

SAILPLANE

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AND GLIDER

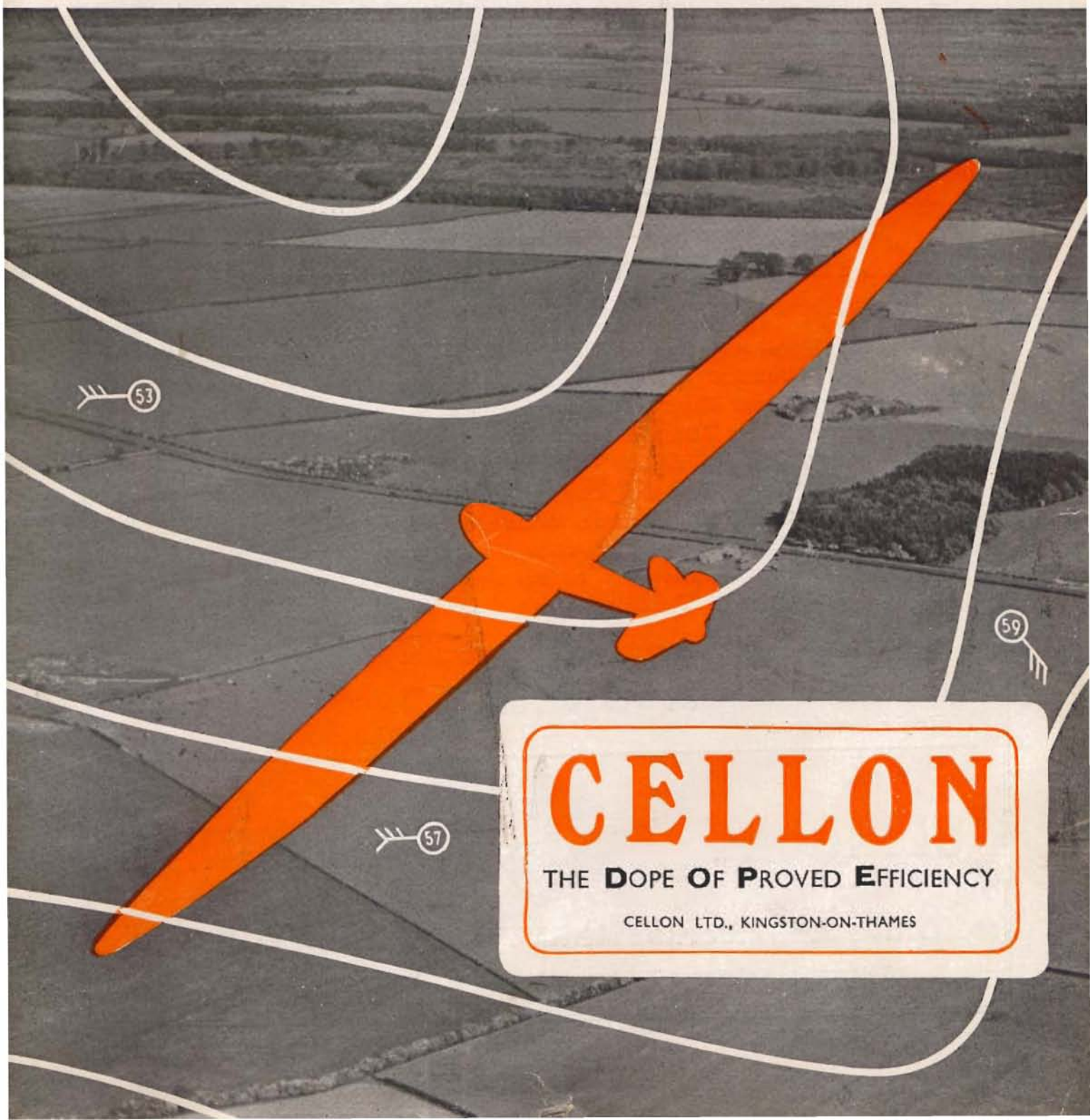
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Official Organ of the British Gliding Association

EDITED BY ALAN E. SLATER



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The National Soaring Contests

THIS year's National Contests were carried through in particularly difficult weather, and the increased standard of pilotage, as compared with previous years, had no chance of showing up as it should have done, except in the case of a few experts. Total points earned were 2,797.4, as against 3,312½ in 1938 and 2,924½ in 1937. Here are the results:—

Markings in Open Contest

Aircraft	Entrant	Points
8. RHÖNSPERBER	C. Nicholson ...	595
2. MINIMO	P. A. Wills ...	573.7
17. KIRBY GULL	D. F. Greig ...	329
10. KIRBY KITE	Cambridge Club ...	327.4
19. PETREL	Slingsby Sailplanes ...	292
25. RHÖNBUSSARD	London Club ...	129
12. RHÖNBUSSARD	Mrs. M. J. Price ...	117.5
6. MINIMO	P. Brown ...	110
16. KIRBY GULL	Derby and Lances, Club ...	62
13. VIKING	E. J. Furlong ...	49
15. GRUNAU BABY	Derby and Lances, Club ...	39.3
28. KIRBY KITE	Norfolk and Norwich Club	35.1
4. GRUNAU BABY	H. Booth ...	33.1
26. KIRBY KITE	Imperial College Club ...	32.1
27. GRUNAU BABY	Bristol Club ...	25.5
3. VIKING	W. E. Filmer ...	18.3
5. KIRBY KITE	Yorkshire Club ...	12.4
22. KIRBY KITE	C. A. Kaye ...	11
1. RHÖNBUSSARD	E. Swale ...	6

Inter-Club Team Contest

Aircraft	Club	Points
10. KIRBY KITE	Cambridge University ...	410.9
25. RHÖNBUSSARD	London ...	129
28. KIRBY KITE	Norfolk and Norwich ...	122
26. KIRBY KITE	Imperial College ...	103
16. KIRBY GULL	Derbyshire and Lances ...	86
5. KIRBY KITE	Yorkshire ...	78.4
15. GRUNAU BABY	Derbyshire and Lances ...	61.3
27. GRUNAU BABY	Bristol ...	25.3
9. CAMBRIDGE I	Cambridge ...	2

Markings in the **Inter-Club Class Contest**, for machines of KIRBY KITE and GRUNAU BABY type, were as above.

Awards and Prizes

DE HAVILLAND CUP for best height during the past year: P. A. Wills, 14,170 ft.

VOLK TROPHY for best distance during the past year: C. Nicholson, 162 miles.

[Probably this should be the Wakefield Trophy, which is offered for distance; in which case the Volk Trophy, offered for duration, would go to Flying Officer A. N. Young, for his flight of 13 hrs. 27 mins. last August.—ED.]

DU GARDE PEACH TROPHY and AIR LEAGUE PRIZE for best club team during Contests, and ROYAL AERONAUTICAL SOCIETY'S TROPHY AND PRIZE for inter-club class contest: Cambridge University Gliding Club's team on KIRBY KITE (R. C. G. Slazenger, J. T. M. Parker, A. P. Pringle).

FIRTH-VICKERS TROPHY for all-British machine gaining greatest aggregate marks during Contest: KIRBY GULL flown by D. F. Greig, G. H. Stephenson and J. C. Dent.

SEAGER TROPHY: P. A. Wills for his flight to New Mills on July 15th.

OPEN CONTEST: First Prize, C. Nicholson (entrant of RHÖNSPERBER); Second Prize, P. A. Wills (entrant of MINIMO).

PRIZES for best performances during Contest:—

Distance: C. Nicholson (162 miles).

Height: R. C. G. Slazenger (7,200 ft.).

Duration: K. M. Chirgwin (5 hrs. 23 mins.).

Daily Prizes

July 8th, for most meritorious flight: J. S. Armstrong.

July 9th, for best individual duration: K. M. Chirgwin (5 hrs. 23 mins.).

July 10th, for greatest aggregate duration: Cambridge Club's KIRBY KITE (9 hrs. 58 mins.).

July 11th, for best goal flight: No award.

July 12th, for best individual duration: R. H. Shaw (3 hrs. 15 mins.).

July 13th, for greatest height: N. W. Burnett (1,900 ft.).

July 14th, for spot-landing: D. G. Hiscox.

July 15th, for best goal flight attempt: P. A. Wills (15 miles; goal, Blackpool).



List of Entries

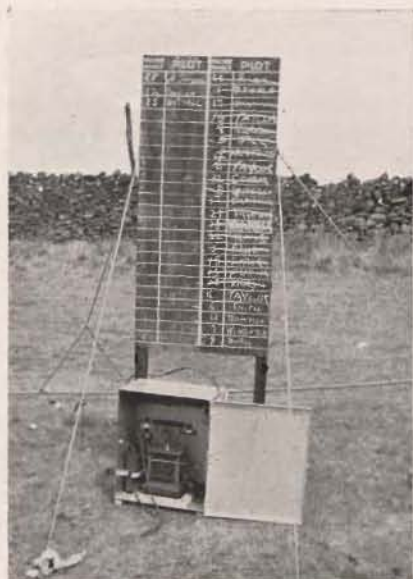
This list shows the machines entered and the pilots who flew them during the Contests. Names of entrants will be found under "Markings in Open Contest."

No.	Type	Pilots
1.	RHÖNBUSSARD	E. Swale, G. Shepard, D. Swale.
2.	MINIMOA ...	P. A. Wills.
3.	VIKING I ...	W. E. Filmer.
4.	GRUNAU BABY	H. Booth, J. Parker, J. S. Armstrong, G. M. Thompson, S. D. Dickson.
5.	KIRBY KITE	R. H. Shaw, M. H. Maufe, J. L. Wordsworth, R. C. Pick, L. H. Barker.
6.	MINIMOA ...	P. Brown, G. O. Smith.
7.	KIRBY KITE (GRACIAS)	C. J. Wingfield, Mrs. A. C. Douglas.
8.	RHÖNSPERBER	C. Nicholson, F. T. Gardiner.
9.	CAMBRIDGE I	R. T. Cole, J. D. Bolton, N. W. D. Lee, B. Jones.
10.	KIRBY KITE	R. C. G. Slazenger, J. T. M. Parker, A. P. Pringle.
12.	RHÖNBUSSARD	R. P. Cooper, Mrs. M. J. Price.
13.	VIKING I ...	E. J. Furlong.
14.	KIRBY GULL	D. G. Hiscox.
15.	GRUNAU BABY	G. T. Slater, N. W. Burnett.
16.	KIRBY GULL	L. R. Robertson, E. H. Taylor, A. Davies.
17.	KIRBY GULL	D. F. Greig, G. H. Stephenson, J. C. Dent.
18.	PETREL ...	F. Charles.
19.	PETREL ...	P. M. Watt, A. H. Reffell.
21.	KESTREL ...	W. E. Godson.
22.	KIRBY KITE	A. Davies, C. W. Verity, A. A. Verity, C. A. Kaye, A. I. Slater.
25.	RHÖNBUSSARD	L. C. Withall, H. C. Bergel, N. W. Burnett, H. Green-shields.
26.	KIRBY KITE	K. M. Chirgwin, W. E. Crease, C. H. Naylor, R. Riley, K. G. Wilkinson.
27.	GRUNAU BABY	A. J. Deane-Drummond, K. W. Turner.
28.	KIRBY KITE	A. E. Firmin, Baron D. de Sarigny.

The following machines were entered but did not appear:—

No.	Type	Entrant
11.	VIKING I ...	Mrs. M. J. Price.
20.	KING KITE ...	Slingsby Sailplanes.
23.	TERN... ..	G. A. Little.
24.	GRUNAU BABY	Surrey Gliding Club.
29.	CONDOR ...	G. O. Smith.

Some distinguished competitors. From top to bottom: 1. C. Nicholson and F. T. Gardiner with the winning "Rhönsperber." 2. P. A. Wills, whose "Minimoa" came second, having his barograph signed by Alan Goodfellow. 3. D. F. Greig in the "Blue Gull" (third) with his co-pilot, G. H. Stephenson, standing beside him. 4. The Cambridge Club's "Kirby Kite" (fourth) with R. C. G. Slazenger, who took it into a storm cloud. 5. P. M. Watt beside the "Petrel" (fifth), with L. H. Barker, of the Yorkshire team, and Mrs. Joan Price. 6. Frank Child standing beside E. J. Furlong, who is trying the cockpit of the former's "Petrel." On the left (with pipe) is Commander H. E. Perrin, Secretary of the B.G.A.



Top left: the starting board, and one item of the comprehensive field-telephone system. Centre: J. Simpson, formerly of Magill University Gliding Club in Canada, could be seen doing this all day and every day. Right: this speaks for itself. Bottom, left and right: rows of familiar faces.

Saturday, July 8th

With clouds nearly down to the hill, and almost continuous rain, three pilots ventured out after a Daily Prize, though the Competitions proper had not yet begun. R. T. Cole was off first, but went to the bottom after 27 minutes. E. Taylor managed 36 minutes, and J. S. Armstrong won the prize with 37 minutes.

Sunday, July 9th

An overcast sky broke after 11 a.m. to disclose cumulus tops, but these were of little use for helping anyone to get away.

At 12.50 P. A. Wills and H. Greenshields went off inside the same cloud. It soon let Greenshields down, but Wills was seen slope-soaring some miles downwind and eventually got back within the clouds, where he stayed during most of his $2\frac{1}{2}$ hour flight to Tuxford. His greatest height was 1,600 ft. Two others got away for a few miles, but the rest spent the day slope-soaring in a 35 mile an hour stormy wind, which incidentally caused several of them to undershoot on landing. Flights of over 5 hours were made by K. M.

Chirgwin, A. P. Pringle, J. D. Bolton, Baron de Sarigny, and A. E. Firmin.

Cross-Country Flights, July 9th.

Aircraft	Pilot	Landing and Mileage
2. MINIMON ...	P. A. Wills ...	Tuxford ... 37
25. RHÖNBUSSARD	H. Greenshields	Baslow Hill ... 8

Summary, July 9th.—43 launches; 99 hrs. 20 mins. flying time; 45 miles across country.

Monday, July 10th

"To the wives of 100 pilots in this National Gliding Contest falls the task to-night of finding their men scattered over a wide area." So wrote the *News Chronicle* correspondent of this day's doings. Actually ten pilots went across country, only four of whom are definitely known to be married.

A remarkable flight by W. E. Filmer, who used a stationary wave, will have to be described in detail another time. Meanwhile several others had gone off in thermals and cloud lift, which was only a little less difficult to find than yesterday—at least, among the Derbyshire hills.

At 12.45 Nicholson was seen going away. He came part of the way back several times before finally vanish-



Mr. Nicholson on his arrival at Southend Airport.

(Photo by S. H. Loe.)

ing at 1.15. At 1.45 Wills and Greig started off together, but had to leave their thermal and both regained the hill lift with only 30 feet to spare. Then R. H. Shaw caught one; Wills joined him and soon entered the cloud above.

After 2 p.m. there were several good thermals, in one of which D. F. Greig, K. G. Wilkinson and P. M. Watt all went off. Watt made some good cross-wind mileage, but Greig, who was kept too busy to read maps, went further down-wind.

Wills and Nicholson both found excellent conditions once they reached flat country. Wills was finally brought down by wet fenland at 5 p.m., but Nicholson managed to keep more inland, and found the clouds specially good over Cambridgeshire. But they had all melted away by the time he reached Southend, 1,000 ft. up, at 7 p.m.—two hours after every other cross-country pilot had landed.

Cross-Country Flights, July 10th.

Aircraft	Pilot	Landing and Mileage
8. RHÖNSPERBER	C. Nicholson ...	Southend (Essex) ... 162
2. MINIMOIA	P. A. Wills ...	Sheddham (Norfolk) ... 103
17. KIRBY GULL	D. F. Greig ...	Cranwell R.A.F. ... 54
4. GRUNAU BABY	G. M. Thompson	Mansfield ... 27
19. PETREL	P. M. Watt ...	Bargate, Belper ... 25
26. KIRBY KITE	K. G. Wilkinson	Stretton ... 17
3. VIKING	W. E. Filmer ...	Near Matlock ... 16
27. GRUNAU BABY	A. J. Deane- Drummond	Chesterfield ... 13
5. KIRBY KITE	R. H. Shaw ...	East of Baslow ... 8
1. RHÖNBUSARD	G. Shepard ...	Chatsworth ... 7

Summary, July 10th.—50 launches; 104 hrs. 39 mins. flying time; 432 miles across country.

Tuesday, July 11th

Most cross-country pilots found the thermals weak, and Mrs. Joan Price, who went furthest, took from 11.30 to 3.30 over her journey, having to spend nearly all the time in patches of poor lift. She left the site with three others, including Gardiner and Robertson, who said he had to get into cloud to find the only good lift. Mrs. Ann Douglas, however, found a 10 ft. per sec. thermal under overcast sky at the site about 1.50, though it let her down again at 20 ft. per sec.

Stephenson, Wills and P. Brown all landed at Grantham within a few minutes of each other—Wills because the town failed to oblige with the expected thermal, and Brown because a "Hart," which had been diving on a towed target, started diving on him instead.

Withall managed to strike a course at 35° to the wind direction, landing well on the route to Dunstable, his goal.

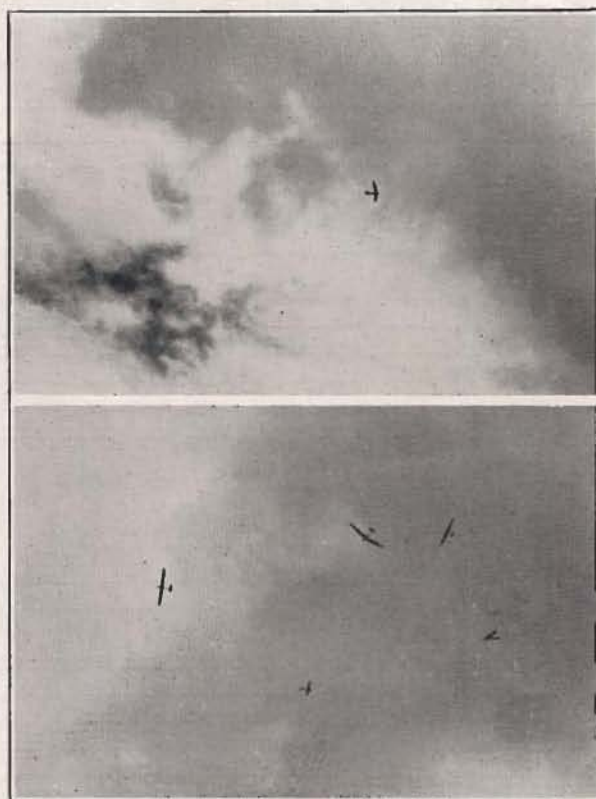
Early in the afternoon, at the site, there occurred the first fatal accident ever to happen at a National Contest. W. E. Godson, circling in the KESTREL, got into a spin a few hundred feet up and hit the ground at a steep angle. He sustained a fractured skull and died four hours later in Stockport Infirmary.

Mr. Godson had built the KESTREL himself at his home at Romily, Cheshire. During its construction, which took over three years, one wing was destroyed by fire and had to be rebuilt. He brought the machine to the club for the first time at the end of August last year, and since then had spent many hours flying it. He was also an experienced aeroplane pilot.

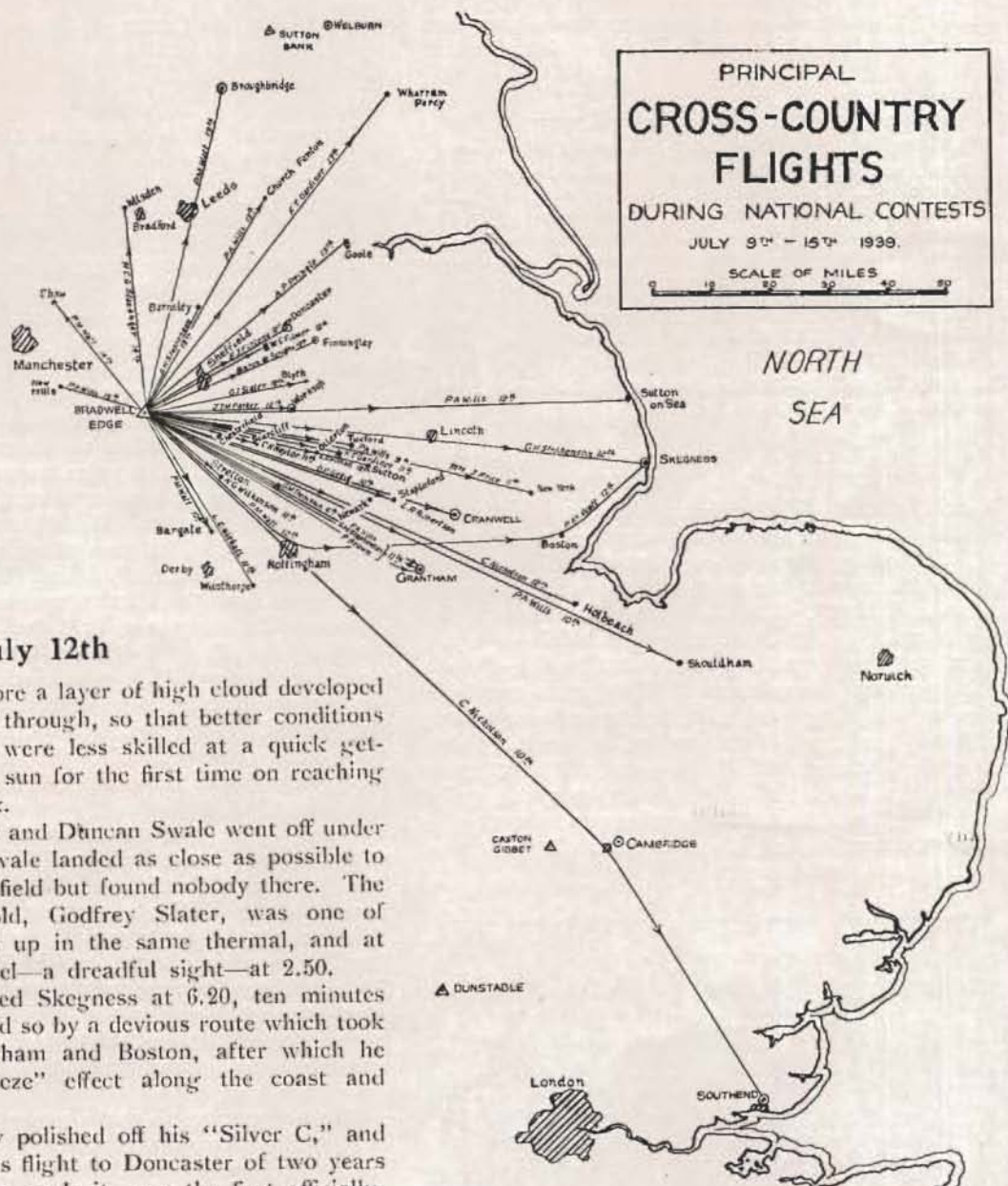
Cross-Country Flights, July 11th.

Aircraft	Pilot	Landing and Mileage
12. RHÖNBUSARD	Mrs. J. Price ...	New York (Lines)... 68
2. MINIMOIA	P. A. Wills ...	Grantham R.A.F. ... 55
6. MINIMOIA	P. Brown ...	Grantham R.A.F. ... 55
17. KIRBY GULL	G. H. Stephenson	Grantham R.A.F. ... 55
16. KIRBY GULL	L. R. Robertson	Stapleford, Newark... 45
8. RHÖNSPERBER	F. T. Gardiner...	East of Ollerton ... 35
25. RHÖNBUSARD	L. C. Withall...	Wiltorpe, Derby ... 35
26. KIRBY KITE	C. H. Naylor ...	Scarecliff, Bolsover ... 20
10. KIRBY KITE	R. C. G. Slazenger	Ford, Sheffield ... 14
4. GRUNAU BABY	J. S. Armstrong	Unstone ... 12
27. GRUNAU BABY	K. W. Turner...	Barlow ... 11
13. VIKING	E. J. Furlong ...	Near Chesterfield ... 10

Summary, July 11th.—37 launches; 63 hrs. 48 mins. flying time; 415 miles across country.



Above: Mr. Wills, at 11.50 on Thursday, under the up-wind edge of the cloud which he used to get away. Below: some of the seven machines which got away all in the same thermal at 2.50 on Wednesday.



Wednesday, July 12th

Wills was off before a layer of high cloud developed gaps to let the sun through, so that better conditions awaited those who were less skilled at a quick get-away. He saw the sun for the first time on reaching the sea at 4 o'clock.

At 2.15 Nicholson and Duncan Swale went off under the same cloud. Swale landed as close as possible to his home at Chesterfield but found nobody there. The other sixteen-year-old, Godfrey Slater, was one of seven who all went up in the same thermal, and at nearly the same level—a dreadful sight—at 2.50.

Watt, who reached Skegness at 6.20, ten minutes after Stephenson, did so by a devious route which took him across Nottingham and Boston, after which he used the "sea breeze" effect along the coast and arrived at 2,000 ft.

Baron de Sarigny polished off his "Silver C," and Furlong repeated his flight to Doncaster of two years ago which, when he made it, was the first officially-recognised British goal-flight.

Cross-Country Flights, July 12th.

Aircraft	Pilot	Landing and Mileage
17. KIRBY GULL	G. H. Stephenson	Skegness aerodrome... 86
19. PETREL ...	P. M. Watt ...	Skegness aerodrome... 86
2. MINIMOIA ...	P. A. Wills ...	Sutton-on-Sea ... 83
8. RHÖNSPERBER	C. Nicholson ...	Holbeach (Lincs.) ... 83
25. RHÖNBUSSARD	L. C. Withall...	Sutton-en-Trent ... 40
28. KIRBY KITE	Baron de Sarigny	Finningley aerodrome 22
13. VIKING ...	E. J. Furlong ...	Doncaster aerodrome 30
15. GRUNAU BABY	G. T. Slater ...	Blyth ... 28
10. KIRBY KITE	J. T. M. Parker	Workshop ... 25
3. VIKING ...	W. E. Filmer ...	Near Workshop ... 25
4. GRUNAU BABY	G. M. Thompson	Near Sheffield ... 15
1. RHÖNBUSSARD	D. Swale ...	Chesterfield ... 14
22. KIRBY KITE	C. A. Kaye ...	Ridgeway ... 14
16. KIRBY GULL	E. H. Taylor ...	Abbeyle ... 10
27. GRUNAU BABY	A. J. Deane-	
	Drummond	Abbeyle ... 10
25. RHÖNBUSSARD	H. C. Bergel ...	(Down wind)... 6
12. RHÖNBUSSARD	R. P. Cooper ...	Grindlesford Bridge ... 5
6. MINIMOIA ...	G. O. Smith ...	Froggatt Edge ... 5

Summary, July 12th.—53 launches; 77 hrs. 58 mins. flying time; 597 miles (officially 600½ miles) across country.

Thursday, July 13th

The wind, which had hitherto been between W. and N.W., now backed to S.W. and beyond.

Pilots no longer found, as they had before, that conditions improved the further they got from the site. Wills, after 30 miles, ran into a dead sky. A. P. Pringle, a little to the east of him, reached the Humber without once seeing the sun.

Several pilots chose Sutton Bank (68 miles) or Welburn (70 miles) as their goal. Gardiner got within 16 miles of Welburn. Watt, who had not arrived back from Skegness till 5 a.m., was off again in the afternoon. Leaving the site as late as 4.30, he missed Sutton Bank by only 13 miles.

During the afternoon there were large areas of sunshine alternating with large areas of almost continuous

cumulus; these areas moved along much slower than the wind, due to melting at the lee edge of each cloudy patch.

Cross-Country Flights, July 13th.

Aircraft	Pilot	Landing and Mileage
8. RHÖNSPERBER	F. T. Gardiner...	Wharram Percy ... 60
19. PETREL ...	P. M. Watt ...	Boroughbridge ... 57
10. KIRBY KITE	A. P. Pringle ...	Booth Ferry ... 46
2. MINIMOIA ...	P. A. Wills ...	Church Fenton ... 42
17. KIRBY GULL	G. H. Stephenson	Barnsley ... 21
17. KIRBY GULL	D. F. Greig ...	Near Sheffield ... 9
26. KIRBY KITE	C. H. Naylor ...	Near Sheffield ... 9
5. KIRBY KITE	M. H. Maufe ...	Lodgemoor ... 8
10. KIRBY KITE	J. T. M. Parker	Redmire ... 7
22. KIRBY KITE	A. A. Verity ...	Redmire ... 7

Summary, July 13th.—38 launches; 43 hrs. 38 mins. flying time; 266 miles across country.

Friday, July 14th

A cold front at mid-day cleared the cloud off the hill-top and brought high cumulo-nimbus in its wake. R. C. G. Slazenger was winched into the lift under one of these storms and vanished. In the next 22 minutes he climbed 7,200 ft. Then he spent half an hour trying to keep under control, and a further half-hour trying to get out again, which he eventually did—into a 20 ft. per sec. down-current. But with spectacles frozen up, and numb with cold, he charged into a stone wall while landing. Watt also had an exciting time, and nearly lost control in the rags of a "front" without entering cloud at all. He has given us a detailed account for the next issue. A policeman, showing his retrievers where he had landed, remarked: "He must have run out of undercurrents."



After the flood on Sunday, July 16th. Note the Bristol Club's tent in mid-stream.

Cross-Country Flights, July 14th.

Aircraft	Pilot	Landing and Mileage
10. KIRBY KITE	R. C. G. Slazenger	Wilsden, Bradford ... 36
19. PETREL ...	P. M. Watt ...	Shaw, Oldham ... 25

Summary, July 14th.—30 launches; 8 hrs. 35 mins. flying time; 61 miles across country.

Saturday, July 15th

Cumulo-nimbus was bigger, but nobody could reach it. Wills managed to get part of the way towards Blackpool in an attempt for the £100 prize, but could only slope-soar over the hills, which did not take him far.

The ill-luck of Tuesday was followed by a further fatal accident early this afternoon, when Frank Charles turned down-wind, after an interrupted launch, with the cable still attached; the reason for this cannot be determined, since the release was afterwards found to be in working order. His PETREL was pulled back sharply and dived in from about 200 ft., and Charles must have been instantly killed. A heavy shower had just begun, and the winch team could not see the wire.

Frank Charles was a skilled sailplane pilot, and had taught himself to fly in a KIRBY KITE which he previously owned. He was circling this machine in thermal currents on only the seventh time of his leaving the ground, in January, 1936. Since then he has done a tremendous amount of work for the Furness Gliding Club, near which he lived, and the club will feel their loss severely. In order to get more time for gliding he gave up his profession, speedway racing, after the 1938 season, though he signed on again this June with his old team at Wembley, and had to leave the Contests for a day to fulfil an engagement there. Charles's flying was a delight to watch, for he had a genius for handling anything in motion—in fact, we learn that in his schooldays he shocked the staff by riding a bicycle along the schoolyard wall. Before achieving fame as a speedway rider he had toured music halls with an accordion, and those present at these Contests will remember how well he played the instrument.

The supper for all participants at the meeting was held at the "Marquis of Granby" in the evening, but it was decided to cancel the programme of entertainments which Fred Harris had arranged. Major Alan Goodfellow, in a speech, expressed the hope that the Competitions would again be held at Great Hucklow.

Cross-Country Flights, July 15th.

Aircraft	Pilot	Landing and Mileage
2. MINIMOIA ...	P. A. Wills ...	Near New Mills ... 15
8. RHÖNSPERBER	C. Nicholson ...	Mam Tor ... 5
8. RHÖNSPERBER	—	Near Mam Tor ... 4

Summary, July 15th.—24 miles across country.

Sunday, July 16th

Cumulo-nimbus quite out of reach, but bigger than ever, as a number of campers found when the clouds "burst." Most of the competitors filtered off home.

It only remains to say that the large number of non-flying personnel, absolutely necessary to enable such a meeting to be run at all, distinguished themselves by their hard work, which is quite in accordance with tradition.

American Visit

By A. IVANOFF



A group at Wurtsboro. Left to right: Wally Setz, almost hiding Prof. Sato; H. Wightman (back to camera); Mr. and Mrs. Barringer (seated), Wistar Browne and A. Ivanoff. In the right-hand photo Wally Setz, who will be remembered by the British team at the International Contest of 1937, is seen opening a can of goldfish.

EVERYONE has heard of American hospitality. However, really to take in its overwhelming character one has to visit the country. It was my good fortune to be sent there by my firm—purely on business, of course. In company with a colleague, G. P. Howard, I set out on the first of April in the "President Harding." We picked an American boat in order to acclimatise ourselves gradually—a wise decision, which saved us much trouble later by giving us time to think of all the answers to the comprehensive political *questionnaire* to which we were subjected by every person beside whom we stopped long enough to exchange a couple of words. However, in all fairness I'll admit that the gliding fraternity spoke only of cumulus clouds, aspect ratios, thousands of feet and hundreds of miles.

In the whole of America I knew just Wally Setz, whom I informed of our arrival a week before we sailed. He met the boat, piloted our car across New York, deposited us at our hotel (27th floor—why use thermostats?) and looked after us during the week-end. He must have set the grape vine in motion, as within a day Lewin Barringer rang up twice and wrote once to invite us to dinner, and Emil Lehecka, Hans Groenhoff and Alexis Dawyloff called on us at the hotel. A fortnight later, in Texas, we received a letter from the club at Frankfort, Michigan, inviting us to glide there, and, I understand, the local paper at Elmira published news of our impending arrival (grossly exaggerated, as it proved).

When it was learned that we were due to return before the Annual Meet a storm of protest arose, various valid objections were invented, and the promise of a machine to fly was dangled firmly and enticingly before me. If I'd been alone the firm at home would, no doubt, have received many good and obvious reasons for extending my stay. What a country!

Some day an American pilot of equal unimportance will come to England . . . I am very much afraid. . .

The hustle and bustle of modern life, however, cut

our gliding activities to a day at Wurtsboro, which is some 80 miles north-west of New York. In addition to the people already mentioned, there converged on Wurtsboro, among others, Mrs. Barringer, H. Wightman, the editor of *Soaring*, Prof. Sato (ref. Wasserkuppe), Miss Donoghue (ref. Dunstable) and Schweitzer brothers, Paul and Ernest, with their new two-place ship sporting a metal tube fuselage and a duralumin leading edge. Some of the party reached the field by car, while others, including me, were flown over by Barringer in a "Waco" lent by Wistar Browne, who some weeks later piloted us round the flying clubs of Philadelphia. They don't fly in Philadelphia, they ride them in Texas style.

The ship was duly assembled and given its first trials by Lehecka. The wind was, of course, blowing down the hill, and we had to be content with winching. A hemp rope was being used, and gave very smooth take-off. But I could not help feeling that steel is stronger.

It was a typical, nice, cold gliding outing with plenty of people to talk to and nothing much to do except hold the wing occasionally.

We spent the night with the Barringers, whom Heaven preserve, and in the morning departed by car for Texas. The Wurtsboro picnic proved the last restful day we had in the States. The rest is a blur of highways, hotels, tourist cabins, expositions, oil refineries, cowboys, works, ball games, reporters, six thousand miles of driving in three weeks, little fields with "Taylor Cubs" staked down, huge airports crowded with "Douglases" and, above all, thousands of miles of thermal sky with cumulus at six to eight thousand feet. Oh, yes, and forty minutes at Elmira (all we had left), being shown round by astonished Stan Smith and Frank Starace.

Three flights here and there, a rush through Canada, and at last we were peacefully fog-bound on the Great Bank off Newfoundland. The siren was blowing a pleasant low note, the ship rocked on motionless sea, and all was peace.

The Helm Wave

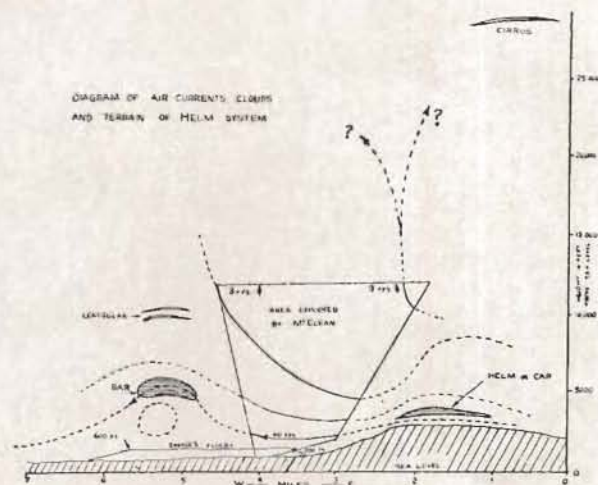
By NOEL MCCLEAN

(Holder of former British Altitude Record, June 22nd, 1939)

THE best authority on the Helm system is Mr. Manley, late of Durham University, and now of Cambridge. Since the very distinctive wind and cloud formation of West Cumberland were mentioned well back in history, he is the only man to have spent any considerable time studying them. He stayed 18 months in camp on top of the ridge to get his data, thanks to a Leverhulme grant. The investigations by the Newcastle Gliding Club have only taken place over about four days of actual Helm activity, so that most of our information comes from Mr. Manley's books, lectures and chats.

The ridge in which the Helm wind has its source appears on the map as the Pennine Chain. It is a very regular escarpment running north-west to south-east, the steep face being the west side, where there is a sudden drop averaging 2,000 ft. in height, to the plain of Cumberland. When a north-east wind blows over this ridge, the ridge acts as a submerged weir. If this happens in a stream only little deeper than the weir, then we get the common phenomenon of a depression and increase of speed followed by a standing wave. The Newcastle Gliding Club group explained the necessary shallowness of the north-east wind by assuming that the prevailing south-west wind blew just over it, but Mr. Manley prefers the presence of an inversion at a height not very much greater than the ridge—something like 4,000–6,000 ft. above sea-level. Apparently the air above this inversion follows the contours of the air beneath it.

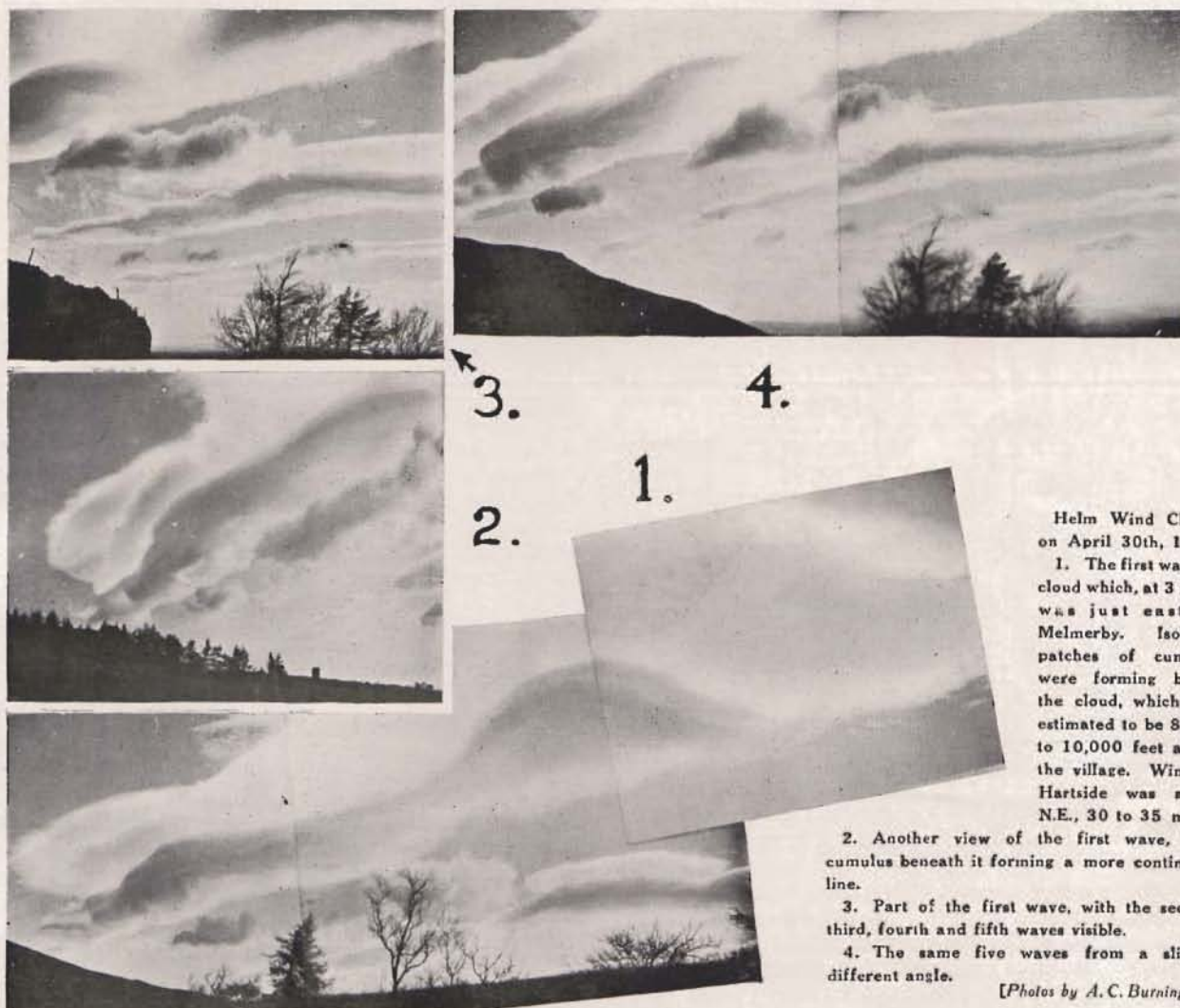
There is rarely any doubt as to when the Helm system is in action, as it is accompanied by very noticeable sights, sounds, and forces. The cloud formation is of a very distinctive character, probably more so than the "Moazagotl". It takes the form of a long roll of cumulus-type cloud, the Helm Bar, at a height of 2,500–5,000 ft., hanging just in front of the ridge, with a lenticular, the High Bar, immediately above it at a height of 8,500–16,000 ft. Both clouds are, of course, stationary in position, but the Bar is visibly rolling, far faster than any cloud movement we have ever seen.



At times of high humidity these clouds unite to form a solid wall, and often the first cloud formation is repeated four times across the plain, without rain or cloud forming in the blue spaces between the walls. The Helm, or Cap, is the helmet of cloud which sits on top of the ridge, and out of which pours the Helm wind—which, however, is not a katabatic wind. It is this wind which causes the distinctive noise in its terrific charge down the rocks and in among the trees at the foot. As for the forces, these are notorious throughout the district to such a degree that the older farm houses have no windows in the east side, while railway engineers were warned of the danger of laying the line through the Eden valley in the old days. I personally have seen a "Whitley" bomber having a very thin time of it just west of the Pennines on the day the second Helm flight was made, when the weather was quite pleasant over the rest of England, but the wind happened to be N.E.

The Helm wind is a north-easter, but it rarely penetrates much more than a mile from the ridge, after which there is a sharply defined area of calm, or even westerly breeze. This is repeated, like the clouds, across the plain, the calm or westerly area always beneath the bars of cloud. A roll of cirrus cloud immediately above the ridge, at 20,000–30,000 ft., is seized upon by John Allan to support his suggestion that, as our wave faces directly into the prevailing south-westerly, there is likely to be a curl-over from the top of the wave into the higher westerly, giving lift out of all proportion to the height of the ridge. I am inclined to agree with him, and further suggest that the second or third waves will be better than the first. This seems unreasonable, I know, but the cloud formation seems to suggest it. So to Cross Fell's "normal" attractions of a 30-mile beat, soaring in winds S. to N.W., lift three miles deep, hill lift to 4,000 ft. above take-off for a GRUNAU, we now add a standing wave in north-easters, frequent in the spring, quite often during the rest of the year, with "Golden C" height for children in nacelled DAGGLINGS.

This has nothing to do with the Helm system, but



Helm Wind Clouds on April 30th, 1939.

1. The first wave of cloud which, at 3 p.m., was just east of Melmerby. Isolated patches of cumulus were forming below the cloud, which was estimated to be 8,000 to 10,000 feet above the village. Wind at Hartside was about N.E., 30 to 35 m.p.h.

2. Another view of the first wave, with cumulus beneath it forming a more continuous line.

3. Part of the first wave, with the second, third, fourth and fifth waves visible.

4. The same five waves from a slightly different angle.

[Photos by A. C. Burningham.]

there is a cloud formation at Hartside which suggested to me that height records would be broken there before ever I knew of the standing wave, and which may possibly be several times more effective than the wave. It occurs in late summer under conditions exactly opposite to a Helm, i.e. a slight breeze from the S.W. among other things. However, this is, if anything, only conjecture.

Three attempts were made at contacting the Helm wave: by Savage, McClean and Allan respectively. All launches were from our normal flying ground at the foot of the ridge at Bank Hall Farm, the usual positions of machine and winch being reversed.

Savage was launched on the Wednesday in the GRUNAU BABY, and on releasing at 500 ft. flew at once down wind towards the Helm Bar. He had plus six inches showing on the Cobb-Slater variometer all the way to the Bar and reached there at 600 ft. above take-off. At this time we held the theory that the wall of cloud marked the upward flow of the wave. We know now that it marks the apex reached by the various layers of air. In accordance with our former theory, however, Savage proceeded to circle under the Bar, but as soon as he flew to the west side of it, was forced down so quickly that he had no time to do more than

scramble a landing anywhere. By the time we had retrieved him, flying was finished for the day.

On the Thursday the Helm was still blowing, so I took a launch in the GRUNAU and at once found lift. I quartered a little towards the Bar, but profited by Savage's experience and did not approach too closely. The lift speedily mounted to 25 ft. per second, and except for some stickiness at 1,000 and again at 9,000 ft. above take-off, had a perfectly pleasant, if cold, ride to 11,140 ft. above take-off. My object in not waiting to explore the wave fully was to permit Allan and Savage to get their "Golden C" height, after which I intended having another flight, with some exploration this time. But greed did not pay, because when Allan took off in a 50-mile-an-hour Helm he struck only a violent down-draught and a very sticky landing ground, and by the time we had hauled the machine back to the proper landing ground it was late evening. After comparing notes we have come to the conclusion that had John burnt his boats and whistled down wind he would almost certainly have contacted the wave before the ground, which falls away quite rapidly. Apparently the entire system had moved out a mile or so from the ridge. However, that remains to be tried next time the Helm howls.

Correspondence

An Appreciation

SIR,

We would like to express publicly our admiration of the splendid way in which the members of the Derbyshire and Lancashire Gliding Club carried out the particularly onerous duties which fell to them at the recent National Contests.

HUGH BERGEL.
R. P. COOPER.
E. J. FURLONG.
F. T. GARDINER.
H. L. GREENSHIELDS.
D. F. GREIG.
DUDLEY HISCON.
CHRISTOPHER NICHOLSON.
JOAN PRICE.
G. H. STEPHENSON.
P. A. WILLS.
L. C. WITTHALL.

"Down-wind" Goal Flights

SIR,

The remarks about goal flights on page 134 of the July *SAILPLANE*, and the fact that these views were incorporated in the Rules of this year's Competitions, lead me to write a faint protest on the subject.

The poor old "down-wind" goal flight receives an awful kick in the pants. It must have felt this social degradation very keenly—except that, in the words of somebody about something else, "there's no sich animal."

Not in gliding, anyway. If anyone were to enter a free balloon then I do agree that he should not receive special treatment for down-wind goal flights. But it is far from possible for a sailplane to fly from A to B in a straight line.

To do a goal flight in any direction involves the pilot knowing throughout the flight where he is. And the difference between knowing where you are and not knowing where you are is one of the main distinctions between the experienced cross-country pilot and the beginner.

There was a good bit of chat on this subject during the Competitions and most people I heard seemed to agree rather warmly with this point of view. I only raise it now because I don't want the notion to get abroad that the irrevocable British decision has been taken that "down-wind" goal flights are for children only.

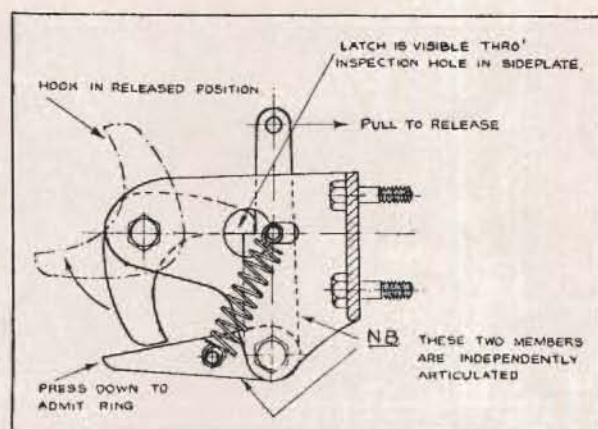
PHILIP WILLS.

An Original Release Hook

SIR,

I enclose herewith a sketch of a new hook which I have had made for our *Scud II*. I have submitted a sample of this type of hook for consideration by the B.G.A. Technical Committee. I have endeavoured to embody the safety features of the open hook, a method of releasing the cable with a minimum of effort, and a lightly spring-loaded finger to ensure that the cable will not drop off the hook due to tension ceasing momentarily.

It seems to me that there is no purpose whatever in



the hook being capable of pulling the nose of a glider downwards, as can, and does happen with the conventional type of hook. I believe the operation of this device will be entirely clear from the attached sketches. Should the Technical Committee approve this hook, I should be glad to provide further particulars for anybody wishing to construct similar devices.

I am, of course, not taking out a provisional patent on this hook, as I feel if it has any merit as far as safety is concerned, this feature should be free to everybody.

W. R. HORSFIELD.

Winching Into Thermals

SIR,

During a recent Air Cadet Corps Camp held at the Cambridge University Club's site at Caxton Gibbet, a number of experiments were made to determine more fully than hitherto the conditions under which it is possible to winch-launch a sailplane into thermals over flat country. No treatment of this problem has appeared in your pages for some time, and I hope that the success we achieved may serve to revive interest in this difficult but fascinating type of soaring.

It seems obvious from the start that no fixed rules can be laid down that will cover all types of day. Of all the general criteria for determining the right moment to launch, probably the best is that temporary lull in the surface wind that must precede the passage of a thermal overhead; this has been used successfully by pilots at a number of clubs. Under certain special conditions such as the approach of a cold front or line squall the clouds may be used as indicators of conditions right down to ground level. But the really difficult day is the type with cloud less than 4/10 and a wind gradient that may slant the thermals at a steep angle. Two days with conditions such as these were experienced during our camp, and it is the flights made on these that have yielded the most interesting results.

Our site at Caxton Gibbet is situated at some 300 ft. above sea-level in practically flat arable country with no obvious differences in the surface humidity or vegetation. From June 28th to July 1st a depression was passing slowly over Scotland and the wind veered during the four days from S.W. to N.N.E.; no single well-marked cold front appeared at Caxton, though a series of minor storms and line squalls developed on July 1st. It was on this day, it will be remembered, that Mr. P. A. Wills established the new altitude record of 14,000 ft.

June 28th was a day of south-west wind with cloud about 3/10 at mid-day. After several unsuccessful attempts at random winching, we decided to try launching in the sunny patches, and about 3.0 p.m. I went up to find the air rising slowly over a large area, and at 700 ft. was just able to maintain height for three or four minutes. Suddenly, without change of position or rate of circling, I started to rise, and noted that this coincided with the arrival of the cloud shadow below me. The thermal took me to cloud base at 5,400 ft., and I was able to fly around for an hour and do some aerobatics for the Cadets.

Similar conditions occurred on the morning of June 30th, this time in a N.W. wind. On two occasions, by launching just before the arrival of a cloud shadow after a sunny period, J. T. M. Parker was able to stay up, and on the second attempt got away, to reach 6,500 ft. in cloud and fly across wind to Baldock where he landed after two and a quarter hours.

The explanation of this success seems to us to be as follows. On days when the cloud shadow is travelling over the ground in the same direction and at approximately the same rate as the surface wind, it will be accompanied by a patch of cold air. This cold air will undercut the warm air over the travelling sunny patch, creating a miniature cold front, which will last as long as the cloud remains distinct. The lift is therefore greatest at the boundary of the shadow.

June 29th and July 1st were rather different days. On the 29th, the west wind was much stronger and the thermals very broken. Nevertheless, A. P. Pringle was able to get away at the fourth attempt and flew 46 miles to Watton, becoming the first pilot to make his "Silver C" distance flight from a winch-launch. On July 1st I went up in front of a line squall, and after rising at 10 and then 20 f.p.s. directly off the top of the launch at 600 ft., flew up wind for 16 miles without circling, often at 60 m.p.h., and reached Biggleswade before turning to come back. On this occasion the cloud showed quite clearly which was the right moment to launch.

Further experiments will be made during our next camp in September. Meanwhile we should be glad to hear of any other experiences that may help with the problem.

J. W. S. PRINGLE

Weak Links for Towing Cables

SIR,

Regrettable accidents in the past few months have shown the necessity of utilising some form of automatic safety device in the launching cable which is, as far as possible, independent of human element. For, even if the perfect quick-release should ever be invented, there still remains the possibility of the pilot releasing too late, or forgetting to release.

It is surprising that many clubs still use equipment which is *capable* of causing damage to a machine, or at least rendering it uncontrollable, while in the air. If all clubs were to standardise the use of weak links, they would safeguard further valuable lives which might otherwise be lost.

For more than two years the Cambridge University Club have been experimenting with weak links, and have adopted the shear-pin variety as standard, both for winching and aero-towing; *no launch is ever made*

without a weak link. There have been numerous instances when machines have not only been saved from undue stress, but have actually been prevented from getting into difficulties.

It must, surely, be realised that, to withstand normal wear and tear, a cable must be many times stronger than the normal maximum working load—and therefore dangerously strong. It is to be noted, also, that the reduction on depreciation of towing cables, due to fewer breakages, more than pays for the small outlay for the weak links and copper wire.

The maximum load we permit at the glider end is 5 cwt., at which the link breaks—equivalent to 55-60 m.p.h. on a winch launch. Pilots are not allowed to "yank-up" at the commencement of a launch, and they must always be in a position to make a good landing if the link breaks. With aero-towing cables weak links must be fitted at *both* ends; this is essential to protect the aeroplane if the cable catches in a hedge before being dropped, or if the link breaks just after the take-off. A stronger link (6½ cwt.) must be used at the aeroplane end so that both links shall not break simultaneously.

The above safety precautions are very simple, yet we should consider gliding dangerous without them; they involve very little extra trouble once the routine of weak link inspection and replacement is established, and should always be enforced as rigidly as the daily passing-out inspection.

P. G. W. WALKER.

Comment on Accidents

Mr. G. B. S. Errington, A.F.R.Ae.S. (Test Pilot, Airspeed, Ltd.), writes to say that he feels that a certain amount of uncertainty and doubt may exist in the minds of many sailplane pilots concerning the recent most unfortunate mishap to a sailplane and its towing aeroplane, near Welburn, Yorks.

As he happened to be a witness, he thinks the following comments might help the gliding movement:—

The take-off was normal, and on approaching the trees, some 400 yards beyond the aerodrome boundary, the aeroplane zoomed slightly, losing speed. The sailplane outclimbed the aeroplane, and when the latter levelled out (at a reduced speed) the slack in the cable began to take up. The tail of the aeroplane was pulled up, thus causing it to dive steeply until it was virtually suspended by the sailplane. This, coupled with the enormous inertia loads, was sufficient to cause structural failure of the sailplane's right wing. The aeroplane appeared to strike the ground almost vertically.

Mr. Errington noted that the towing outrigger had partially fractured, indicating very considerable up-loads, and also that the hook gear itself showed signs of considerable strain. The cable had released from the aeroplane, but only immediately before it struck. It is very important to add that in the case of acute upward angles the cable would not clear the claw-type hook fitted, even if released. The glider pilot had not released.

He feels that these two lives will not have been lost entirely in vain if the following main lessons are stressed:—

For the Sailplane Pilot:—

(a) He should never lose sight of his power plane.

(b) He should never let the cable make more than a slight upward angle to the aeroplane tail.

(c) He must be *prepared* to release instantly during the first few hundred feet, particularly if he cannot prevent overhauling.

For the Power Plane Pilot:—

(a) He should not change direction suddenly near the ground, particularly in the vertical plane.

(b) He should climb with the free hand on the cable release, which *must* be on the left-hand side of the cockpit.

The Hon. Secretary of the Furness Gliding Club has sent us a copy of a letter addressed to the British Gliding Association on the club's behalf, dealing with the accident to Frank Charles on July 15th. The letter suggests that an enquiry of a more technical nature than that of an inquest should be made into the cause of the accident; also that the following points should be considered when launches are made by winch:—

(1) A weak link of a loading specified by the B.G.A. to be used.

(2) The use of an indicating pendant to be specified.

(3) A modified type of release such that after the pulling of the control by the pilot it stays in the open position, and thus obviates any possibility of re-engagement of the winch-wire chain link.

(4) A visual indication to the pilot that the wire has been disconnected.

(5) A standardisation of a suitable link to be used with the quick release.

The club has experimented with the quick release as fitted to one of its sailplanes, and finds that, with the line of pull of the wire at an acute angle to the release tunnel, and with a superimposed twist on pulling the release the first link is freed, but is bound in the tunnel by the adjacent link, the grip being sufficient to equal the breaking strain of the wire or weak link. These two conditions are quite possible in a case where the machine is over-riding the wire and with the natural twisting movement from the wire due to its lay.

Mr. T. G. Nyborg, in a letter emphasising the danger of launching hooks used on gliders in this country, writes:—

I myself had the unpleasant experience some time ago of being pulled down to the ground through the breakage of the wire operating the hook release, and I have seen several potentially serious accidents owing to the launching hook not being released or the ring locking over the hook when an open type was used.

The continued use of these types of launching hook appears to indicate a grave indifference to a danger which has been demonstrated again and again, and I would appeal strongly to responsible people in the gliding movement to adopt at once the use of a hook over which the ring cannot lock, and which is self-releasing when the angle of the rope becomes greater than normal.

SIR,

It is high time we snapped out of the idea that gliding is a safe game which may be played with a casual indifference to all reasonable precautions. And it is regrettable that it takes fatal accidents to bring this point home. For every bad accident there are a score

of cases where people get away with it; strut pins without safety pins, stones in quick releases, and even loose fittings and cracked spars. Congestion on hills is another case in point. There has already been one lucky adventure in the aerial collision line. Doodle-dicing around lots of other machines may make soaring less boring, but is apt to make undertaking more profit-making.

Without going to the other extreme, we could cut out the "Oh, that'll be all right" spirit, which is apparent far too often. Most of the bad accidents that have occurred in British gliding can be attributed to this.

I make no apologies for posing as an antiquated aunt with a crystal bowl. Gliding is adventurous—that's why we like it—but no one wants unnecessary hazards.

GERALD O. MANNING.

British Gliding Association

Aero-Towing.

In the course of a circular letter to clubs, the Secretary of the B.G.A. points out that the responsibility for seeing that a suitable towing cable is employed rests with the club or glider pilot concerned. In addition, care should be taken by the club that the glider pilot does not suffer from any physical defect, which in an emergency may be the cause of his being unable rapidly to operate the glider release.

Attention is drawn to the B.G.A. regulations governing aero-towing, as revised in June, 1939:—

Regulations Governing Aero-Towing.

B.G.A. Regulations.—(1) Only pilots who possess a "C" Gliding Certificate and who have completed two hours motorless flying, or "A" licensed aeroplane pilots who have completed 10 hours solo flying, will be allowed to pilot gliders which are aero-towed.

(2) No glider shall be aero-towed unless it is in possession of a current B.G.A. Certificate of Airworthiness duly endorsed for aero-towing.

(3) All gliders which are aero-towed must have a quick release of an approved type operable by the pilot.

(4) Aeroplanes used for aero-towing must possess a Certificate of Airworthiness endorsed to that effect.

(5) The towing cable shall include a "weak link" fitted at the glider end of the cable, consisting of a 5 cwt. cable for single-seaters and a 7½ cwt. cable for two-seaters. The latter cables may, if desired, be replaced by an approved shear pin device failing at similar loads.

(6) The minimum length of cable shall be 300 ft.

Air Ministry Regulations.—An Air Ministry notice to aircraft owners and ground engineers (No. 20 of 1939) includes the following paragraphs:—

Owners of aeroplanes approved for glider towing should take immediate steps to replace the existing type of towing cable release (i.e., the hook attached to the aeroplane) with an improved type of quick release approved against the latest requirements. The new conditions of approval include a satisfactory test of the ability of the release to withstand, without permanent deformation, a 750 lb. cable load, at all angles of the cable aft of the towing aircraft up to and including 90° (in all planes) to the axis of symmetry of the aeroplane and to operate at all such angles under this load and any smaller load. In addition to the approval of the release itself, approval of its installation in each individual aeroplane is necessary. Application for approval of releases and their installation must be made to the Under-Secretary of State, Air Ministry (C.H.2(a)), London, W.C.2.

The approved type of release described in the preceding paragraph must be used in conjunction with a weak link of failing strength not exceeding 700 lb., located at the aeroplane end of the towing cable. The failing strength of the towing cable and attachments should exceed 700 lb.

Information regarding improved types of releases, the design of which is approved, is obtainable from the Air Registration Board, Brettenham House, Lancaster Place, W.C.2.

Gliding Certificates

"A" Certificates

No.	Name.	Club.	Date.
1304	L. C. Horton ...	Midland ...	21.5.39
1305	F. L. Savidge ...	Surrey ...	21.5.39
1306	L. B. Tate ...	Newcastle ...	7.5.39
1307	J. H. Fearon ...	Midland ...	3.6.39
1308	G. Muller ...	Oxford ...	8.4.39
1309	A. E. Martindale ...	London ...	27.5.39
1310	L. S. Bates ...	London ...	22.5.39
1311	C. J. Keeble ...	London ...	24.5.39
1312	E. Veal ...	London ...	24.5.39
1313	A. F. C. Moss ...	London ...	24.5.39
1314	K. F. Banks ...	London ...	24.5.39
1315	L. G. Jones ...	London ...	26.5.39
1316	B. P. Brannan ...	London ...	24.5.39
1317	A. T. Rodgers ...	London ...	24.5.39
1318	P. T. Billington ...	London ...	23.5.39
1319	A. H. Allinson ...	London ...	24.5.39
1320	D. J. Whitehead ...	London ...	27.5.39
1321	R. D. Baker ...	London ...	24.5.39
1322	H. A. Bond ...	London ...	26.5.39
1323	M. W. Curteis ...	London ...	22.5.39
1324	M. E. Caves ...	London ...	26.5.39
1325	E. A. Moss ...	London ...	26.5.39
1326	A. C. Howard ...	Derby and Lanes.	28.5.39
1327	L. Welch ...	London ...	7.6.39
1328	R. S. Davies ...	London ...	7.6.39
1329	D. S. Studholme ...	London ...	7.6.39
1330	H. F. S. Bowen ...	London ...	7.6.39
1331	R. H. Laud ...	London ...	7.6.39
1332	W. A. Foster ...	London ...	7.6.39
1333	F. K. Harvey ...	London ...	11.6.39
1334	G. Micklethwait ...	London ...	9.6.39
1335	Lt.-Col. T. D. Murray	Surrey ...	15.4.39
1336	K. B. Files ...	Yorkshire ...	31.5.39
1337	B. Sowerby ...	Midland ...	31.5.39
1338	P. L. Hicks ...	Derby and Lanes.	3.6.39
1339	R. J. Graham ...	Oxford ...	6.11.38
1340	H. D. Fraser ...	Oxford ...	7.5.39
1341	G. S. Aird ...	Yorkshire ...	20.11.38
1342	D. F. Godfrey-Faussett	Midland ...	3.6.39
1343	A. A. Pardoe ...	Midland ...	4.6.39
1344	C. Bouneville ...	London ...	11.6.39
1345	D. J. R. Gee ...	London ...	9.6.39
1346	F. A. Rickaby ...	Cambridge ...	23.5.39
1347	P. N. Richardson ...	Derby and Lanes.	25.6.39
1348	L. A. Harris ...	Yorkshire ...	15.6.39

"B" Certificates

No.	Name.	Club.	Date.
1301	V. C. Morris ...	Surrey ...	27.5.39
1264	F. Wright ...	Midland ...	28.5.39
1266	H. E. M. Hammick ...	Cambridge ...	9.5.39
1235	P. J. Torrie ...	Oxford ...	25.5.39
1310	L. S. Bates ...	London ...	27.5.39
1311	C. J. Keeble ...	London ...	24.5.39
1312	E. Veal ...	London ...	27.5.39
1313	A. F. C. Moss ...	London ...	24.5.39
1326	A. C. Howard ...	Derby and Lanes.	3.6.39
1327	L. Welch ...	London ...	10.6.39
1328	R. S. Davies ...	London ...	10.6.39
1329	D. S. Studholme ...	London ...	10.6.39
1330	H. F. S. Bowen ...	London ...	10.6.39
1331	R. H. Laud ...	London ...	10.6.39
1332	W. A. Foster ...	London ...	10.6.39
1335	Lt.-Col. T. D. Murray	Surrey ...	27.5.39
1336	K. B. Files ...	Yorkshire ...	2.6.39
1295	M. H. A. Woolcombe ...	Cambridge ...	22.5.39
1339	R. J. Graham ...	Oxford ...	22.1.39
1340	H. D. Fraser ...	Oxford ...	21.5.39
1341	G. S. Aird ...	Yorkshire ...	20.11.38
1047	W. G. G. Goodwin ...	Midland ...	4.6.39
1342	D. F. Godfrey-Faussett	Midland ...	4.6.39
1343	A. A. Pardoe ...	Midland ...	4.6.39
1345	D. J. R. Gee ...	London ...	11.6.39
1346	F. A. Rickaby ...	Cambridge ...	23.5.39

"C" Certificates

No.	Name	Club.	Date.
1229	E. R. Stafford ...	Southdown ...	28.5.39
1165	D. J. Samuel ...	Oxford ...	31.5.39
1327	L. Welch ...	London ...	10.6.39
1329	D. S. Studholme ...	London ...	11.6.39
1331	R. H. Laud ...	London ...	10.6.39
1335	Lt.-Col. T. D. Murray	Surrey ...	10.6.39
1301	V. C. Morris ...	Surrey ...	17.6.39
1062	E. Straus ...	Surrey ...	14.6.39
763	G. E. J. Reynolds ...	Surrey ...	14.6.39
1267	C. Annear ...	Surrey ...	14.6.39
1124	W. G. Kauppali ...	Oxford ...	11.6.39
1264	F. Wright ...	Midland ...	11.6.39
777	G. H. Lee ...	London ...	11.6.39
1092	R. E. H. Fender ...	London ...	11.6.39

The above gliding certificates, for which qualifying flights were made on the dates given, were granted by the Royal Aero Club in June.

"Silver C" Certificates

Two British "Silver C" certificates, dated June 22nd, have been received from the International Commission for the Study of Motorless Flight (Istus):—

British No.	Name.	Istus No.
51 ...	L. C. Withall ...	1278
52 ...	F. Charles ...	1279

The completed applications for four further British "Silver C's" have been sent in by the British Gliding Association on behalf of C. J. Wingfield, F. T. Gardiner, A. P. Pringle and G. H. Briggs. In addition the B.G.A. has evidence of completed tests from 25 other pilots, which are being held until the remaining tests are finished. It is to be hoped that the finishing process will soon be done, otherwise the 1939 figure for this country will be down on that for 1938, which was 20.

Glider Engineers' Certificates

The following Glider Engineers' Certificates of Competence have been issued by the Air Registration Board:—

No.	Name.	Club or Firm.	Date of Issue.
15	E. G. Sanguinetti ...	Kent Gliding Club	7.6.39
16	A. Archangelsky ...	Oxford Gliding Club	7.6.39

Altitude Records

The following National Gliding Height Records have been passed by the Committee of the Royal Aero Club:—

Noel McClean in GRUNAU BABY II, at Bank, Rigg, Kirkland, Cumberland, on June 22nd ...	10,350 ft.
Philip Wills in MINIMO, at Dunstable, on July 1st ...	14,170 ft.

News from the Clubs

London Gliding Club

The club is kept pretty busy with Air Defence Cadets in the second half of each month, and an instruction camp taking up most of the first half, leaving an occasional few days in between for the staff to recover, except in so far as ordinary club activities keep them busy.

The fleet of machines remains much the same, except for DAGLING replacements. The *TERN*, which has hung in the roof for nearly two years owing to its owner's absence, is reported to have been sold at last. Cooper's *VIKING*, which he took out to the Argentine just after Christmas, has been sold out there, though it was entered in the National Competitions in case he should have to bring it back. Sproule, Manning, Bucknell and Box, who now live in Hampshire, have been given the Dorset Club's engineless *AERONCA*, and intend putting an engine back into it. (Shame!) A Polish *KOMAR*, ordered by the club from Slingsby, and being built at his works, has not yet arrived. The new *GRUNAU BABY*, first used at the Leicester meeting at Easter, is very popular, and there is no doubt about the effectiveness of the increased alleron area. The *CAMEL* is having a new nose designed for it by Sproule.

Saturday, June 10th.—Stephenson arrived in the *BLUE GULL* from the Oxford Club, 2 hours 22 minutes after he had been launched there. The straight-line distance is 22 miles. As there was a fair wind from between N.W. and W.N.W., he must have made good use of the slopes of the Chilterns, though there are several gaps on the route which have to be crossed by other means. This is the first cross-country between the two clubs.

Sunday, June 11th.—Another club-to-club flight. Murray set off in his *BUSSARD* at 3.15 under a long cloud street directed from S.E. to N.W. He reached the Oxford Club and, without landing, made off back again to the London Club. Unfortunately the Ivinghoe gap was too wide to be crossed so late in the day, and he had to land at Dagnall, two miles short, after being in the air for 4 hours 15 minutes altogether.

Other cross-countries were: Greig in *BLUE GULL*, 32 miles to North Weald (R.A.F.); and Hiscox in *GULL*, 35 miles to Chigwell aerodrome. Wingfield found a 10 ft. per sec. thermal just N.W. of the club entrance, which took him to 1,000 ft. Dewsbury, getting up in RHÖNSPERBER to 4,600 ft. in a north wind at 4 p.m., toured the countryside.

Wright, being winched in *SCUD II*, which has an open hook, found himself being pulled down again because someone had driven a car across the cable just before the launch and picked it up. Eventually the ring came off his hook and left him so placed that he hit the hill while manoeuvring to land.

Hiscox has written down details of his flight which, he says, may be of some use to fellow-beginners; so here they are:—

Dunstable to Chigwell.

When I set off from Dunstable the intention was to make Gravesend. I failed, and landed at the Chigwell aerodrome of the Romford Flying Club.

With the wisdom of after the event, I think the goal flight might have been easy if I had thought a bit more and not been in such a hurry. The area of lift with which I went away was large and smooth and lifted me to 4,300 ft. before it had drifted over Watling Street. That was cloud base, and when I could only see downwards I set off S.E. at 50 m.p.h., "funking" the cloud. I have never yet found lift between Markyate and St. Albans, so tried Harpenden a bit off to the east. No luck there, but the sink was only a foot a second and I arrived at Hatfield aerodrome still at 3,000 ft. There I encountered a similar area of lift and was soon in the bottom of the cloud at just over 4,000 ft. Given a westerly wind it seems there is *always* lift behind that aerodrome: immediately east of a mansion with a lake in its grounds. Again I left on a S.E. course as soon as the *GULL* became enveloped in the cloud, and the rest of the flight was just one long glorious glide.

I am sure it was the same big cloud that came drifting over Chigwell half an hour or so after I had landed. Then I realised that you must not expect the Good Lord to present you with more than two big areas of lift in one afternoon. One must hang on to areas of lift like those I had bumped into. If you funk climbing within the cloud base, return perhaps 500 ft.



The line of cloud under (and in) which two pilots left the London Gliding Club on cross-country flights on July 23rd, photographed at 2.36 p.m. They are too far off to be visible, but other machines are seen slope-soaring over Dunstable Downs.

lower, climb up again, and repeat the process, drifting all the while with the wind. Don't leave the area until the lift gives out; you never know how long it will take to find some more. The bigger and smoother the areas of lift, the less frequent they are likely to be. That is the lesson I think I learned and hope to profit by.

D. G. HISCOX.

Monday, June 19th.—Wilbur, while doing 5 hrs. 25 mins. as "Silver C" duration test, took a *GRUNAU* up to cloud base at 3,800 ft., but, alas, had no barograph with him. Simultaneously Yates took the *FALCON I* to about 2,500 ft. without either a variometer or an altimeter. He was at this height, more or less, for an hour or so during a flight which lasted 4½ hours. Then the wind died on him.

Saturday, July 1st.—Briggs, like Wingfield, took his *KITE* to the Oxford Club; he tried to get from there to Dunstable and managed 12½ miles to Halton—just over half the distance.

A large contingent from the Royal Meteorological Society decided to visit the club for the Annual Summer Outing, and were lucky to find a good soaring wind and instability up to great heights. A local architects' society likewise spent the afternoon inspecting the club.

An Altitude Record.

Wills celebrated the occasion by putting up a new British height record. He was launched in *MINIMOX* at 3.30 and made for a huge and growing mass of cumulus to the N.E. At 5.45 he landed, with the help of his wheel brake, five yards from the entrance to the clubhouse enclosure, just in time for tea. The two barographs were at once seized upon; in one of them the pen had gone off the top, but the other showed a climb of over 14,000 ft. The meteorologists had by now gone away to tea and talk at their secretary's house at Dagnall, but they heard about it all right, with the result that they are now taking the unprecedented step of putting an article by a gliding man into the *Quarterly Journal* of the Royal Meteorological Society.

Of the total climb, 10,400 ft. had been done inside the cloud during 15 minutes, and at one period the *MINIMOX* went up just 3,000 ft. in a minute. Wills came out when things began to get rough, 1,500 ft. below the top of the cloud. He was then over St. Albans. A lucky change of wind to the north enabled him to slope-soar back from Luton, where he had got down to 1,500 ft., and reach the club ground with 200 ft. in hand.

Stephenson, at the same time, took the *BLUE GULL* into a similar cloud about a mile to the west, but the lift gave out when he had climbed just over 7,000 ft. He landed in a field near the Plough Inn, beside the car dump where the bones of the Editorial Austin now lie.

Sunday, July 23rd.—Good soaring, and two cross-countries. Hiscox took his GULL to Widdington, which we can't find on the map; and Briggs went 24 miles in his blue KIRBY KITE and landed near Royston, getting up to cloud base, at 4,000 ft., on the way.

Annual General Meeting.

This was held on Saturday, May 29th, the business meeting being in the clubhouse and the dinner in Whipsnade Zoo.

The Chairman, J. S. Fox, in his report, gave the membership of the club as 381, of which 344 were flying members and 77 (372) associate members. Gliding certificates taken during 1938 were 95 "A," 63 "B," and 45 "C" (total 203), 12 "Silver C" and one "Gold C"—the first in Britain and the third in the world (by P. A. Wills). Flying time for that year was 1,584 hours. He outlines the progress of the club from the time, nine years ago, when its assets were one bungy and two broken primaries. The National Contests were held for the first time at Dunstable, and aero-towing was introduced for the first time at such contests.

The accounts showed an increase over the previous year of £154 on flying money receipts, and of £304 on annual subscriptions and entrance fees. There was a loss of £205 on the National Contest expenses, and but for this there would have been a balance of income of £44. Repairs, renewals and maintenance showed an increase in expenditure of £191, and insurance also cost the club considerably more than in the previous year.

The club had now been reorganised into two holding companies: the L.G.C. Proprietary, which owned the land and premises, and London Sailplanes, Ltd., which owned the flying equipment, including cars and winches. This would avoid the contingency of any claim against the club depriving it of all its assets. Major H. E. Petre was thanked for the work he had done in arranging this transformation, which is purely a legal one.

There was some discussion on the question of arranging a joint subscription with neighbouring clubs, as many members have recently been taking their machines to Reigate, Duxford and Aston Rowant when soaring conditions there have been better than at Dunstable, and full membership of several clubs comes rather expensive. The Committee were going to try to work out such a scheme in conjunction with other clubs, but it was unlikely that it could be put into operation during the present financial year.

Awards.—The Derry Trophy, for voluntary work on behalf of the club, was given to J. R. Ashwell-Cooke for his hard work in organising the National Contest meeting. The Descouter Cup was awarded to A. Ivanoff and J. S. Sproule for their design of the CAMEL. P. A. Wills received the Dent Cup for the third time in succession, for his British altitude record, of 10,080 ft. set up on June 5th, 1938. G. H. Stephenson was congratulated on his flight to France, and it was announced that the Committee had refunded to him all his expenses in connection with the flight. P. B. N. Davis was congratulated on his altitude flight of 11,600 ft. (which his barograph failed to record) last year.

Committee.—The nominations to the committee were equal to the number of vacancies, and the 1939 Committee consists of:—J. R. Ashwell-Cooke, H. E. Bolton, J. S. Fox, D. G. Hiscox, A. W. Lacey, C. Nicholson, H. E. Petre, C. L. Ruffle, P. A. Wills, E. A. S. Barnard and L. Wright. Arthur Sweet was re-elected Secretary-Treasurer.

Summary of Flying.

Week ending:	Days of Flying	Ground-hops	Timed Flights	Flying Time hrs. mins.
July 2nd ...	5	547	145	83 22
July 9th ...	4	53	87	42 31
July 16th ...	3	193	21	1 49
July 23rd ...	6	913	149	46 5

Totals since January 1st: 10,902 launches, 709 hrs. 51 mins. flying time.

Certificate Flights.

June 28th.—Frith, "A"; Nightingale, "A"; Holton, "A"; Hawker, "A"; Ives, "A"; Ball, "A"; Clauson, "A"; Hawker, "A"; Waghorn, part "Silver C" (duration).

June 30th.—Leadon, "A."

July 1st.—Lyons, "A"; Wells, "A"; Bowman, "A"; Martin, "A"; Smith, "A"; Barnwell, "A"; Smith, "B"; Roake, "B"; Wells, "A"; Lee, part "Silver C" (duration).

July 9th.—Buckley, "B"; Briggs, part "Silver C" (duration).

July 22nd.—Holman, "A"; Harvey, "B"; Bournville, "B."

July 23rd.—Baker, "A"; Miss Hobbs, "A"; Buchanan, "A."

* Air Defence Cadets.

Southdown Gliding Club

Friday, June 23rd.—PRIMARY starts hopping again after repairs to a wing and the fuselage.

Sunday, June 25th.—Two prolonged flights of hill scraping in the GRUNAU and KIRBY KITE to the bottom, finishing with a Shandy for all retrievers at the "local."

Wednesday, June 28th.—Wind S.W. Refell took the GRUNAU to Erringham. He was launched from the top of the hill, and after half-an-hour's flight landed in a long field at the bottom. (Normally we land on top and the other side of the road.) The GRUNAU was carried to an adjoining field up the hill for more flights. This field forms a small ridge and an excellent field for bungy launching. The following Sunday, Stevens took his KIRBY KITE to try out these newly discovered fields. Unfortunately he overshot when landing, and slightly damaged his machine on the side of the hill.

Saturday, July 1st.—N.W. to W. wind, 10 m.p.h.; cloudy. Hopes of knocking off a couple of "Silver C" cross countries did not materialise. In a short hail storm that passed over the Dyke, an absolute calm was noticed by those up, which lasted about four minutes. After two and a half hours of flying in the GRUNAU without a cushion, Grantham was rather indifferent as to going up again, despite the very encouraging observation of rapidly forming clouds two miles to the north.

Sunday, July 2nd.—Gusty until late in the afternoon. Passenger flying in the TWO-SEATER down the valley.

A New Winch.

Sunday, July 9th.—The new winch arrived, having been made by Sam Youles. He finds very little time to glide and has to date only had seven flights in a glider. These include flights for his "A," "B," "C" and "Silver C" five hours. There are two separate Chrysler six-cylinder engines, and the driving position for the chassis has been made uncomfortable, to curb the driver's desire to drive fast over rough ground. The winch engine includes an electric starter, hand and foot brake, oil pressure gauge, a meter, and a very neat gadget to prevent the drum unwinding after taking up the slack before a launch.

The TWO-SEATER took up those nearly ready for their "A" on winch launches. The PRIMARY continued to hop; while unattended during the afternoon it was seen to be gently blown over backwards, only damaging one rib in the tailplane.

Sunday, July 16th.—Billness, Bushby, Bridgen, and Woodley got their "A's." The TWO-SEATER took up many passengers during the afternoon.

Channel Gliding Club

The proposed Canterbury Gliding Club has met with a serious setback in the form of the withdrawal of permission to use the only suitable site for primary training in the district. Those interested in the formation of the new club have decided to join forces with the Channel Gliding Club and help to get this old club more firmly established than ever.

The Channel Gliding Club is fortunate to enjoy the use of a fine primary and soaring site, situated on the hills overlooking Folkestone, which is the property of Captain Turner, a founder member of the club and the owner of a PROFESSOR sailplane. The club has put up excellent hangar accommodation of 3,300 square feet extent, with a club room of some 300 square feet adjoining.

Mr. H. Chater, who obtained his "A," "B," and "C" with the club, and is now an instructor at Bokesbourne aerodrome, is fitting his "Avro 504K" with a towing attachment for aero-towing the club machines, and the club's 30-00 Vauxhall, which has previously been used for auto-towing, is shortly to be converted into a winch. The B.A.C.IV, now entirely rebuilt with enlarged rudder and ailerons, is as good as new and the PROFESSOR is next on the list for a "spring clean."

An intensive recruiting campaign is now being embarked upon, and Mr. Chater has very sportingly offered to present the club with a Cobb-Slater variometer when twenty new flying members have been enrolled.

Readers of THE SAILPLANE AND GLIDER who reside in the south-east of England and who would like to see a club in this area, able to offer all that is best in this great sport, are earnestly invited to join the club and so make the work a success. The subscription is £2 per annum, and further particulars of membership may be obtained from the Hon. Sec., Mr. F. G. Whitnall, 16, High Street, Cheriton, Folkestone.

Yorkshire Gliding Club

July.—Higson and Lavington brought their KITE and remained for a week, during which time they put 6 hours 20 minutes flying time. Lavington flew to Comondale (21½ miles) with a maximum height of 3,500 ft., and both made thermal flights over 2,000 ft. on various occasions.

Air Defence Cadets.

N. H. Sharpe, Wordsworth and other qualified members put in good work travelling long distances in the evenings to give dual instructions to the Air Defence Cadets in training at Welburn. These were brought up to Sutton Bank in suitable parties for this purpose and were very enthusiastic. Most of them showed great aptitude. Out of the last camp (concluded week ending July 29th) all cadets qualified for "A" certificates and flew excellently. During the first week of August we are giving Cadet Officers training and holding a small instruction course in place of the advanced course which had to be cancelled.

On July 9th W. T. Fisher made his five hours' duration towards the "Silver C," and Terence Horsley was promoted to fly the KITE; total time for the day, 11 hours 19 minutes.

The team from the National Competitions returned on July 16th highly appreciative of the hospitality of the Derbyshire and Lancashire Club, and having gained some valuable experience and one Daily Prize.

July 23rd was a good hill-soaring day with a rough west wind in the early part which gradually dropped to 10 m.p.h. in the evening—suitable for two "C" certificates: Watmough and Martin in the HOLS. Warren did the five hours towards his "Silver C," and likewise R. C. Pick. Pick thereby (subject to confirmation) completes his "Silver C," and is to be congratulated on this achievement, for which he has worked very hard indeed. Total time for the day, 23 hours 12 minutes.

The STEDMAN two-seater has done a good deal of flying this month—there has been so little soaring weather prior to the present month that this machine has not appeared before. The FALCON III, flown by Shaw, Sharpe and Wordsworth, was used for dual instruction, and has put in a considerable number of hours.

Our new ground engineer, A. Archangelsky, formerly with Oxford Club, has commenced duties at the club, and we are now able to restore mid-week facilities in full. No doubt distant members will make a note of this; also intending visitors.

Instruction Course No. 1 commences on August 13th; also our last Cadet camp at Welburn.

Durham County Branch.

July.—A fair number of good days' flying, especially as it is the holiday period.

At the moment it looks as if we would lose our site at Whitburn as the War Office are evidently going to erect buildings on it permanently. However, we can only hope that arrangements can be made for us to retain the field and for the buildings to be put on an alternative site.

Oxford University and City Gliding Club

Although everyone seems to have been busy there is not a great deal of achievement to report. Wind has blown with exasperating persistence off the hill and rain has damped some of our ardour. Nevertheless three members have gained both "A" and "B" certificates in the last month, Cyril Burchardt, A. W. F. Erskine and M. A. R. Sutherland. These are all power pilots, Sutherland in the Civil Air Guard, Burchardt and Erskine in University Air Squadrons London and Oxford. Erskine, who stayed in Oxford for a fortnight after the end of term specially to work for his gliding certificates, had to struggle for them through the most atrocious weather and finally gained his "B" in a near-gale. Brian Bell from Harwell Aerodrome also gained his "A" and A. L. C. Chalk, a power pilot from London who is camping in a field adjoining the flying ground and taking a short course, qualified for his "A" on July 21st. J. P. M. Wilkes and W. H. Wilson, our veteran pilot, have qualified for "B."

All members join in congratulations to Professor H. H. Price on gaining his "C," for he is a Founder Member and has done a great deal to help the Club. Kronfeld considers that his flying is "a typical example of steady and consistent progress."

Eight visiting machines, with fifteen pilots, spent the week-end of June 24th–25th at Beacon Hill, but the climate was unhelpful

and only P. A. Wills got away, and landed on Heston Aerodrome. The record number of sixty-eight starts was made on Sunday.

During the week-end of July 1st–2nd, two visiting pilots made qualifying flights for their "Silver C" from our ground: F. T. Gardiner of the Cambridge Club, who did his five hours duration along the Chiltern ridge, reaching over 3,000 feet in the course of it, and C. J. Wingfield, who covered about thirty-nine miles and landed near Reigate. Joan Burchardt, who is now helping to instruct the Air Cadets, soared for an hour in the KADET and thus qualified to fly the KITE, which has now returned from the convalescence necessitated by its tree-top adventures.

We have a new full-time ground engineer, Miss Robertson, who has now been working with us for three weeks. She was trained at Witney Aeronautical College and says that she had no idea that work without engines could be so fascinating. (Apparently she does not consider that the contraptions which—sometimes—make our retrieving cars go are engines.) We have had a groundsman at work levelling the field and most of the worst bumps have now disappeared, so that it is almost a pleasure to drive a retrieving car.

Air Defence Cadets.

On Monday, July 17th, our first contingent of twenty Air Cadets arrived, from Chingford and Croydon squadrons, in the charge of Flight-Lieutenant Ackers and Pilot-Officer Powell. Some of them came by train to Aston Rowant station, just below Beacon Hill, but unfortunately we did not at the moment of their arrival stage one of our famous railway hold-ups by dropping the cable across the line, which would have enabled them to step out right on to the flying ground. Wing-Commander Heath, Commanding Officer of the Chingford squadron, came to see them installed.

They started work on Tuesday morning with instruction in handling machines, parking them both with screw pickets and with sandbags, and flagging. They started ground trundles in the afternoon, but only got twenty-three starts before rain put an end to outdoor activity. Wednesday was spent in alternate flying and drying, but they got sixty-nine starts and also had a lecture from Miss Robertson on the rigging of aircraft. On Thursday there was very little flying (only nineteen starts) and much drying, and a visit to Watlington cinema.

We had heard rather lurid tales of Air Cadets elsewhere, and certainly our retrieving cars seem a little jaded, but Kronfeld reports that the boys are a pleasant surprise and are very keen and hard-working. They have carried on through pouring rain and not wanted to give up until soaked through, and in spite of the weather they seem to be making good progress. We all appreciate the efficiency of their officers.

Oxford to Reigate.

Saturday, July 1st, at Beacon Hill—the answer to the maiden's prayer: magnificent cumuli and a good N.W. soaring wind. I was given much helpful advice by Kronfeld, who emphasized that there was no hurry to be off, as I ought to wait until a layer of high stratus had moved over—and other pilots, including Humphries, who arrived in time to sign and seal my barograph with three ha'penny stamps!

I declared Reigate as my goal, and was launched at 12.30, just as the high stratus was clearing over, followed by 30 minutes hill-soaring, during which I got damn-all. Then a small thermal came, followed by the perfect thermal of the summer from 500 feet to 3,500 feet, including 2,400 feet in four minutes—average of 10 feet (point A on barogram). It was terrific, but was under a clear patch of sky with no cloud within reach. Luckily I remembered the high stratus, and returned to the hill in 10 feet per sec. down-draught with only 1,200 feet left.

At 14.00 hours I got a steady but slowish thermal under a street extending about five miles up and down wind, which took me up well. I flew out beyond the Lambert Arms, rising steadily, nearly reached cloud base, and decided it was time to go (point B). Having roared in my cockpit while on the hill, I was now very cold—temperature about 48° F. I flew straight down wind over Stokenchurch and other pretty little villages, leaving Wycombe on my left, and the great bend of the Thames below Henley on my right. Flying cross-wind to Marlow I sank from 3,900 feet to 3,300 feet with all the panic that the sight of the red ball gives the novice on a cross-country; I lit a cigarette, and flew to a good cloud, sinking rapidly to 2,900 feet—Horror!

Marlow Mere then came up to expectations, and as I circled up, drifting across to Maidenhead, I thought how much easier it was then when I rowed 27 miles from Eton to Marlow and

back five years ago. I arrived at Maidenhead at 4,500 feet (point D, 14.30 hours) and flew down the Thames to Eton, taking far more interest in the river below than in Messrs. Slater and Cobb; so I arrived at only 3,500 feet and found the Eton and Winchester cricket match going on. I determined that if I was badly let down I would land on it, as the circle of chairs looked very inviting for a spot-landing!

A few patches of lift over Windsor (but quite the best possible view of the Castle)—and on to Staines (point E), where a good cloud took me back to its base again at 4,500 feet (point F). I thought of going into it, but it died on me and the red ball remained unshakably obstreperous. I had by then (15.00 hours) caught up the high stratus and there was damn-all ahead except Brooklands, which I didn't think I could reach and which was only 49 kilometres away. But I did reach it, with 1,900 feet, so went straight over the middle of it (watching a "Moth Minor" take off) and headed for the fields beyond the woods to the south-east.

"Silver C" distance at last—after 13 months of trying! It seemed a pity to chuck away my remaining 1,300 feet, with plenty of landing fields about—and then the miracle happened. With no cumulus at all, and under a 10/10 high overcast sky, the red ball got bored over Church Cobham, and the green ball showed at least one foot per minute rise. The penalty for landing with the green ball showing might be "Beer all round for the B.G.A.!" So I carried on, doing gentle zig-zags to try and locate the centre of the lift. But it was merely very gently rising air off the reverse slope of the North Downs (point G), and nevertheless I sank slowly.

At Great Bookham it was obvious that I would not get over the North Downs, so I went through the Dorking Gap barely level with the top of Box Hill (700 feet above sea level). Round the roundabout at Dorking (to avoid the down-draught off Box Hill) and down the main road towards Reigate. At the Barley Mow I felt it was time to organize a landing before I merely flew into the ground; but a down-draught of 15 feet per sec. over a sandpit while making an approach made me turn out of it down wind; and I carried this crazy 16 mile glide from Staines to its logical conclusion by landing down-wind, without an approach, in a field of standing oats. (Thank God for sporting farmers!)

Distance 42 miles. Thank you, Oxford Club.

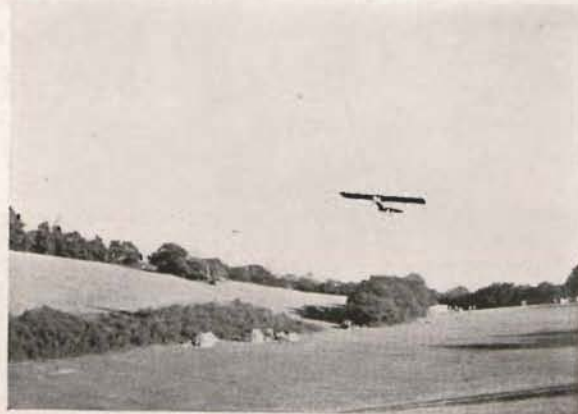
C. J. WINGFIELD

Standard Telephones & Cables, Ltd.

July 1st.—A temporary move was made to Austin Lodge for "A" licence training, the Dickson having recovered from a bent king-post sustained on June 10th.

Heningham started the ball rolling with a flight of 15 secs. off the cable. A second attempt raised the figure to 25 secs., and a final attempt from a launch of 120 feet brought off our first "A" with a glide of 38 secs. Shrewsbury followed suit with 25 secs. on his first attempt, and gained his "A" on his second attempt with 31 secs.

Next day four more members continued with "A" training flights and showed good promise of early certificates.



The "Dickson" glider in flight at The Standard Telephones & Cables Company's gliding site near Shoreham, Kent.

(Courtesy Standard Telephones & Cables Co. Magazine.)

Midland Gliding Club

Sunday, May 14th.—North-west wind blew intermittently, not tempting members to fly farther afield than over Myndtown.

Saturday, May 20th.—The Club had the privilege of assisting at the Air Display at Ternhill Aerodrome. Their item on the programme, which was limited to ten minutes, was a flight given by Miss Amy Johnson, who was launched by the winch to a height of 600 feet but successfully looped and stall-turned from that small height and very satisfactorily thrilled the crowd.

Sunday, May 21st.—Cecil Reilly made the only flight before the wind dropped.

Whitsuntide Camp.

The Camp started with a favourable wind on Saturday, May 27th, which unfortunately died away about tea time. On Sunday, the east wind prevented any slope-soaring. On Monday and Tuesday, several interesting winch flights were made, despite the east wind, and Hubert Wynne succeeded in soaring for 5 minutes in the GRUNAU above the East Slope. Theo Testar successfully kept aloft in the KITE. Most of the time was devoted to secondary training flights.

Saturday, June 16th.—A north-west wind of even strength provided slope-soaring for all members.

Sunday, June 17th.—The north-west wind continued and provided a superlative week-end for all who attended. Lift was reported to be satisfactory at least a mile out from the Mynd.

Amy Johnson attained a height of 4,000 feet by utilising cloud lift, and Gerry Edwards later reached the height of 4,500 feet by the same method.

Cecil Reilly travelled off in the TWO-SEATER with a passenger until he was almost out of sight over Bishops Castle. This tempted several other pilots to follow the cloud street in the same direction.

Sunday, June 18th.—The Club had the pleasure of entertaining the Scientific Society to tea at the Mynd. Learned professors of that Society expressed their great delight after flights in the TWO-SEATER. Robson demonstrated how to fly gracefully down to the valley below in the KITE, but later on retrieved his honour by a beautiful flight in the same machine. Amy Johnson gave a hair-raising aerobatic display, to the delight of the Scientific Society members.

Air Defence Cadets.

Saturday, July 1st.—Twenty Cadets arrived in cars and lorries from Church Stretton Station, and started their Camp well by having seven flights in the TWO-SEATER before the machine was withdrawn for the day. The Cadets were enjoying themselves by balancing in the two primaries on the edge.

Amy Johnson soared for 21 hours on one flight.

Cecil Reilly, who was piloting the Cadets, succeeded in landing the TWO-SEATER five times on the same spot at the launching position.

Sunday, July 2nd.—A strong north-west wind was blowing; conditions bumpy, but good thermals reported. Gerry Edwards attained 2,000 feet and flew blind for a quarter of an hour in cloud in his GULL.

Manning, a recently joined London member, flew the TUTOR, but not knowing the geography of the land, came to earth three miles south of the Hangar. Houghton just failed to hold the KADET up in his first attempt at his "C."

FALCON II was flown by Testar, Riley, Cuss, and Manning. Barnes turned out with great aplomb in the H.17.

Scottish Gliding Union

The equipment of the Bishop Hill site is proceeding rapidly. The club house at East Feal Lane seats 40 for meals, and the dormitory sleeps 20. Mr. Rogerson has directed the work, assisted by his wife and many club members. Since many members are now spending their week-ends at the club house, gliding continues till late on Saturday night and starts as early as 6 a.m. on Sunday morning. Radok, a German pilot, now assists with instruction; while making his first flight here he found the going so comfortable that he stayed up three hours. On another occasion, in a N.E. wind, he had been up some time, and was but 100 ft. from the bottom when a thermal lifted him right back to the hilltop. He tried unsuccessfully to repeat the performance and landed in the gorse at the bottom.

Two new sailplanes have arrived at the site: an H-17 and Tommy Graham's newly-constructed GRAMPAN.

Hull Gliding Club

Our gliding site has been changed from Heden Airport to Swine, E. Yorks., about 10 miles from the City centre, and we now launch by winch.

We started at our new site on May 7th with our PRIMARY and Cammell's KASSEL two-seater, which he has kindly made available to club members.

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"Gosh! What a catapult!"

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Secretary:—L. A. Alderson, "Malham," 32, Wensley Green, Chapel Allerton, Leeds 7. Primary training and soaring. Flying ground, Sutton Bank, between Thirsk and Helmsley, Yorkshire. Clubhouse and hangar. (Tel.: Sutton under White-stone Cliff 219.) Resident Steward; full residential facilities. Full range of machines for members' use. Branch Clubs: Co. DURHAM (Sunderland) and WEST RIDING (Huddersfield). Regular Instruction Courses for Beginners and Advanced Pilots.

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(Affiliated to the B.G.A.)

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