside to look over the factory, and were entertained afterwards to a show of gliding films. Great interest was shown by the party who had hopped the open DAGLING in a film demonstrating a loop in a similar machine.

The flying by this time was getting so good as to be almost without incident. Burn relieved the monotony by trying to soar in a down-draught over the south slope and inevitably had to land near Kilburn to everyone's annoyance.

With Sunday came a rather strong north-west wind. Those who had already obtained their "C" qualification flew FALCON I, GRUNAU, KADET and HOLS, but it was not until the afternoon that conditions were deemed suitable for "C" flights.

After the nacelled DAGLING had been soared briefly by Drummond to test the possibilities, Burn was sent off in this machine and collected the first *ab initio* "C" with a steady confident flight. Duxbury, who had set off for home the previous day, turned back when he saw the wind direction and he also qualified for his "C" on the NACELLE. Later in the day the younger Thorburn in this machine and Pearson in HOLS both added themselves to the number of those who had been trained right through during the period of the camp.

A fine finish to a wonderful fortnight.

H. T. BLAKESTON.

(Poetic interruptions by A. R. BURN.)

### Certificates gained:—

"A."	"B."	"C."
Bevington	Bevington	Bevington
Blackden	Blackden	Blackden
Burn	Burn	Burn
Cribb	Cribb	Cribb
Duxbury	Duxbury	Duxbury
McCullough	McCullough	Foster
Oliver	Oliver	Gray
Pearson	Pearson	Pearson
Savage	Savage	Piddocke
Thorburn, H. W.	Thorburn, H. W.	Savage
		Spence
		Thorburn, A. J.
		Thorburn, H. W.
		Wareing



## Yorkshire Gliding Club

### Annual Competition Week, August 15th to 22nd.

Competition Week this year suffered rather badly from adverse weather conditions, but in spite of this some good flying was put in. The total flying time was about 93 hours, and when it is considered that at least three days were almost hopeless, and also the fact that many visiting machines and pilots did not attend as usual owing to weather, the time put in was rather good.

The **Sunday** started very well with 43 hours' flying. Included in this was a cross-country to Hull, by Rudolf Haslinger, who thus obtained the last leg of his "Silver C" which he required. Much passenger flying was also put in.

On **Monday**, Toby Fisher got away, but after 1 hour 45 minutes conditions forced him to land at Malton. A total of over eight hours was put in, however, to which Messrs. Gregg and Stevenson, with their KIRBY KITE, and Miss Heron-Maxwell contributed.

**Tuesday** saw yet another cross-country started, Miss Heron-Maxwell getting away in strong wind, which quickly carried her up to cloud base. After a few minutes the machine disappeared into the cloud, but was seen shortly afterwards making off to the north-east at great speed. Miss Heron-Maxwell landed at Pickering after a rather hectic 35 minutes in the air. Later, Smart, of the Newcastle Club, did well over five hours in the Newcastle KIRBY KITE. Other flights during the day brought the total up to over 16 hours.

**Wednesday** was no good for soaring flight, but some training was done, resulting in two "A" certificates.

**Thursday** was rather better, and our old friend "Professor" O'Grady, of Newcastle, took their KITE up for 5 hours 10 minutes. Many other flights of shorter duration were put up, making a total of 21 hours (odd) in all.

On **Friday** the weather again frowned on us, and we were only able to get in 1 hour 5 minutes.

**Saturday** was hopeless, and all that could be done was primary training. No flying time could be recorded.

**Sunday.** Another bright day, but practically no wind. Everyone had hopes of doing something on the last day, but all were doomed to disappointment, with one exception. In an effort to get as high as possible on the launch, machines were taken into the car park field, extra cable being added to the winch. Barker was first away from here in SCUD III, and with great courage turned down-wind and made for the bowl. Finding nothing there except a very hearty downward reading on his variometer, he promptly made for Whitestone Cliff. He certainly burnt his boats by doing this. Having got there he found nothing, and by the time he got back he was below the top. A certain shimmering of the air around the cockpit of the machine was noticed, but unfortunately, as Barker is almost completely welded into his machine, the thermals he created by sundry remarks only succeeded in heating up his cockpit, and could not get out fast enough to be of use to the machine. However, he gave the crowd a really fine display of flying round and round the bowl, taking nearly 15 minutes to reach the landing field.

Next off was K. Lingford. He went through a hefty thermal on the launch, and on releasing promptly turned back and found it. The result was that he was soon up to 3,000 feet, and commenced a tour of the district. Stedman went up within the next 15 minutes or so, but found nothing, and after scratching about for 10 minutes was compelled to land.

Later in the day the Spot Landing Competition was flown off, and Stedman got his own back on Lingford by putting his KITE right on the spot, thereby winning this event. Roy Watson was second with a distance of 13 yards. A total time of 3 hours 16 minutes was logged, but this was obtained with much hard work.

The various cups, trophies, and prizes will be awarded at the General Meeting, which takes place on the last Sunday in September. Altogether the members and visitors attending the competitions had some good practice, both in flying and in various ways of addressing themselves to that mythical gent, the Clerk of the Weather.

R. F. STEDMAN.

**August 22nd.**—This week-end we welcomed Wordsworth, back from Poland and a fine gliding holiday. Subject to confirmation, his necessary height and distance for the "Silver C" had been obtained on his last day over there. Congratulations, once more. From what we hear, we gather that it is not hard to be happy in Poland!

On this day, almost windless conditions prevailed, and high launches with the long cable from the car park field became the order. Barker (SCUD III) went off first and flew to the bottom in fifteen minutes. After landing, he was seen to run backwards on his little wheel, and we should think that his sensations were not too pleasant as he sat in his skin-tight "office" and waited for a scrunch. We believe that he has since fitted SCUD with some sort of an anchor, but we may not give details here!

Lingford, in his KIRBY KITE, found a thermal right away, and climbed to 3,000 feet, staying aloft for two hours and visiting all the villages to the west of us. Wordsworth reached 1,000 feet and flew for eighteen minutes in thermals. He sang loudly all the time. We were on duty at the winch and gathered the impression that it was a Polish song; but so long as we don't hear it on the ground, we are prepared to let bygones be bygones. Stedman found thermals for a ten minutes' flight in the GRUNAU. He also won the spot landing competition (4½ yards). Training followed, Brook taking his "B."

A total of 3 hours 15 minutes flying in windless conditions; 93½ hours for the week.

**August 29th.**—Wind west, increasing to 5 m.p.h. A training day, Priest in the KADET taking his "B." Dyson, who, we regret to say, shortly leaves us for another three years in Africa, made a valiant attempt to soar in windless conditions.

**September 2nd.**—S.S.W. wind, 30 m.p.h., decreasing to 10 m.p.h. Maufe in the GRUNAU reached 3,300 feet and flew cross-country to Helmsley. He had his barograph. Pearson, in making a forced landing several fields away, cartwheeled and did a fair spot of damage to our KADET I.

**September 3rd.**—Maufe, in the GRUNAU, reached 3,800 feet in a three hours' soaring flight.

**September 4th.**—South-west wind, 20 m.p.h., decreasing. Longest flight of the day again made by Maufe in the GRUNAU (2 hours 10 minutes). Brooke and Priest both qualified for "C's" with excellent flights, well over the time specified. FALCON I, FALCON III, SCUD III (Barker), KADETS, and GRUNAU's all made soaring flights, giving a total of 17 hours flying for the day.

**September 5th.**—Wind south-west, 25 m.p.h. Pick flew his GRUNAU for two hours. Hastwell in the GRUNAU reached 1,200 feet. More than seven hours' flying in the day.

**September 8th.**—Maufe reached 3,400 feet in FALCON I; Hastwell 1,600 in the GRUNAU. Later, Hastwell in the FALCON I made two trips to the reservoir in the course of one flight. We have it on good authority that he found it in the same place on both occasions. Great things, these reservoirs!

Drummond was to-day promoted to the GRUNAU and attained 3,000 feet on his first flight. Drummond had never flown anything before he started training with us, just after Easter this year. It is especially interesting to note that he is an accomplished horse-man.

**Annual General Meeting.**—This was held within the Club House at Sutton Bank on the evening of September 26th. The secretary's report and the usual business was discussed, and the resignation of Mr. Henry T. Blakeston, who has carried out secretarial duties for the past year, was accepted with regret. He is finding other duties pressing insistently upon his spare time and is obliged, temporarily, to bend all his efforts in that direction. We trust that in course of time he will find it possible to be as active a member as in the past. Mr. L. A. Alderson has taken up the duties of honorary secretary.

## Workington and West Cumberland Gliding and Flying Club

Activities have been held up for some time on account of difficulties in connection with a training site, but thanks to the good offices of J. A. Cape, Esq., J.P., and W. Addison, Esq., J.P., of St. Helens Colliery Co., Ltd., the club have now the use of a most suitable ground near Siddick, Workington. The ground, adjacent to the main road, includes a disused engine shed which has been turned into an excellent hangar, and also another building which has been lent to form a clubhouse. A 37 h.p. Studebaker car has been purchased for launching and towing, and training is now carried on three days each week.

Thanks are due to our Ground Engineer, Gr. Vingoe, and to G. Crellin, for the excellent work they have put in on the new hangar.

[Correction to List of Clubs published in the August issue: the acting secretary is Mr. W. L. Foster, c/o The United Steel Co., Ltd., Moss Bay, Workington, Cumberland. It is also stated that the club has a soaring site at The Hay, Cockermouth.—Ed.]



## British Gliding Association

Particulars of Air Ministry Subsidy allocated to Gliding Clubs from the commencement of the subsidy in November, 1935, to the financial year ending 31st March, 1937.

### TRUSTEES OF THE GLIDING SUBSIDY.

Prof. D. Brunt, M.A.	British Gliding Association.
W. E. L. Courtney	Air Ministry.
Lt.-Col. J. T. C. Moore-Brabazon, M.C., M.P.	Royal Aeronautical Society.
H. E. Perrin, C.B.E.	Royal Aero Club.
Dr. S. J. Whipple	Royal Meteorological Society.

Gliding Club	1935-1936	1936-1937
	£ s. d.	£ s. d.
CAMBRIDGE UNIVERSITY	—	29 10 0
CHANNEL	110 3 6	2 19 7
DERBYSHIRE AND LANCAIRE	85 18 1	829 13 2
FERNES	148 9 5	61 0 0
LONDON	3,029 9 3	517 6 3
MIDLAND	715 6 0	793 2 7
NEWCASTLE	—	239 12 10
SOUTHDOWN	—	394 11 3
ULSTER	—	100 0 0
YORKSHIRE	427 0 0	1,625 18 8
BRITISH GLIDING ASSOCIATION	300 0 0	400 0 0
	£4,816 6 3	£4,993 14 4

## Requirements for "Silver C" Certificate

**DURATION FLIGHT.**—A flight of not less than 5 hours.

**ALTITUDE FLIGHT.**—A flight of not less than 1,000 metres (3,280.8 feet) above the starting point.

**DISTANCE.**—A distance of not less than 50 kilometres (31.069 miles).

A sealed barograph must be carried on all qualifying flights.

The Distance and Altitude tests may be made in a single flight, but the Duration test must be a separate flight.

A certificate of the start of all qualifying flights must be signed by an Official Observer and a witness.

In the case of a Distance flight, a certificate of landing must be signed by two local witnesses.

In the case of a Duration flight a certificate giving the time of take-off and landing must be signed by an Official Observer and a witness.

**BAROGRAPHS.**—Sealed barographs must be opened and signed by an Official Observer.

The above supporting documents must be sent to the Secretary of the British Gliding Association, 119, Piccadilly, London, W.1, accompanied by the fee of 5s.

## Rochdale Gliding Club

We have done no flying since August 8th this year, because one bright lad told us about some timber we could have cheap, which would make us the swiftest hangar we ever saw. So when we remember that our DAGLING is in the small shed on the flying ground proper, and is just waiting to be rigged for flying, we have to keep our eyes off that little shed. No less than 11 sections of the new hangar have been made in two week-ends.



A group of members of the Rochdale Gliding Club.

We have now got another navelled DAGLING almost ready for housing in the new hangar. We have also got a 30 h.p. Studebaker car, out of which we are going to make a winch. At present we are using the car and elastic, and about 400 feet of manila rope for launching, and we have never found any difficulty or the slightest danger.

## Ulster Gliding Club

July and August are, unfortunately, not our best months over here. What with Board of Trade restrictions on the beach and holidays (the former, we hope, will be removed before next summer), they have been, as usual, very slack months.

The two-seater and Liddell's KITE flew early in July, and we tried the experiment of auto-towing the two-seater off the road on top of the Umbra, with fair success in spite of a cross-wind.

One day in August we had a bit of trouble with the bungy when it fouled the launching hook on the KADET. Bell, who was enjoying his first bungy launch, did not realise exactly what had happened, and went flying up and down the cliffs with the catapult still attached and the nose well down (it was lucky the KADET's elevator was fit for the load). On his turn in to land on the beach Bell must have stalled, but the resultant bump did little more than make it easy for him to walk out of the cockpit unscathed save for a cut forehead.

Gardiner and Metcalfe (N.) flew our new KITE with much satisfaction, and we should not be surprised if they wished the



holiday season might last a little longer, so that they might have it to themselves.

In fairness to the makers of the Cobb-Slater variometer it must be reported that Liddell's instrument is now eminently satisfactory and he is well pleased with it.

**September.**—A good month with quite a lot of flying.

On the 10th Liddell set off for Benbradagh, 15 miles away, but was disappointed to find no thermals of any sort after leaving Binevenagh. He had instead to fight a constant down-current of about 10 feet per second, which deposited him at Drumurn, below Donald's Hill, about 11½ miles from Downhill.

On the 11th we were glad to have with us Mr. and Mrs. Slingsby, together with Wynne and Beck, now of the Midland Club. The wind behaved and we got in a 37 hours total for the week-end. No great excitement except for a peculiar meteorological occurrence on Monday, 13th, when "Sling" was flying a KITE over the Umbra. He noticed two converging winds which caused cloudlets to approach him from both sides at once (one presumes he was by chance at the spot where they met). He was able to reach 2,500 feet by flying straight ahead without circling, which height must be considered exceptional in the 10-15 m.p.h. wind. The directions of the winds appeared to be about N.N.W. and N.E., and may have been simply caused by convection. Cloud base was about 2,200 feet, but a lot of fluffy stuff was met with down to 1,500 feet at times.

Beck flew the KITE for over an hour—his first experience of this type of machine.

On the 19th we were pleased to see at Magilligan some of the visiting pilots to the North of Ireland Aero Club's Rally. Micklethwait (who flies at Sutton Bank) flew the GRUNAU for



an hour. Mrs. M. had a flight in the two-seater as had Miss Connie Leathart of "Comper Swift" fame.

Jochen Benemann, who was a member of the Anglo-German camp at Dunstable, added an international touch to the week-end by taking his "C" on Monday, the 20th, in the GRUNAU with a 22 minute flight. He flew again for a further three hours.

To get back to Sunday, the 19th, however, Liddell managed to work his way up-wind under clouds until he found himself over the Irish Free State, having crossed the Foyle in doing so. He had to retreat after being unmercifully buffeted by rough air and down-currents in the lee of the Donegal Mountains. He got back safely, if low down.

At about 4.30 p.m. Gardiner, in the Kite, circled up to a large and sticky-looking black cloud, reaching the base at 2,500 feet, about two miles back from the ridge. He entered it and climbed smoothly and without further circling to 4,500 feet, when, one believes, he wished he hadn't. The usual story of deathly silences, followed by shrieking hurricanes, ends up with his being ejected with a hearty kick in the pants somewhere over Coleraine and about six miles back down-wind. The most satisfactory part of the flight was his being able to get back again, though how he did it nobody is able to understand.

One simply must include an account of how Benemann took Liddell's car three miles up the beach to explore, and how, finding it growing rather narrow, he started to turn back. The rear wheels sank in the soft sand at the edge of the water, and, as the tide was flooding rapidly, he got nervous and rushed off to try to get help from some of the farms away behind the sand dunes. In the meantime a youngster, who had been taking a joy ride with him, ran back the three miles and got some club members to come to the rescue.

They, arriving breathless on the scene, found the car surrounded by water (which was by this time up over the rear hubs), the engine running merrily, and best of all, a solemn clerical voice issuing from the interior, and appropriately enough, exhorting all and sundry to "be of good cheer." (It was Sunday evening and sermon time on the radio.)

The car was salvaged and the beach lay deserted when poor Benemann arrived back with farm hands galore carrying planks and ropes! Let us leave a description of his despair to the imagination and repeat that he took his "C" the next day.

Summary for September: 93 launches, 57½ hours, one "C" certificate.

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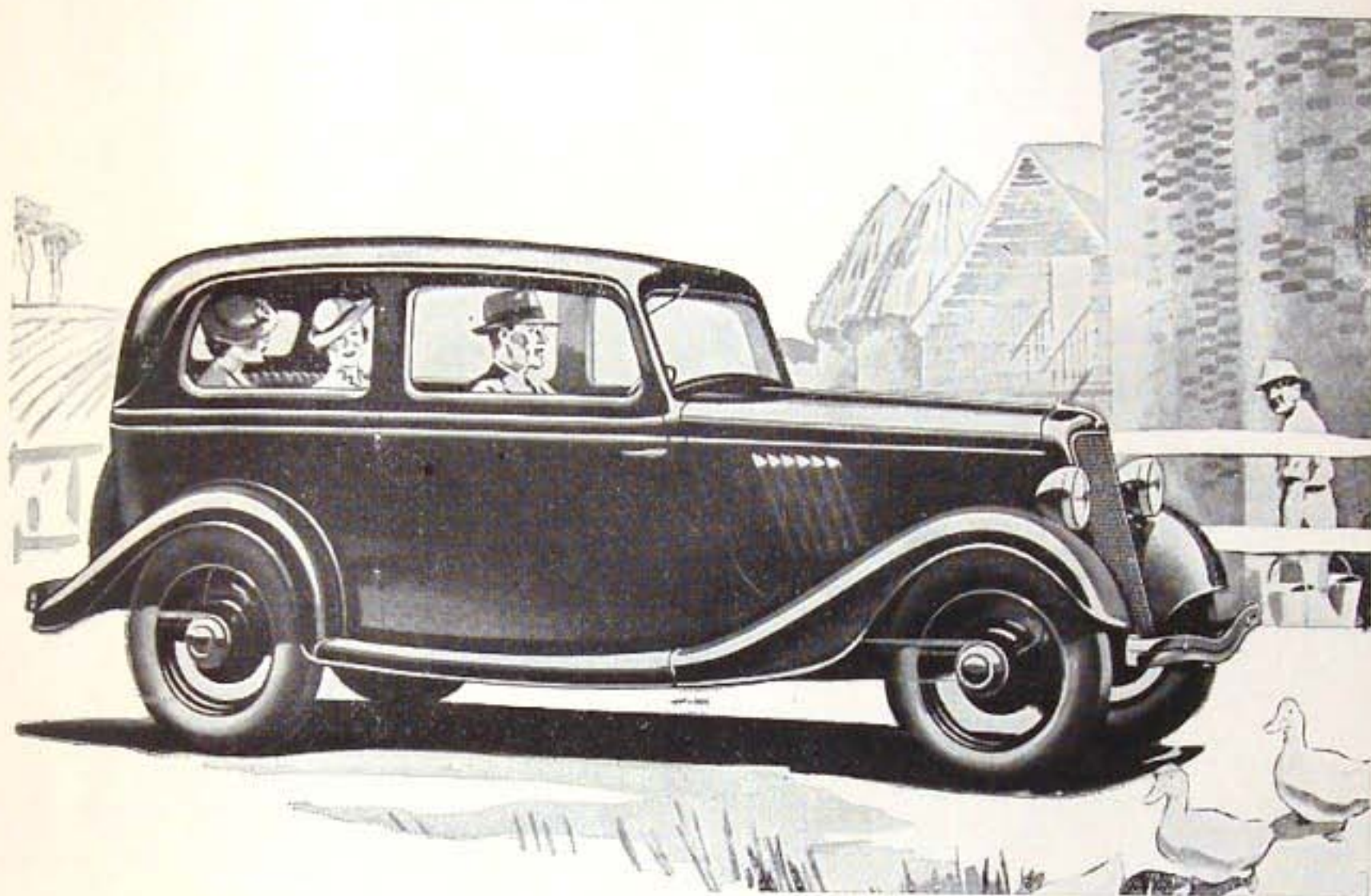


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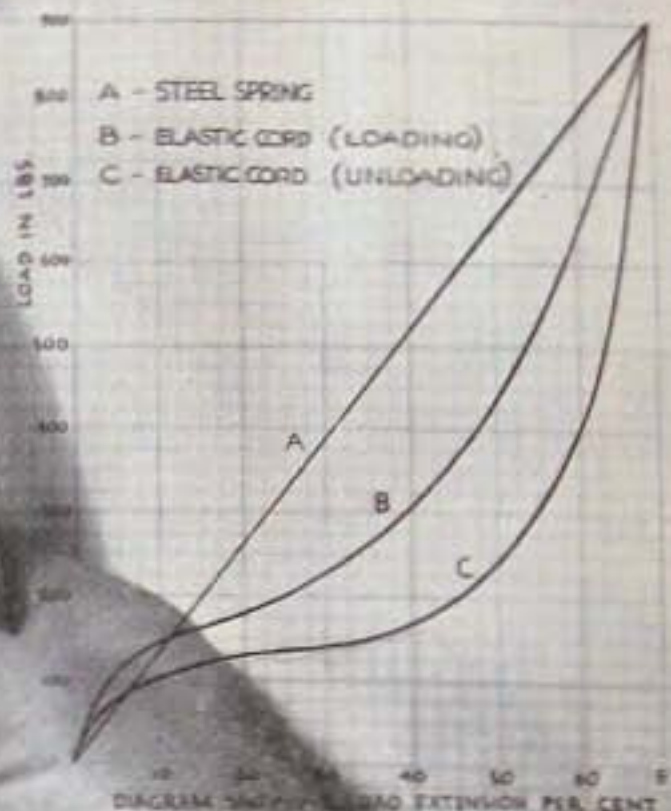
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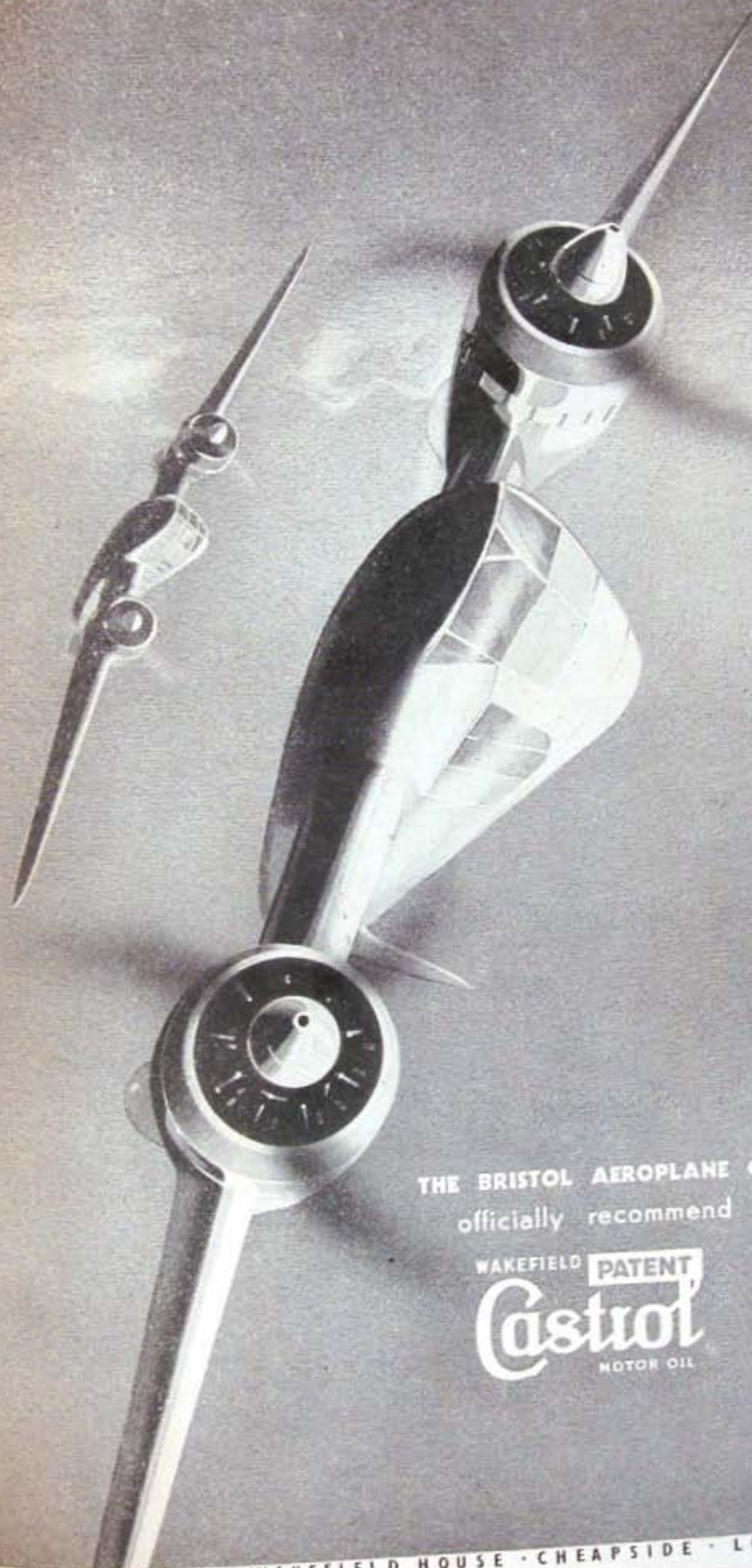
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