SAILPLANE AND GLIDER

SEPTEMBER
1937
Vol. 8 No. 9

Published Monthly
PRICE - - 1/-
Editorial Offices:
13, Victoria St., S.W.1

Official Organ of the British Gliding Association

EDITED BY ALAN E. SLATER



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Vol. 8 No. 9 SEPTEMBER, 1937 Published Monthly—Price 1/-

The National Competitions

THIS year's soaring competitions, which concluded at Bradwell Edge, Derbyshire, on September 5th, have put all previous events of the kind in the shade. The amount of cross-country flying done has far exceeded anything before recorded. For so many pilots to have attempted such flights—many of them for the first time—the general standard of club flying must have risen enormously during the past year. But this alone was not enough; the added incentive of allotting points for all performances above certain minima was evidently one of the chief causes of the success of the meeting. "There is nothing like competition flying for improving one's style" is what one of the German competitors said at the recent international meeting, and pilots of all nations proved it to be true. It has been proved again this month in Derbyshire.

In this issue of THE SAILPLANE AND GLIDER we have room for little more than a presentation of the flying and its results in tabular form. A detailed description of the cross-country flying will have to wait till next month, when we shall be able to include a map and several photographs of the clouds actually used by the cross-country pilots.

Placing of Machines

Order.	*No.*	*Machine.*	*Points.*
1st	1	HJORDIS	477
2nd	8	RHÖNSPERBER	408
3rd	6	K. Lingford's KIRBY KITE ...	278½
4th	2	RHÖNBUSSARD	239
5th	14	Cambridge KIRBY KITE	212½
6th	4	CAMBRIDGE II	204
7th	12	Newcastle KIRBY KITE	181
8th	16	C. Kaye's KIRBY KITE	158½
9th	18	P. Brown's FALCON I	158
10th	19	White GRUNAU BABY II	145
11th	5	SCUD II	102
12th	22	F. Slingsby's KIRBY KITE ...	93
13th	3	TERN	83
14th	10	CONDOR	78
15th	7	Derby and Lancs. GRUNAU BABY	37
16th	9	H.17	35½
17th	23	CRESTED WREN	19
18th	24	D. G. Hiscox's KIRBY KITE ...	10
19th	15	F. Coleman's GRUNAU BABY ...	5½

A full list of machines and pilots entered is given on the next page.

Summary of Results

There were 238 launches, leading to an aggregate flying time of 292 hours. This gives an average duration of about 1¼ hours per flight.

Cross-country flights were 43 in number, with an aggregate distance of 1,489 miles, giving an average distance of 35 miles per flight. Twenty-six pilots contributed to this total.

Twelve pilots completed their "Silver C" tests during the meeting, thus raising the total number of British "Silver C" pilots from 14 to 26. They were: L. R. Robertson, G. M. Thompson, Mrs. R. Price, S. C. O'Grady, R. M. Smart, K. Lingford, J. P. Dewsbery, K. W. Turner, J. E. Simpson, G. A. Little, J. V. Rushton, and E. J. Furlong.

Awards and Prizes

Open Championship.—No. 1, HJORDIS; pilot: P. A. Wills. 477 points.

Individual Contest Prize.—No. 1, HJORDIS; pilot: P. A. Wills. 477 points.

Open Team Prize.—No. 6, KIRBY KITE; pilots: K. Lingford and J. E. Simpson. 278½ points.

Club Team Prize.—No. 8, RHÖNSPERBER; pilots: J. P. Dewsbery, C. Nicholson and R. P. Cooper. 408 points.

Aggregate Duration Prize.—No. 2, RHÖNBUSSARD; pilots: E. Swale, L. R. Robertson and G. Shepard. 20 hours 35 minutes.

Altitude Prize.—No. 5, SCUD II; pilot: P. B. N. Davis. 5,100 feet.

Distance Prize.—No. 2, RHÖNSPERBER; pilot: J. P. Dewsbery. 85 miles to Flamborough Head.

Manio Cup.—For best goal flight. No. 1, HJORDIS; pilot: P. A. Wills. Goal flight to North Coats Aerodrome. 75 miles.

Volk Cup.—For longest duration flight during past year. J. V. Rushton. Eight hours at Midland Gliding Club, July 24th.

Wakefield Cup.—For longest distance flight during past year. P. A. Wills. Dunstable to Dover, 95 miles, on August 15th.

De Havilland Cup.—For greatest height during past year. Not awarded. (Previous performance not beaten.)



Competitors at the 1937 National Soaring Meeting, searching for lift under some promising-looking clouds.

List of Machines

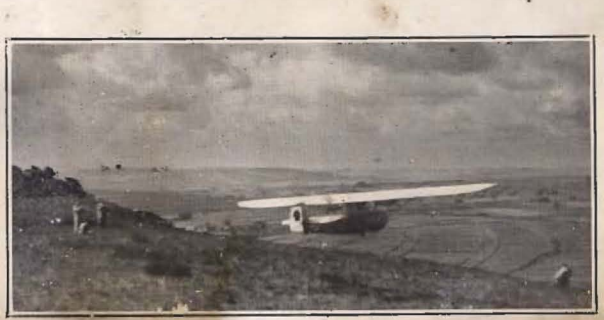
No.	*Type.*	*Class.*	*Pilots.*	*Club.*
1.	HJORDIS	A ...	P. A. Wills	London
2.	RHÖNBUSSARD ...	A ...	E. Swale	Derby & Lancs.
			G. Shepard	,,
			L. R. Robertson	,,
3.	TERN	A ...	G. A. Little	Southdown
4.	CAMBRIDGE II ...	B ...	R. S. Rattray	London
			E. J. Furlong	,,
5.	SCUD II	B ...	P. B. N. Davis	London
6.	KIRBY KITE ...	B ...	K. Lingford	Cambridge Univ.
			J. E. Simpson	,,
7.	GRUNAU BABY II...	B ...	D. Upton	Derby & Lancs.
			G. M. Thompson	,,
			H. Booth	,,
			S. Dickson	,,
8.	RHÖNSPERBER ...	A ...	J. P. Dewsbery	London
			R. P. Cooper	,,
			C. Nicholson	,,
9.	H.17	B ...	M. F. Barnes	Midland
			B. H. T. Olver	,,
			W. G. Edwards	,,
10.	CONDOR	A ...	E. Thomas	Derby & Lancs.
			A. L. Slater	,,
			G. O. Smith	,,
			R. G. Robertson	,,
11.	NACELLED DAGLING	B ...	S. Dickson	Derby & Lancs.
12.	KIRBY KITE ...	B ...	S. C. O'Grady	Newcastle
			R. M. Smart	,,
			M. S. Roberts	,,
14.	KIRBY KITE ...	B ...	K. W. Turner	Cambridge Univ.
			J. E. Simpson	,,
15.	GRUNAU BABY II...	B ...	F. S. Coleman	Derby & Lancs.
16.	KIRBY KITE ...	B ...	C. A. Kaye	Derby & Lancs.
			A. L. Slater	,,
			A. Davies	,,
17.	GOLDEN WREN ...	B ...	G. O. Smith	Derby & Lancs.
			A. L. Slater	,,
			R. G. Robertson	,,
18.	FALCON I	B ...	P. Brown	Derby & Lancs.
			B. Thomas	,,
19.	GRUNAU BABY II...	B ...	H. C. Wynne	Midland
			P. G. Everall	,,
			J. V. Rushton	,,
20.	GRUNAU BABY II...	B ...	A. H. Reffell	Southdown
21.	KIRBY KADET II ...	B ...	A. & C. Verity	Derby & Lancs.
			A. Goodfellow	,,
22.	KIRBY KITE ...	B ...	Mrs. Price	London
			R. F. Stedman	Yorkshire
			F. N. Slingsby	,,
23.	CRESTED WREN ...	B ...	L. C. Withall	London
24.	KIRBY KITE ...	B ...	D. G. O. Hiscox	London

Although the competitions did not start until Sunday, August 29th, large numbers of people turned up the day before, including the party of Germans who had been attending the Anglo-German Camp at Dunstable for the past fortnight, who came by motor coach. Three more Germans arrived by air: Hanna Reitsch in her cabin aeroplane, and Wolf Hirth in his "Klemm" towing Eva Schmidt in the two-seater MINIMOA. These were the first aeroplanes ever to land on, and take off from, the club site, as the owner of the land does not usually allow aeroplanes on it at all—in fact, two uninvited power pilots who gate-crashed later in the week were requested to leave at once.

There were some practice flights on the 28th, and thermals were in evidence, Rushton getting one over the winch which sustained him for 11 minutes. On another occasion a cylinder-shaped mass of circling rooks showed where a thermal was coming up out of the valley; but no one was ready for a launch at the time.

Next day, however, soaring birds were made use of to better effect; Rattray, ready to start, received a message from the winch, by field telephone, that three gulls were circling overhead; he was launched at once on the 3,500 foot cable, and, although he didn't see the birds, he caught their thermal and went up to 3,600 feet, winning the Daily Prize.

On this, the first competition day, several people got thermals after unhitching from the cable at about 800



The "Tiddler" (H-17 type) taking off from Bradwell Edge.

feet. The most surprising flight was that by Philip Brown; he went from the winch cable up to cloud base in the FALCON, which is classed as a "secondary training machine."

Two pilots tried to get to Blackpool against a light wind, in an attempt on the *Daily Dispatch's* £100 prize, but the thermals only extended over a small part of the necessary 65-mile journey.

Monday was a blank day, with the site in cloud and rain. But a delightful entertainment was arranged in the evening at the cinema down at Tideswell, where a programme was given consisting entirely of gliding films. First we had "Plane Sailing"; then the American film "Air Hoppers," which was a riot from beginning to end. Then Herr Hirth, having been unable to take off yet for Germany, showed his collection too, including pictures taken from a strut of a GRUNAU primary whilst being looped.

On Tuesday morning Little arrived with his TERN, having left Brighton the previous afternoon and driven



R. P. Cooper, who was launched at 7.24, 6.40 and 6.55 on three successive mornings, is here seen taking nourishment before one of these early flights. With him are B. A. G. Meads (left), J. P. Dewsbery and Peter Goodfellow (right).

all night—making this the first British gliding meeting at which all the entries have turned up. Three days later he had qualified for his "Silver C," having done all three tests in two consecutive days.

In the afternoon the weather cleared at last, and a strengthening of the S.S.W. wind enabled some soaring to be done, while the German pilots finally got away. The "Klemm" and MINIMOA, joined by cable, departed over Eyam Edge where a number of machines were soaring in a bunch; some bright Press correspondent hit on the idea of calling this "an escort of gliders as far as Eyam." The daily prize, which was for duration, was won by Smart, of the Newcastle Club, with a four-hour flight.

It was on this day that the club teams contest began to provide excitement, for at the end of the day four clubs ran each other very close; the Newcastle Club having 22 points, the Cambridge 21, and the Derbyshire and Lancashire, and the Midland Clubs 20 points each.

The London Club, on whose behalf the RHÖNSPERBER had been entered, changed all this when Cooper got into the air soon after seven next morning and proceeded to win 32 points for his team by staying up for over five hours in very rough conditions with the cloud base only just above the hill-top. Half-way through his flight, when there was a little more room between the clouds and Eyam Edge, the TIDDLER (H-17) was allowed up too. It was flung up and down like the proverbial cork; in fact the behaviour of the two machines reminded one of "Dignity and Impudence," though, according to Cooper, the RHÖNSPERBER'S flight felt far from dignified, whatever it may have looked like from a distance.

In the afternoon the wind veered, and about 15 machines soared together over Bradwell Edge. Among these, L. R. Robertson stayed up for 7½ hours and brought the RHÖNBUSSARD'S points up to 89½, thus putting the Derbyshire and Lancashire Club in the lead for the club teams prize.

The total flying time for Wednesday, 62 hours 8½ minutes, was a record for a single club site in one day, but only until it was eclipsed the following day, when 66 hours 26½ minutes were done.

Thursday, Friday, and Saturday were all cross-country days, the total distances for each day amounting to 670, 481, and 317 miles respectively. How these prodigious totals were achieved will have to be described next month. There was a final day of non-thermal flying in a very fierce west wind, during which the H-17 was unfortunately damaged by getting into the downward eddy behind the lip of the hill.

Finally, mention must be made of the hot-pot supper and entertainment provided at the Marquis of Granby on the final Saturday night, when Dr. Du Garde Peach showed his films of this and previous meetings at the site, and I. G. F. Harris gave a brilliant "Annual Report of the Higher Winchem Gliding Club," assisted by John Noble and some weird and wonderful scientific apparatus.

During the final week-end the site was visited by the Engineering Section of the British Association meeting at Nottingham, whose president, Sir Alexander Gibb, took a ride in the two-seater; and by three eminent meteorologists: Professor Brunt (B.G.A. Chairman), Dr. Whipple, and Dr. Karl O. Lange, one of the original German pioneers of soaring, now a United States citizen and chief meteorological adviser to the Soaring Society of America.



Eight sailplanes soaring over the camp.

National Competitions: List of Flights

Flights on Sunday, August 29th.

Pilot	*Machine*	*Start*	*Landing*	*Remarks*	*Points*
Wynne ...	19	10.29	10.31½	1,250 ft. on launch	—
Barnes ...	9	10.54	10.56½	...	—
Everall ...	19	11.03	11.06	...	—
Simpson ...	14	11.24	11.28	...	—
Lingford ...	6	11.34	12.34	12 miles to New Mills; 2,700 ft.	13
Brown ...	18	11.45	12.57½	Over 3,000 ft. (no barograph)	—
Olver ...	9	11.56	12.03	...	—
Thompson ...	7	12.05	12.08	...	—
Rushton ...	19	12.14	13.09	8 miles to Ashopton; 3,300 ft.	19½
Turner ...	14	12.23	13.10	47 mins.; 2,500 ft.	11
Wills ...	1	12.31	12.37	...	—
Upton ...	7	12.40	12.45	...	—
Swale ...	2	12.51	12.56	...	—
Davis, P. B. N.	5	13.05	13.09½	...	—
Dewsbery ...	8	13.17	13.21½	...	—
Coleman ...	15	13.30	13.34½	...	—
Simpson ...	14	13.56	14.00	...	—
Hiscox ...	24	13.47	13.51	...	—
Edwards ...	9	14.09	14.11	...	—
Rattray ...	4	14.18	15.33	3,600 ft. Daily Prize...	23
O'Grady ...	12	14.29	14.31	...	—
Mrs. Price ...	22	14.42	14.47½	...	—
Smith, G. O....	10	14.58	15.02	...	—
Wills ...	1	15.08	15.16	...	—
Booth ...	7	15.17	15.21	...	—
Shepard ...	2	15.27	16.58	1 hour 31 mins.	—
Davis ...	5	15.39	15.47	...	—
Dewsbery ...	8	15.52	16.55	1 hour 3 mins.	—
Coleman ...	15	16.17	16.38	21 mins.	—
Olver ...	9	16.28	16.36	...	—
Simpson ...	14	17.04	17.06	...	—
O'Grady ...	12	17.17	17.20½	...	—
Mrs. Price ...	22	17.22	17.25	...	—
Hiscox ...	24	17.35	17.46	11 mins.	—
Robertson, R. G.	10	17.30	17.41	11 mins.	—
Thompson ...	7	17.30	17.37	...	—
Furlong ...	4	17.46	17.51	...	—
Robertson, L. R.	2	17.57	18.00	...	—
Thompson ...	7	18.00	18.07	...	—
Smith ...	10	18.20	18.22	...	—

Launches: 41; flying time: 9 hours 41½ mins.; cross-country flying: 20 miles.

Flights on Tuesday, August 31st.

Thompson ...	7	14.40	14.54	...	—
Rushton ...	19	14.59	15.11	...	—
Smart ...	12	15.02	19.02	4 hours. Daily Prize	22
Coleman ...	15	15.08	15.20	...	—
Swale ...	2	15.16	19.05	3 hours 49 mins.	20
Furlong ...	4	15.29	17.39	2 hours 10 mins.	—
Davis, P. B. N.	5	15.32½	18.08½	2 hours 36 mins.	—
Thompson ...	7	15.37	17.50	2 hours 13 mins.	2
Lingford ...	6	15.50	17.18	...	—
Turner ...	14	15.52	18.39	2 hours 47½ mins.	9
Mrs. Price ...	22	16.00	16.17	...	—
Coleman ...	15	16.03	16.56	...	—
Barnes ...	9	16.09½	16.22	...	—
Dewsbery ...	8	16.15	18.11	...	—
Rushton ...	19	16.23½	16.45	...	—
Withall ...	23	16.27	19.02	2 hours 35 mins.	6½
Wills ...	1	16.37	18.48	2 hours 11 mins.	2
Thomas, E. ...	10	16.41	19.05	2 hours 24 mins.	4
Mrs. Price ...	2	17.15	17.32	...	—
Edwards ...	9	17.26	18.02	...	—
Coleman ...	15	17.47	18.07	...	—
Simpson ...	6	18.03	18.20	...	—
Rattray ...	4	18.11	18.38	...	—
Cooper ...	8	18.24	18.31	...	—
Dickson ...	7	18.57	19.00½	...	—

Launches: 27; flying time: 34 hours 39½ mins.

Flights on Wednesday, September 1st.

Cooper ...	8	7.24	12.35	5 hours 11 mins. Duration for "Silver C"	32
Barnes ...	9	10.13	13.15	2 hours 2 mins.	½
Hick ...	12	12.37	13.45	...	—
Robertson, L. R.	2	13.05	20.36½	7 hours 31½ mins. Duration for "Silver C"	69½

Pilot	*Machine*	*Start*	*Landing*	*Remarks*	*Points*
Rattray	4	13.49	20.37	6 hours 48 mins.	52
Everall	19	14.41½	16.45	2 hours 3 mins.	½
Smart	12	14.52	20.18	5 hours 26 mins. Duration for "Silver C"	37½
Nicholson	8	15.01	18.04	3 hours 3 mins.	10⅓
Edwards	9	15.17	16.43		—
Lingford	6	15.31½	16.46½		—
Mrs. Price	22	15.37½	20.40	5 hours 2½ mins. Duration for "Silver C"	33½
Simpson	14	15.50½	16.35½		—
Kaye	16	16.03	16.46		—
Dickson	7	16.11	16.37		—
Withall	23	16.22½	19.36½	3 hours 14 mins.	13
Little	3	16.38	16.42		—
Coleman	15	16.49	19.05	2 hours 26 mins.	—
Kaye	16	17.07	18.07		—
Turner	14	17.17½	19.48	2 hours 30½ mins.	—
Lingford	6	17.19	19.47	2 hours 27 mins.	—
Little	3	17.55	18.07		—
Thompson	7	18.01	19.34		—
Rushton	19	18.05	18.49		—
Slater, A. L.	16	18.24	19.30		—
Dewsbery	8	18.41	19.43		—
Barnes	9	18.41	19.18		—
Everall	19	19.02	19.25½		—
Edwards	9	19.29	19.38		—
Thomas, B.	18	19.36	19.41		—
Davies, A.	16	19.54	20.32		—
Upton	7	20.00	20.07		—

Launches: 34; flying time: 62 hours 8½ mins.

Flights on Thursday, September 2nd.

Cooper	8	6.40	9.48	3 hours 8 mins.		12½
Robertson, L. R.	2	7.37	10.47½	3 hours 10½ mins.		13½
Rushton	19	10.01	11.40	76 miles to Roos; 1,700 ft.		125
Dewsbery	8	10.13	10.17			—
Davis, P. B. N.	5	10.44	15.00	30 miles to Doncaster; 2,800 ft.		61½
Edwards	9	10.50	13.41	Points for height		2½
Thompson	7	11.00	16.05	5 hours 5 mins. Duration for "Silver C"		34
O'Grady	12	11.07	13.00	Goal flight: 32½ miles to Finningley; 2,800 ft.		64½
Furlong	4	11.09	12.30	Goal flight: 30 miles to Doncaster; 3,200 ft.		62½
Coleman	15	11.25	12.40			—
Wills	1	11.30	13.45	75 miles to North Coats; 3,500 ft. (Goal: Skegness)		130
Mrs. Price	22	11.37	12.50	25½ miles to Maltby; 2,500 ft.		23
Shepard	2	11.46½	17.02	5 hours 16 mins. Duration for "Silver C"		33⅓
Simpson	14	11.45	14.40	78 miles to Withernsea; 4,000 ft. (Goal: Finningley)		155
Lingford	6	11.55	15.15	47 miles to Luddington; 3,600 ft. (Goal: Hedon)		92½
Thomas, E.	10	11.57	14.40	11 miles to Dronfield; 3,250 ft. (Goal: Skegness)		7½
Kaye	16	12.04	15.35	41 miles to Epworth; 4,000 ft. (barograph not working beyond 2,000 ft.). (Goal: Skegness)		49½
Dewsbery	8	12.46	16.40	86 miles to Flamborough Head; 3,600 ft. (Goal: Welburn.) Daily Prize		153
Nicholson	15	12.59	15.15	30 miles to Doncaster		—
Little	3	13.08	18.19	5 hours 11 mins. Duration for "Silver C"		32
Brown	18	14.03	16.03	68 miles to Hawkstone; 4,300 ft. Distance and height for "Silver C." (Goal: Doncaster)		138
Barnes	9	14.23	14.46	11 miles to Sheffield; 1,750 ft. (Goal: Doncaster)		3½
Reffell	20	14.28	14.52			—
Reffell	20	15.09	15.26			—
Slater, A. L.	17	15.27	16.34			—
Dickson	7	16.24	18.28	2 hours 4 mins.		½
Goodfellow, A.	21	16.42	17.27			—
Robertson, L. R.	2	17.46	18.12			—

Launches: 29; flying time: 66 hours 26½ mins.; cross-country flying: 670 miles.

Flights on Friday, September 3rd.

Cooper	8	6.55	7.00			—
Swale	2	8.12	8.21			—
Rushton	19	10.47	11.00	4 miles to Hathersage; 700 ft.		—
Rattray	4	10.56	13.00	26 miles to near Doncaster; 4,000 ft. (?). (Goal: Whitby)		—
Barnes	9	11.03	12.48			—
Swale	2	11.08	13.20	1,600 ft.		1
Dickson	7	11.17	12.38			—
Davis	5	11.26½	12.30	11 miles to Totley. (Goal: Catfoss)		—
Wills	1	11.35	13.55	Goal flight: 72 miles to East Driffield; 4,800 ft. Daily Prize		185
Lingford	6	11.45	14.15	11 miles to Sheffield; 1,780 ft.		3
Hiscox	24	11.53	11.54			—
Nicholson	8	12.00	14.50	67 miles to Leconfield; 4,100 ft. (Goal: Driffield)		121½
Smart	12	12.10	13.45	32½ miles to Finningley; 2,700 ft. Distance for "Silver C." (Goal: Selby)		40½
Mrs. Price	22	12.30	13.50			—
Slater, A. L.	10	12.46	13.47			—
Little	3	12.33	12.[illegible]			—
Coleman	15	13.00	14.45	2[illegible] miles to Rotherham; 2,000 ft. (Goal: Hull)		5½
Hiscox	24	13.09	14.57	16½ miles to Rotherham; 2,150 ft. (Goal: Hull)		7

Pilot	*Machine*	*Start*	*Landing*	*Remarks*	*Points*
Edwards	9	13.15	14.30	21½ miles to Bramley; 2,000 ft. (Goal: Doncaster)	9½
Turner	14	13.44	14.19	3,900 ft.	26½
Robertson, L. R. ...	2	14.10	16.25	56 miles to Winteringham; 3,400 ft. Distance and height for "Silver C." (Goal: Doncaster)	100
Thomas, E.	10	14.18	16.55	26½ miles to Tickhill; 3,300 ft. Height for "Silver C"	38
Withall	23	14.30	15.00	21 miles to Rotherham; 3,000 ft. (Goal: Finningley)...	18½
Mrs. Price	22	15.32	16.30	28 miles to near Doncaster; 3,300 ft. Height for "Silver C"	39
Thompson	7	15.37	17.37	32½ miles to Lound; 4,000 ft. Distance and height for "Silver C" ...	51½
Kaye	16	16.03	16.55	12 miles to Coal Aston; 4,800 ft. (barograph not working)	25
Lingford	6	16.55	18.49	... ...	—
Goodfellow, A. ...	22	17.30	17.45	... ...	—
Turner	14	18.12	20.15	2 hours 3 mins.	—
Furlong	4	18.40	20.12	... ...	—
Simpson	6	19.25	20.14	... ...	—
Barnes	9	19.33	20.09	... ...	—

Launches: 30; flying time: 43 hours 36½ mins.; cross-country flying: 481 miles.

Flights on Saturday, September 4th.

Nicholson	8	11.09	13.35	48 miles to Scanton; 3,700 ft.	78
Wills	1	11.11	14.20	Goal flight: 75 miles to North Coats; over 6,000 ft. (barograph not working beyond 2,800 ft.)	160
Hiscox	24	11.14	12.45	16 miles to Sheffield; 1,800 ft.	3½
Everall	19	11.16½	11.50	2 miles to Callow	—
Lingford	6	11.20	15.35	80 miles to Easington; 4,360 ft. (Goal: Doncaster)	169½
Olver	9	11.21	12.28	1,750 ft.	2½
Furlong	4	11.27	13.30	4,560 ft. Height for "Silver C"...	41
O'Grady	12	11.36	13.53	2,100 ft.	6½
Davis	5	11.40	12.55	20 miles to near Worksop; 3,900 ft.	26½
Simpson	14	11.43	12.43½	2,300 ft.	9
Kaye	16	12.18	16.57½	4 hours 39½ mins. Attempt for "Silver C" duration	26½
Swale	2	12.34	13.14	... ...	—
Reffell	20	12.50	14.04	... ...	—
Edwards	9	13.01	13.44	... ...	—
Smith, G. O.... ...	10	13.18	15.30	30 miles to Doncaster; 3,500 ft. (Goal: Skegness)	40
Coleman	15	13.43	14.25	... ...	—
Turner	14	14.01	19.12	5 hours 11 mins. Duration for "Silver C"	—
Barnes	9	14.18	14.26	... ...	—
Slater, A. L.	17	14.39	15.16½	... ...	—
Barnes	9	14.44	15.17	... ...	—
Shepard	2	14.53	16.15	18 miles to Rotherham; 2,300 ft. (Goal: Finningley)...	8
O'Grady	12	14.59	16.30	18 miles to Rotherham; 3,300 ft. (Height for "Silver C")	20
Withall	23	15.41½	16.12	... ...	—
Baker	17	15.47	16.12½	... ...	—
Olver	9	15.53	16.24	... ...	—
Upton	7	16.04	16.34	... ...	—
Wynne	19	16.11	16.15	... ...	—
Slingsby	21	16.30	16.58½	... ...	—
Orme	11	16.53	16.56½	Attempt for "C"	—
Bergel	17	17.06½	17.14	... ...	—
Coleman	15	17.16	17.22	... ...	—
Booth	7	17.23	17.29½	... ...	—
Hiscox	24	17.33	17.54	... ...	—
Stedman	22	17.42	18.09	... ...	—
Furlong	4	18.00	18.24	... ...	—
Upton	7	18.27	18.32	... ...	—
Cuss	11	18.51	18.55	... ...	—
Verity	21	19.20	19.22	... ...	—

Launches: 46; flying time: 44 hours 58½ mins.; cross-country flying: 317 miles.

Flights on Sunday, September 5th.

Wynne	19	10.43	12.20	(Goal: Doncaster)	—
Barnes	9	10.46	10.53	(Goal: Doncaster)	—
Thompson	7	10.59	11.45	(Goal: Doncaster)	—
Robertson, R. G. ...	10	12.17	13.20	... ...	—
Booth	7	12.27	13.01	... ...	—
Smith, G. O.	17	12.57	13.52	... ...	—
Everall	19	14.34	14.55	(Goal: Doncaster)	—
Roberts	12	14.53	19.40	4 hours 47 mins.	—
Wynne	19	15.20	15.50	... ...	—
Smith, G. O.... ...	17	15.23	16.26	... ...	—
Booth	7	15.34	15.52½	(Goal: Hull)	—
Dickson	7	16.11	16.24½	(Goal: Hull)	—
Thompson	7	16.21	17.22	... ...	—
Robertson, R. G. ...	17	16.46	18.29	... ...	—
Davis	?	17.42	18.50	... ...	—
—— ...	Falcon	17.50	18.00	... ...	—
Booth	?	18.00	18.29	... ...	—
—— ...	Falcon	18.32	18.41	... ...	—
—— ...	Falcon	18.58	19.12	... ...	—
——	Kirby Kite	19.14	19.46	... ...	—

Launches: 24; flying time: 17 hours 48 mins.

Anglo-German Gliding Camp

ON Sunday morning, August 15th, twenty-three tired German gliding men arrived at the London Gliding Club at Dunstable. At least, they ought to have been tired, after travelling a day and a night without sleep, and with a rough Channel crossing thrown in. However, they seemed lively enough, though it was thought advisable not to put them into the air that day, except as passengers in the two-seater.

This was the second Anglo-German gliding camp. The first, held in Germany during July last year, had been mainly devoted to primary training. This year, however, the programme was more ambitious, for the German party included three "Silver C" pilots, as well as 9 "C," 5 "B," and 3 "A," and only two of them were still in the ground-hopping stage. Even these two progressed to "B" stage before the fortnight was over. The English members of the camp brought the total numbers up to about 40; they were mostly in the more elementary stages.

By great good luck the camp started with a week of almost continuous soaring winds, enabling camp members to get six "C" certificates, while three of the Germans did duration flights of five hours towards



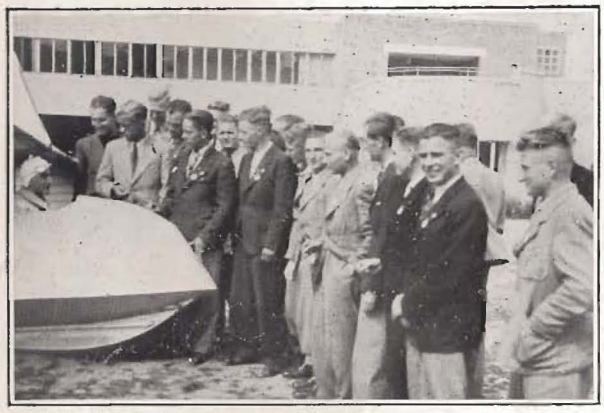
Carli Magersuppe, who instructed during the Anglo-German camp, is here seen after flying a "Drone."

their "Silver C." So many ordinary club members rolled up too, that altogether 165 hours of flying were done from the site in the first seven days. In addition to the soaring, 12 "A" and 15 "B" certificates were qualified for by camp members. Here are the names:—

Furlong (brother of E. J.), Shaw, and Miss Edmonds, "A," "B," and "C"; Bergter, De Wolf, Dungs, Forester, Scharrer, Gardiner, and Latto, "A" and "B"; Tarrant and Pearce, "A"; Benson, Quinn, Benemann, Ball and Schittig, "B"; Dumke, Botter, and Schacht, "C"; Steinmann, Unverfehrt and Gehlhaar, duration for "Silver C."

Except for a GRUNAU BABY which was blown over on the ground, there was no crashery of note throughout the camp. Two of the Germans, however, found, as London Club members have found before them, that the wind blowing up over the Bowl can be unexpectedly strong when there is any south in it, and a couple of forced landings on the hilltop resulted.

During the second week, when only light winds blew, things became less strenuous and social activities

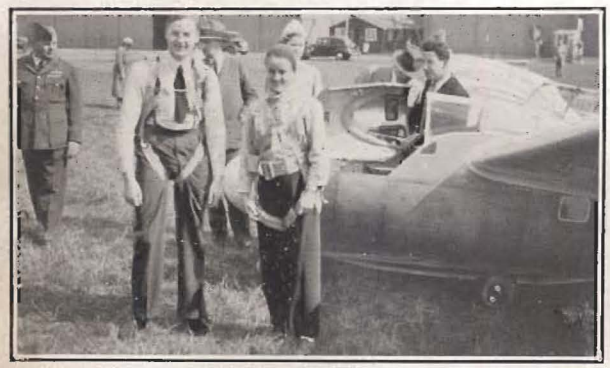


The German party on the morning of their arrival.

came more to the fore. Robert Kronfeld visited the camp twice, together with his wife. The first time was on Sunday, the 22nd, when aeroplane-towing was being done. The pair were towed up in the two-seater FALCON and left under a fine cumulus cloud, and it was over an hour before they descended from what Kronfeld described as his only soaring flight for the last three years. On the 25th they flew over in a pair of "Drones," but there appeared to have been no previous arrangement as to who should land first, and there was much stopping and re-starting of engines while husband and wife circled round each other trying to decide the question by telepathy.

During this week visits were made to Halton R.A.F. training camp, various swimming pools, the Whipsnade Zoo (which some camp members had already flown over), and the Bonar Law political college at Ashridge (where two of the Germans, examining the library, were amused to find a book on Karl Marx, but were assured that his principles were not taught at the College). A local resident who gave hospitality to the Germans was Mr. Blyth, of Hall Farm, Whipsnade, one of the original founders of the London Gliding Club and an old friend of Oskar Ursinus.

The final week-end went off in great style, thanks to three delightful visitors from Germany, all famous soaring pilots. On the 26th, Wolf Hirth, in his "Klemm," arrived over the ground with a two-seater



Flight-Lieut. Murray and Fräulein Eva Schmidt ready for an aero-tow in the two-seater "Minimoa."



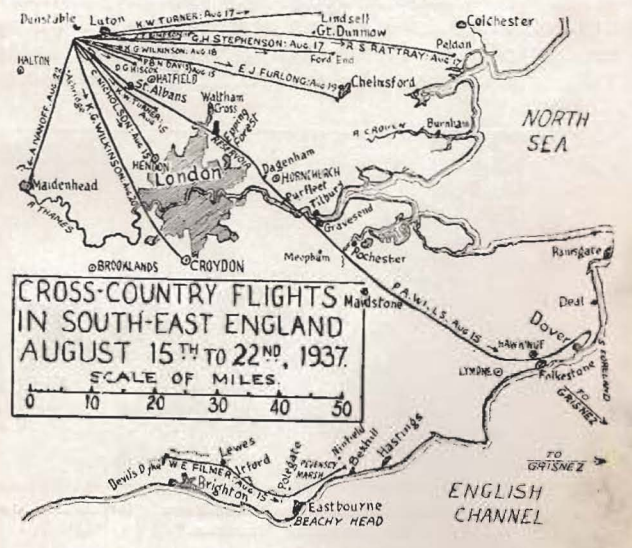
The "Klemm," with "Minimoa" in tow, leaving Derbyshire for Germany on August 31st.

MINIMOA in tow; this, after unhitching and gliding down, was found to contain Eva Schmidt, holder of the women's distance soaring record until Hanna Reitsch recently took the title from her. Next day Fräulein Reitsch herself turned up, having landed at Hatfield in a cabin aeroplane from Germany.

So Friday, August 27th, was spent on Halton Aerodrome, kindly lent by the commanding officer in order to provide space for aero-towing. Herr Hirth lent his "Klemm" and MINIMOA, and Fräulein Schmidt her services as instructor; thus it was possible for all the more expert members of the camp to get some aero-towing experience. There were good cumulus clouds about, and Eva Schmidt soared for so long, after arrival from Dunstable by aero-tow, that Wolf Hirth had to go up and signal her down, since the spectators were refusing to go into lunch. A GRUNAU BABY was also towed over, and between them the two machines put in nearly eight hours, mostly cloud-soaring.

Finally, all the German camp members went in motor coaches to the Derbyshire meeting, and the three German visitors followed by air.

Cross-country flights by camp members could not be arranged for, but London Gliding Club members made up for this by performing 14 such flights totalling 450 miles, during the first week. Their routes are shown on the map below; some of their flights are described on the following pages, and further particulars are given in the "News from the Clubs" section.



A Southdown Flight

*[The flight described below, which is the longest yet done from the site of the Southdown Gliding Club near Brighton, was made at the same time as Mr. Wills was flying from Dunstable to Dover, as described on the opposite page. It is especially interesting to compare the soaring conditions as found by the two pilots, who flew on converging routes from widely separated starting points.—*ED.*]*

ON Sunday, August 15th, gliding conditions were as near perfect as one can hope for: wind about 20 m.p.h., W.N.W. to N.W.; cumulus and cloud streets everywhere. Thanks to the enthusiasm and energy of other club members I was able to get my GRUNAU BABY up on to the north face of the Downs ready rigged in the record time of one hour.

I started at 12 o'clock by car-bungy launch, soared around the Dyke in front of the hotel for ten minutes or so, and then spotted a longish cumulus cloud coming along. I went out to meet this and was greeted with a hearty down-draught. I understand all the best clouds treat you like this, so I went on further under the cloud and soon started going up. Flying backwards and forwards along the cloud I became so fascinated in seeing the variometer indicating anything up to 8 ft. per sec. rise, that I quite forgot where I was. The result was I was committed to a cross-country flight, having got so far down wind that I could not get back.

To the east I spotted two satisfactory-looking ranges suitable for a west wind, and set off with about 2,400 ft. I only lost height slowly and passed over the first range (about 7 miles from the Dyke) at high speed. The second range turned out to be Itford. Just south of Lewes I got an extra boost of lift, but decided it wasn't good enough to get to the last stepping-stone north of Eastbourne, particularly as there were no clouds ahead.

So I dropped down on to Itford and put in a spot of slope-soaring till the clouds caught me up. This wasted a quarter of an hour and 2,000 feet, but I got warm again. As soon as the clouds came I started climbing and circled slowly up to 2,600 ft. again. By this time I had drifted down wind as far as the last soaring slope on the Downs—distance 19 miles, as I had already worked out before I started. To go further down wind takes you out to sea. The only thing to do is to fly north and drift east and see how far you get. Unfortunately there are a lot of woods behind Bexhill, so I had to take a more northerly course in order to have a better chance of finding a landing ground.

As one might expect, there was no lift over Pevensey Marsh, and I came down at Lunsford Cross alongside the Bexhill main road.

W. E. FILMER.



Dunstable to Dover

August 15th, 1937.

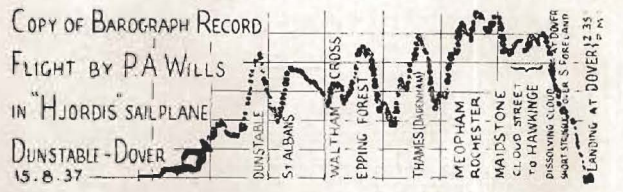
SELDOM has a good cross-country day advertised itself so well beforehand. On Friday one said: "Looks as if it will be good on Sunday." On Saturday one peered out at the rain of the warm sector of the passing depression and said: "To-morrow will be a Big Day." On Sunday one woke up to a cloudless brilliant morning, with the expected north-west wind stirring the bedroom curtains.

We arrived at Dunstable early, leisurely rigged HJORDIS, took her to the top of the hill, as there was no point in a hurried winch-launch, and were bungy-launched at around 11.30 just as everything began to boil up nicely.

At breakfast Nicholson (who was giving an aero-towed display at Ramsgate the following Saturday) and I simultaneously said: "How about a goal-flight to Ramsgate to-day?" So I decided on Ramsgate as a goal. The wind was W.N.W., about 15 m.p.h. on the hill top, 20 to 25 at cloud base. Around mid-day the SPERBER and I caught a thermal which took us up to cloud base at 3,100 ft. above the top. Nicholson, just above me, disappeared into the cloud, so I hurriedly left, particularly as the turn indicator was not working.

Things ahead looked a bit flat, so I determined to fly down Watling Street, and failing lift on the way, look for more thermal over St. Albans. Cruising at 50 m.p.h. with the wind nearly astern I must have covered the ground at at least seventy, and arrived at St. Albans in a very short time at about 1,500 ft. I found the expected lift to the windward, and after a bit of a struggle climbed to nearly 3,000 ft. I was still not quite happy about the surrounding instability, so determined to stay in the bit of air where I was and let the wind carry me along until something better turned up. This plan produced about 20 minutes' struggling in weak and broken lift, during which I was carried along over some very unhappy-looking landing country between Hatfield and Hendon, to the banks of the big quadrilateral reservoir at Waltham Cross, which I reached around 1,700 ft. A bit of lift here got me high enough to cut over this spur of London to Epping Forest, where I felt fairly confident of finding lift.

The sky now began to look very promising: cumuli forming everywhere, with a tendency to streets. I found good lift, up to 10 ft./sec., where I expected it, and decided to cut across wind for my crossing of the Thames, where I expected to find a belt of down-currents. I entered the cloud at 3,200 ft. and climbed rather messily to 3,500 ft. (4,200 ft. above sea-level), then took a compass course south towards the Thames. Approaching the river banks I saw an aerodrome (Hornchurch) rather comfortingly on my left, and big power-wire pylons spanning the river ahead. I was rather low by now, and nervous of crossing the river and finally burning my boats (so far as retrieving went, the far side was certainly two hours further away), so I struggled for some while in rather broken lift over a big factory on the near bank. At last, doing no good, I nervously ventured over the edge, and got the surprise of my life. With a surge the machine heaved



upwards. The variometer popped up to 10 ft./sec. climb, and I could actually feel the warmer air on my face.

I am convinced that on this day the waters of the Thames were actually warmer than the land. The combination of circumstances necessary to produce my up-current must be exceedingly rare. To begin with, we had had a fortnight's heat wave, during which the waters must have heated up considerably, followed suddenly by a cool day with a west-north-west wind. This not only kept down the land temperature, but happened to be blowing exactly along the Thames where I met it, and so had time to absorb heat from the water.

Anyway, my troubles were over. I flew, rather than circled, up to cloud base, along the river as far as Tilbury, through a variety of rich smells ascending from the factories on either bank. Then I turned inland and did a cross-wind traverse to Rochester aerodrome. From now on it was not a question of "Where can I go?" but of "Where shall I go?" Lift was everywhere. After some cogitation I decided that Ramsgate was being presented wrapped in cellophane on a silver dish, and that I would have a look at France.

I did another cross-wind flight to a cloud street over the main Dover line, then flew rapidly down this, proudly ignoring lift under 3 ft./sec., to Lympne aerodrome. The French coast was in sight from about Maidstone.

The calculation in my head went something like this. Distance Folkestone—Grisnez, say, 25 miles. Thermal from coast should take one at least 2 miles; 23 to go. Flying speed 48 m.p.h., wind averaging 22; total 70. Sink, say (with a bit of down-current), 4 ft./sec., hence gliding angle, say, 1 in 24 (it took a few miles to work that one in one's head). Therefore it's in the bag for a husband and father from, say, one mile up or 5,500 ft., to be quite sure. A spot of blind flying indicated.

At this juncture a large black cloud hove up, quite the meatiest of the day, over Dover, and simultaneously the insurance premium against my spending the night in a French gaol (having no passport) rose to 90%.

I got to Dover in a raging down-current of 10 ft./sec. In disbelief I flew right through it, expecting at any minute to hit the corresponding up. I emerged the other side and found some mouldy little bits which, every time I tried to struggle, carried me out over the cliffs at 1,500 ft. I flew north towards Deal: nothing. The last chance was another hunt around Dover. The down-current was still there. I made a rather hair-raising landing in a valley with a violent down-current rolling down my field, and landed on a 40-yard uphill stretch of grass between houses, trees and a sunken road.

It was just after 2.30, and I had averaged since leaving Dunstable nearly 40 m.p.h. Three good thermal hours to go, and I sat sadly on the beach throwing pebbles at the sea. There are some drawbacks to being an Englishman.

P. A. WILLS.

Dunstable to Peldon, Essex

I HAVE a suggestion to make in aid of the funds of the London Gliding Club. It is that anyone who in the future has the temerity to land a sailplane anywhere due east of Dunstable should be fined £5. Wills, Wilkinson and Ivanoff have taught us that there are other aerial skyways than those leading to East Anglia. Having suggested thus much, the account of my own misdemeanour shall be brief, as befits an abject apology.

A scorching thermal to 3,400 ft. over the clubhouse at 3.10 p.m. gave me a vision of a cloud street running as far as the eye could see. I hadn't the slightest intention of going away, having told five dachshunds and one daughter that I would be down for tea. But—who could resist such an invitation from clouds that beckoned? Down I pushed the nose of CAMBRIDGE II to register 40 m.p.h. on the air speed indicator and 2 feet a second rise on the variometer! This, with about a 20 m.p.h. following wind, made good going, and took me somewhere to the neighbourhood of Chelmsford in little over 30 minutes. Here the glider pilot's dream of heaven ended. Beat my Slater-Cobb as I would, the red ball would not lie down. The machine descended to about 700 feet.

I had my field all chosen when I suddenly spied a KIRBY KITE about 2,000 feet up away on the right, circling gaily. I sped away to circle beneath it. A miracle! Up I went to nearly 3,200, and away again. (Thank you, Stephenson and GREY KITE.)

Anon, I had one minor adventure. Circling very tightly and nearly stalled I expect I got dazzled by the sun. When I could see again, the world was up above me and the CAMBRIDGE in some horrible position out of which she fell in a plunge which was not agreeable, and into a slow rhythmic spin. She came out beautifully.

Soon after, behold the Blackwater Estuary and my two islands! I turned N.E., not wishing to abuse the hospitality of Burnham-on-Crouch again too soon.

It was now 4.30 p.m. Ten minutes later all was over, and I was sitting in a very large cowless field, thrice removed from the nearest habitation, 1 hour 30 minutes from Dunstable. Is it really "quicker by rail"?

To this I walked. Usual questions: "Where am I?" "Peldon, south of Colchester." Sixty miles.

A charming host and hostess: Captain and Mrs. Scales, of *Hervey's Farm*! What could be more appropriate?

And—thank you, Turner, for retrieving me. And—I am sorry; next time a fiver fine perhaps.

R. S. RATTRAY.



The "Cambridge II" launched from Bradwell Edge on September 4th. In it the flights described on this page were made.

Dunstable to Chelmsford

AFTER about an hour of ups and downs, following a winch launch at 12.15 p.m., the CAMBRIDGE II was over the "Bastion" at 800 ft. when a feeling of lift was confirmed an instant later by the variometer; at this point I saw the Two-seater (Murray piloting), and we started to go up in the same thermal in eccentric circles.

At 2,600 ft. the lift deserted me and I now noticed that what I had thought to be Dunstable, during fleeting glances snatched from the variometer, was in fact Luton. It seemed a long way off, and with the red ball of the variometer up to 5 ft. per sec. I began to wonder if I was destined to land there. When I reached the outskirts of the town, at 1,300 ft., a reassuring "judder" raised my morale tremendously; soon I was circling in a 3 to 5 ft. per sec. rise and was up to close on 2,000 ft.

In the next twenty minutes, by "throwing" circles on anything from minus 2 to plus 5 ft. per sec., I managed to delay a gradual descent which brought us down to 400 ft. The machine was now over a large country mansion, complete with lake and beautiful grounds, and it seemed high time to think about my landing. But, after a few circles in that tense neutral state, so well known to gliding men, the green ball lazily moved up a fraction and then slowly crept up to 3 ft. per sec. rise, and up we rose to 1,800 ft., taking about twenty minutes to do so. I just managed to maintain this height for about 15 minutes by continued easy circles. The lift finally left me and there followed a long steady glide; but I finished up a (for me) wonderful experience by crashing my faithful steed.

We profit by our own and the experience of others, so here is an account of my mistakes.

Having picked up my height earlier on, after being down to 350 ft., I delayed too long before telling myself I was really coming down for good; this left me little choice of fields. Actually there were two: the larger looked exceedingly rough; the other, which I chose, was triangular with the apex down-wind. Describing S turns over the narrow end of a field is unwise because if, as often happens, one gets a down-draught, this means a shorter run and a sharp turn near the ground. In my own case a down-draught from a high-level road, even though there appeared to be plenty of height in hand, brought about a nasty dilemma; i.e., the alternative of landing on a busy by-pass or trying to cross it to get into the landing field. I tried the latter and failed by 12 inches to clear a road-side sign. The moral seems to be: pick a field with a long down-wind edge so that you can turn into it from any part of your S turns. What I learned:—

(1) Don't despair till you are below 500 feet; on the other hand, keep a good field within range.

(2) Keep in mind the wind speed and direction near the ground and don't be misled by the apparent lack of wind high up.

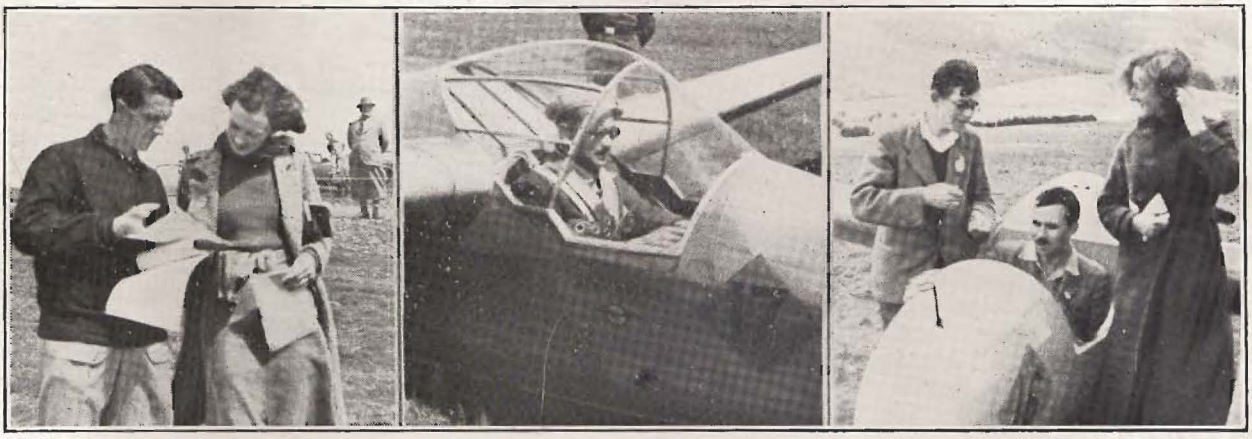
(3) The still-air sinking speed is approximately 3 ft. per sec.; anything less than that indicates rising air, so circle.

(4) The clouds are undoubtedly the best guide to wind direction; watch their shadows on the fields.

E. J. FURLONG.

The International Competitions

(Continued from Volume 8, No. 8)



Members of the British team at the Wasserkuppe: left, Flight-Lieut. P. M. Watt shows the "Daily Sketch" his route on the map; centre, G. O. Smith in a "King Kite"; right, J. C. Neilan in another "King Kite," with J. S. Sproule and Mrs. Price.

MOST of the chief prizes of the competitions were awarded on points, which could be won for distance, height or duration; but the system of allotting points was such as to put a premium on specially good performances, while performances which failed to achieve certain minimum standards earned no points at all.

Before starting a flight, every pilot had to state what he was trying for: he could go for height and distance combined, or for duration only, or for a flight round the triangular course Wasserkuppe–Kreuzberg–Dammersfeld, which was 35 kms. but counted as 100 kms. every time it was done (which it never was).

Sunday, July 4th.

Immediately after the opening ceremony there was a rush to get machines to the top of the Kuppe, and pilots entered their names at the "starting table" in order of their arrival. This piece of hustle over, the teams had plenty of time to recover their breath whilst waiting for signs of thermal activity.

It was not until 9.50 a.m. that a buzzard was seen circling and going up fast just in front of the launching slope. So off went Kurt Schmidt in his ATALANTE, and, without wasting any time in slope-soaring, went straight out to where the buzzard had been, started circling and rising, and went on doing so till he got up to cloud base—the cloud being the very first which had formed over the Wasserkuppe summit that morning.



Kurt Sch . who made the first star. of the meeting, entering his name at the "starting table."

Hofmann and Dittmar followed, then the FALCON two-seater was launched with Fox alone inside. He caught sight of Dittmar in a thermal just beyond the brow of the west slope, and at once joined him, but failed to catch it in time.

Watt was next in a KING KITE. He felt a thermal just after the launch, in the same place as Kurt Schmidt, and began to circle slowly round, about 150 feet above the ground. But though one half of the machine behaved like the ATALANTE, the other half didn't, and down went the left wing. It was a spin, with no room to recover; after two complete turns, the wing and nose hit the ground together, and Flight-Lieut. Watt, as he described it afterwards, "landed on his toes," and was none the worse for it. But the KING KITE was pretty well "written off," and officials kept the Press photographers at bay while the bits were removed.

Meanwhile launches continued, including the two other KING KITES, but they were both among the dozen machines which sank to the bottom of the valley. There was not enough slope lift for soaring, and most of the thermals, even if found, were none too good.

Eleven machines got away across country, and with a light southerly wind they were all carried more or less to the north. The most spectacular flights were those of three pilots who went to Hamburg and landed on the Fühlsbüttel aerodrome there, 219 miles away. They were Mynarski of Poland, and Dittmar and Hanna Reitsch of Germany, the last thereby putting up a distance record for women, which had previously been held by Eva Schmidt. They took a long time over the journey: Mynarski was in the air 8½ hours, and the other two about 7 hours each.

Wills, the only British pilot to go across country this day, actually accompanied Frl. Reitsch part of the way, till in the neighbourhood of Erfurt she went off eastwards. North of Erfurt is a plain surrounded by hills, and apparently both the Germans worked round by the hills to the east and thus got round the obstacle

—there being poor thermal lift over the plain. The Hamburg pilots appear to have found their worst stretch just beyond Brunswick. For the last part of the journey, however, they had a lovely long cloud street which led them straight across the Lüneburger Heide to Hamburg.

There were many other fine flights, among them one by Emi von Roretz, who went 120 miles to the neighbourhood of Hameln, the Pied Piper's town, and beat the Austrian distance record.

Späte, after sinking to the bottom from his first launch, was rapidly transported back to the top for another start and got away on a distance flight after all.

Monday, July 5th.

The Wasserkuppe was in cloud till noon, when the mists cleared and launches were commenced from the north slope in a very light northerly wind.

First off was a "test" MINIMOA, piloted by Peters, to see what conditions were like for the competitors. The amusing thing about this machine was that, although not a competitor at the meeting, it often gave the impression of having a better performance than any of the real participants. On days when people couldn't



Herr Peters in his "Minimoa."

make up their minds whether thermals were good enough yet to be worth trying, this MINIMOA would be taken up by Peters and soared all over the place as if the air were thick with up-currents. Then off would go one or two competitors and sink to the bottom. One up for Peters.

The ground at the bottom of the north slope seems to be particularly good for thermals. To-day resembled many of the days in the 1935 Rhön meeting, in that pilots were able to pick up a thermal only a few hundred feet above the ground, far below the top of the Wasserkuppe, and soar up in it all the way to cloud base. (We have never seen this done at the bottom of the west slope; once a machine gets well below the top there, it has to give up the struggle and land.) The FALCON III did particularly well at this game, in the hands of both its pilots in turn, flying solo.

A thunderstorm, visible all afternoon to the east, invaded the Rhön mountains in the evening; Späte's MINIMOA and Neilan's KING KITE were got out, and their pilots made ready in the cockpit, but although several odd pieces of "front" wandered around in the offing, none came near enough to be worth trying for.

Tuesday, July 6th.

Again there was thunder in the afternoon. Kurt Schmidt actually found some frontal lift and went about 9 miles to Larbach, and Späte went 3 miles to Wüstensachsen, but nobody else got anywhere. Neilan tried, had a poor launch, and had to do a ground loop to avoid some trees; unfortunately the tail skid hit something, and the fuselage broke in half. The machine was actually repaired again in just over a day, thanks to the untiring energy of the German workshop staff. A Polish machine also broke its back to-day in an uphill landing; it was likewise rapidly repaired.

Wednesday, July 7th.

A warm front gradually spread over the sky. When it had passed over the sky cleared; then, late in the evening, came another thunderstorm. But the Daily Prize, for the best height above 1,000 metres, went begging.

Thursday, July 8th.

To-day, for the first time, points were earned for duration. The Daily Prize was offered for the longest duration by a non-"Silver C" pilot. The FALCON III was fetched out by its team before anyone else was ready and was first to get into the air, with Murray flying it solo, at 12.26. Of his rivals, Frena was next off at 12.35; Fiedler, another Austrian, at 12.44; and the Swiss Müller at 12.54.

There was a west wind of 15 m.p.h., and if only it had continued as strong till evening, Murray would have secured the prize automatically, since all flights had to end officially a quarter of an hour before sunset. But actually the wind faded out gradually, so that the machines were let down one by one, the FALCON first.

The rule about leaving the site within an hour is not much to worry about in a good west wind, since there is an even better soaring slope about 4 miles away, overlooking the Ulster Valley, down-wind from the Wasserkuppe. The slope is many miles long, and is slightly curved, so that Murray spent his time at the far northern end until the wind veered. The air got so hazy after a while that the officials on the observation tower lost sight of him, and sent off an aeroplane to find out whether he was still in the air. Professor Brunt went off by car on the same mission.

Meanwhile there was some good distance flying. The Swiss pilot Sandmeier got furthest with 125 miles. Späte went almost as far, and on the way climbed to 7,366 feet above start, a height which remained unbeaten till nearly the end of the meeting.

The only injury to a pilot happened to-day, when the Czech pilot Chlup crashed in landing down in the valley and broke his leg.

Friday, July 9th.

This, at last, was a really good day for the British team; also for the KING KITE, which retrieved its reputation. Flight-Lieut. Watt, after landing in the valley, returned to the top and got a thermal at 3 feet per second. The flight finished at Jena, 80 miles away. During it, he made a climb of 7,644 feet above the previous lowest point of the flight (which had been somewhere down below the Wasserkuppe west slope).



Some famous German pilots: (left to right in foreground) Dittmar, who won first prize; Hofmann, who came second; Bräutigam, who did well at the subsequent National meeting, and Späte, who was third in the International Competitions.

Although this was a greater climb than that of Späte the day before, the absolute height was not quite as much, so this prodigious climb would not have counted for the chief height prize. It did, however, earn the Daily Prize, though only by a narrow margin, for Dittmar, as was determined from his barograph three days later, got within 82 feet of it.

Watt's achievement was done by blind flying in cloud continuously for 1½ hours! He even "blind-flew" for longer than he need have done, for it was a rain cloud, and not only did the water leak into the cockpit and soak him, but it made the view through the cockpit cover look like the inside of a cloud for perhaps ten minutes after he had come out into the open. Once during the climb he rose 1,000 feet in one minute.

While in his biggest thermal, Watt had the pleasure of seeing another sailplane pilot being aero-towed home 2,000 feet below. Three times during the flight he got so low that he prepared to land. Finally, he reached Jena at 6.30 p.m., with 4,000 feet in hand, saw an aerodrome, and landed on it. It turned out to be occupied by a training school for the German Air Force, and he was given a most hospitable reception, well dined, and then taken to see the sights of Jena.

McMurdo, with Professor Brunt on board, flew off in his Avro "Cadet" in the hope of giving the KING KITE a tow home, but had to return without it (the KITE) owing to poor visibility. So the retrieving was done by road, and took all night.

The five longest distances on this day were done by the Germans, of whom Späte landed in Czecho-Slovakia. Sandmeier was sixth, and then came Watt and Wills. The latter went 75 miles (which included some blind flying) and landed on the grounds of a very friendly farmer, who promised to drive Wills in to Sondershausen as soon as his wife, who was on a shopping expedition, returned from there with the car. She was expected any minute, but wives on shopping expeditions are the same the world over, and they had to wait three hours for her return.

Späte's flight started directly down wind, to the E.N.E. over the Thuringian Forest. He then turned S.E. by E. to the Fichtel Mountains, then S.E. by S. along the German–Czech frontier, which lies along the Bohemian Forest. His idea was that, when the lift gave out in the evening, he could slip back into Germany; but he got too far east, in the lee of large mountains, and was unable to do so. His retrieving team arrived at 4 a.m., but he didn't get back till next evening.

Saturday, July 10th.

Dittmar, aero-towed back after his distance flight of yesterday, landed on the Wasserkuppe aerodrome at 1.15 p.m. Half an hour later he was launched again, got across the Ulster Valley, and soared along its far side while waiting for something to turn up. Something did. At 1.40 we had noticed a "front" far off to the W.N.W. At 2.45 it was close on the Wasserkuppe, and at 3 p.m. had passed over. Dittmar picked up a "front," presumably this one, went up inside the clouds, then darted on at over 90 m.p.h. to another "front" further down wind. He rose in this at 33 feet per second, being now over the Thuringian Forest, and then went on ahead to a third "front," which took him nearly to Leipzig.

Nobody else got away at all. Frena made a valiant attempt to connect with the "front"; he went into a thick-looking wall of cloud, which turned out to be quite narrow, rose 2,000 feet, and was up for an hour —winning the Daily Prize, which was for duration, for the second time.



Heini Dittmar, winner of the International Competitions, signing on at the "starting table."

Monday, July 12th.

After a day's rain throughout Sunday, Monday dawned with a strong and turbulent west wind, and as the Daily Prize was again for duration, it was decided to launch the FALCON III with both pilots aboard. The machine became air-borne at 9.50 with Fox at the controls and Murray waving farewell to an appreciative crowd. They were soon off over the Ulster Valley, and spent the rest of the day above the usual slope for duration flights, which is conveniently just outside the



W. B. Murray and J. S. Fox, with the "Falcon III" in which they set up an international duration record.

5 kilometre limit from the Wasserkuppe. For the first four hours they took an hour each in turn at the controls; this was then reduced to half-hour shifts. The going was rough for the first 7 hours of the flight, after which it smoothed down. Their sustenance was biscuits, chocolate, and malted milk tablets. But nothing liquid.

They did not want for company; three other machines were out for duration, while others were birds of passage, using the slope as a stepping stone to higher things (as Blake would say). However, the FALCON'S chief rival, the Austrian RHÖNSPERBER, flown by Frena, had got into the air sooner, and as the wind was strong enough to keep everybody up till official closing time at 8.15 p.m., he automatically won the prize. He soared for 10 hours 2 minutes, of which 9 hours 30 minutes counted for points. The FALCON did 9 hours 48 minutes, and of this 9 hours 20 minutes counted. But the FALCON had other glories to console itself with—it had put up an International Duration Record for Two-Seater Sailplanes. How so? Because the F.A.I. only decided to recognise such records early this year, and this will be the first one to qualify.

The distance flyers, when they got as far as Meiningen, found the clouds down on the high ground of the Thuringian Forest. Few could get past the obstacle, and those who did appeared to have gone round to the south-east. Both Schmidt and Späte, after making a poor first attempt, got back to the Wasserkuppe in time to start again and put up quite respectable distances. Wills was unable to try again as his tow-bar was found cracked. (Herr Ursinus had remarked, as Wills took off: "He won't do anything to-day; he's wearing a different hat.")

Tuesday, July 13th.

International records are made to be beaten, and at 6.30 a.m. Fox and Murray were off again in the two-seater. But the wind wasn't like yesterday, and it let them down. Prachar, of Czecho-Slovakia, who started even earlier at 6.16, suffered the same fate. So there was nothing left to do but go all out after the prize for total duration, and the FALCON proceeded to circulate between the top and bottom of the mountain—down by air, up by road—flown solo by each pilot in turn, while the *Daily Despatch*, who had generously paid the machine's expenses, rang up twice during the day from their London office to learn how it was getting on, and promised to phone again on the morrow. But the wind wouldn't oblige.

The longest flight by a British pilot was put up by Watt, who landed 111 miles away at Cheb (German: Eger). He started about 1 p.m. and landed at 5.25. For the last hour, he said, the sky was overcast; but before that he had encountered two large areas of clear sky. The first one he got round, but had to go through the second, being saved by a small cloud which, however, disappeared again before he got up to it. Some of the thermals he used were very rough, and they got rougher but bigger towards evening. Approaching his destination, Watt saw people running about all over the market place—then suddenly everyone stopped dead: they were all looking up at him. Still 2,000 feet up, he saw an aerodrome, so thought that would be the best place to land on. An hour later he had induced them to telephone his whereabouts to the Wasserkuppe, and someone called the Captain gave him a lift into the town.

The retrieving team reached the frontier at 3 a.m., passed through the German side, and then lay down to sleep until the Czech side opened to traffic two hours later. All had an excellent breakfast at the hotel in the town for 9d. each, and at 6 a.m. went to the aerodrome to get the KING KITE, but found the hangar wouldn't officially open till 8, so had to play nap for two hours. They finally got back at 2 p.m. on Wednesday, handed the KITE over to Hiscox, and went to bed.

Wills on Tuesday went 82 miles to Bayreuth aerodrome. Baur arrived there also, five minutes later. The HJORDIS was flying from 11.30 to 5.10, and with a loose aileron horn. Two hours were spent over the Ulster Valley slope waiting for thermals. During the flight, Wills went up inside a cloud street, then came out at the side, without realising that he had changed direction till he had got half-way to the next street. Having reached this, it took him half an hour to get back up to cloud base. Conditions looked "sticky" beyond Bayreuth. His retrieving team arrived at midnight, and the party got back at 5 a.m.

Then Mrs. Price in the other KING KITE: she had the time of her life. Followed the Main Valley, which was full of castles; finally found the altimeter reading only 400 feet, so decided it was time to seek a landing



The three women pilots who flew at the International Contest: (left to right) Emi von Roretz (Austria), Hanna Reitsch (Germany), and Mrs. Joan Price of the British team.

field, remembering too late that zero on the altimeter meant the top of the Wasserkuppe. The landing was made by a tiny Bavarian village called Schwürbitz. All the village turned out to have their first sight of a foreigner; the men were set to work dismantling the machine, after which the women escorted Mrs. Price to the tiny village inn and pressed her to eat an enormous *Schweinkotelett*, helped out with twelve large potatoes. An accordion, played by father and son in turn, struck up dance music; lads from the local primary gliding centre at Isenfels looked in to talk shop, and all was merry and bright, with no room to move, either inside or outside the inn. Yes, Mrs. Price *had* remembered to telephone to the Wasserkuppe first.

There were two disappointed pilots: Hanna Reitsch damaged her machine in the morning and couldn't get it mended in time to fly; and Sandmeier put in for the triangular course, didn't quite get round it, and then found it too late to do anything else.



Hans Sandmeier, of the Swiss team, who took fourth place. He is said to have been trained in Germany.

Wednesday, July 14th.

Moderate [illegible]nce flights, except Hofmann, who went about twice as far as anybody else.

Of the British team, it was Neilan's and Hiscox's turn to fly the KING KITES. Neilan shook the spectators by going into a spin, and coming out of it unnervingly low down; but it wasn't he who was unnerved, for he went off 35 miles across country afterwards.

The FALCON tried again, and Frena followed in hot pursuit. Frena won, but had a hard struggle for 2½ hours and received the miserable pittance of 1.1 points for his pains.

Mynarski tried the "triangle," but landed at Gersfeld.

Thursday, July 15th.

Hardly any wind and nobody did anything.

A "front" approached just before dark; Späte and Schmidt got ready and were launched amid wild farewell scenes. Each made a goal flight to the hangars, 400 yards away.



Some of the Polish team, including the pilots Zabski (left), who achieved the greatest height of the meeting, and Brzezina (second from right).

[Photo by A. Ivanoff

Friday, July 16th.

This was a great day, especially for the Polish team. Zabski achieved the greatest height of the meeting with 9,239 feet, and Baranowski went a great deal further than anybody else and reached the outskirts of Potsdam, near Berlin. The newspaper *B.Z.* some years ago offered a prize of RM. 3,000 for the first soaring flight from the Wasserkuppe to Berlin, but the landing has to be made on either Tempelhof or Rangsdorf aerodrome, and moreover nobody seems to know if foreigners are eligible.

Of the British team, Wills reached the Ulster Valley slope and soared there for two hours, unable to pick up thermals so low down, while he saw others pass by overhead. Neilan went 48 miles to Gotha, just getting into the aerodrome by 10 feet.

Watt did 96 miles, and might have done more if he hadn't been delayed in starting owing to his KITE'S leading edge being damaged on a trolley. He found the thermals narrow and rough; got up under a cloud but afterwards found thermals in clear air. While doing one of his quick darts from one thermal to the next, he shot right through a small one being used by a Swiss pilot, who forthwith tried to follow him, but couldn't catch up and had to land. Watt found a slow-rising thermal over Sangershausen, and finally a weak one over Allstadt, before landing himself. His course was first N.E., then S.E. Clouds blowing from the Harz Mountains were melting over the plains below. There was a thunderstorm in the direction of Dresden, and this, he thinks, caused the lack of thermals in his region towards the end of the flight, perhaps owing to compensating down-currents surrounding the storm.

Saturday, July 17th.

This, the last day of the main competitions, was an important one for deciding the final allotment of points. However, it was a difficult day for flying. Only two pilots, Hanna Reitsch and Sandmeier, went over 100 miles, and of these Sandmeier went furthest. This secured him fourth place, all among the German team. Wills and Mrs. Price were among those who got away.

(Descriptions of some foreign machines next month.)

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Week ending July 4th.—Primary training at Cramlington; 34 launches. We were pleased to re-enlist Lindsley, one of the oldest members of the club, who has been away for some time and who now proceeded to take both "A" and "B" certificates on the same day. Thirty-four launches were made.

Week ending July 11th.—Light winds; 30 launches at Cramlington.

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Week ending July 25th.—We spent some time packing up equipment for our summer camp at Chillingham; 40 launches were made nevertheless and Ruck secured his "A" certificate.

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Saturday was spent at Chillingham in getting winch, machines and tents to the top of Kay Hill and in praying for the wind to strengthen, but on Sunday morning there was still no wind. This was perhaps not entirely a bad thing, for a soaring breeze would certainly have added to the afflictions of the party who were digging the Humber out of a bog into which it had wandered in spite of Mr. O'Grady's careful route-marking over the heather. In the afternoon we made four circuits in KITE and GRUNAU but the wind was never more than 5 m.p.h. from the north-west and soaring was out of the question.

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G-GAAE	... FALCON III	...	Manchester Aeronautical Society.

HAROLD E. PERRIN,
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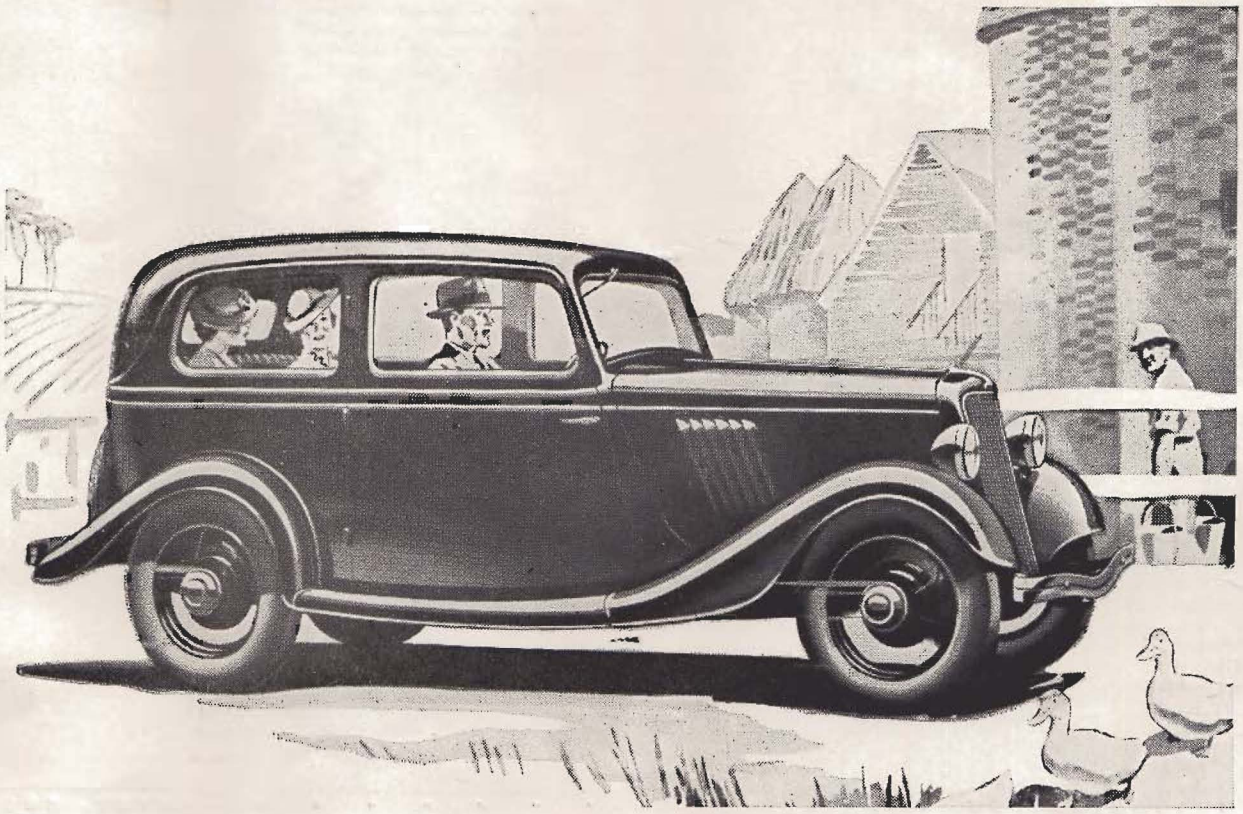
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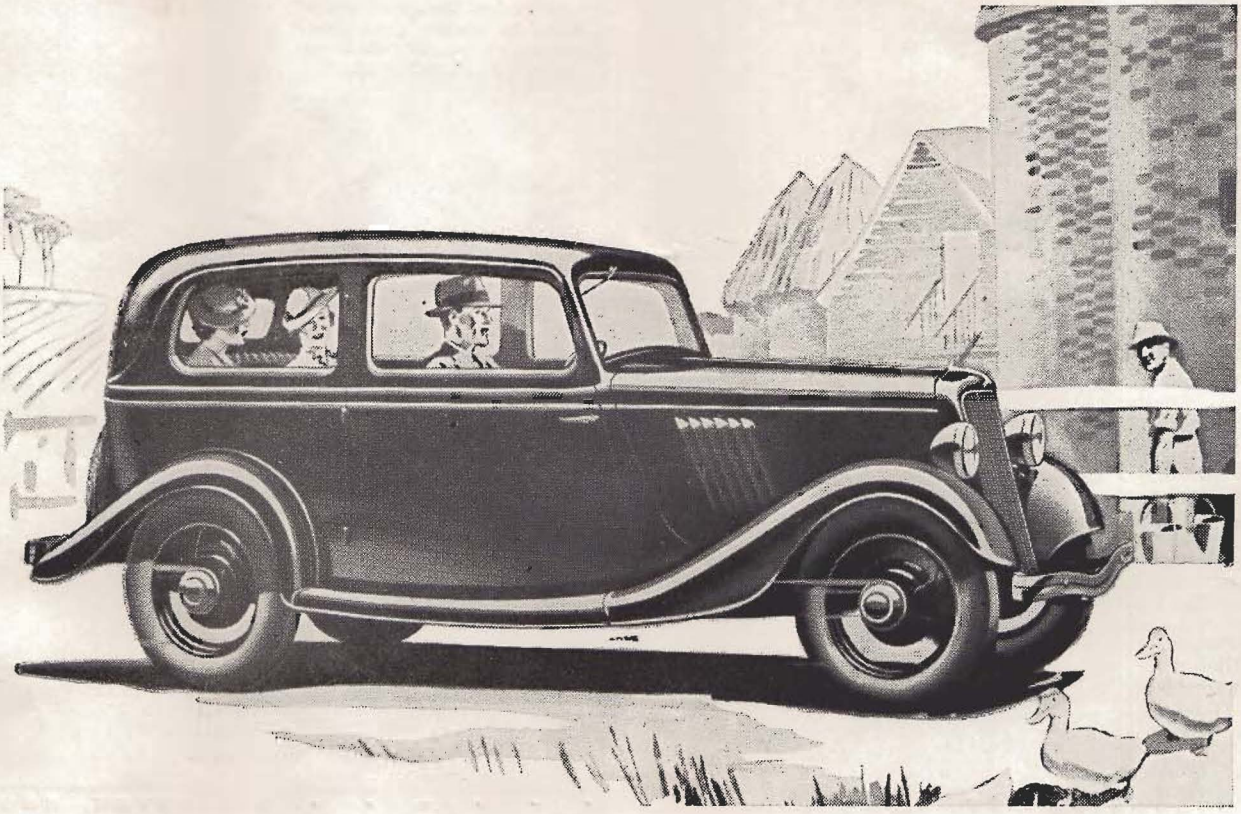
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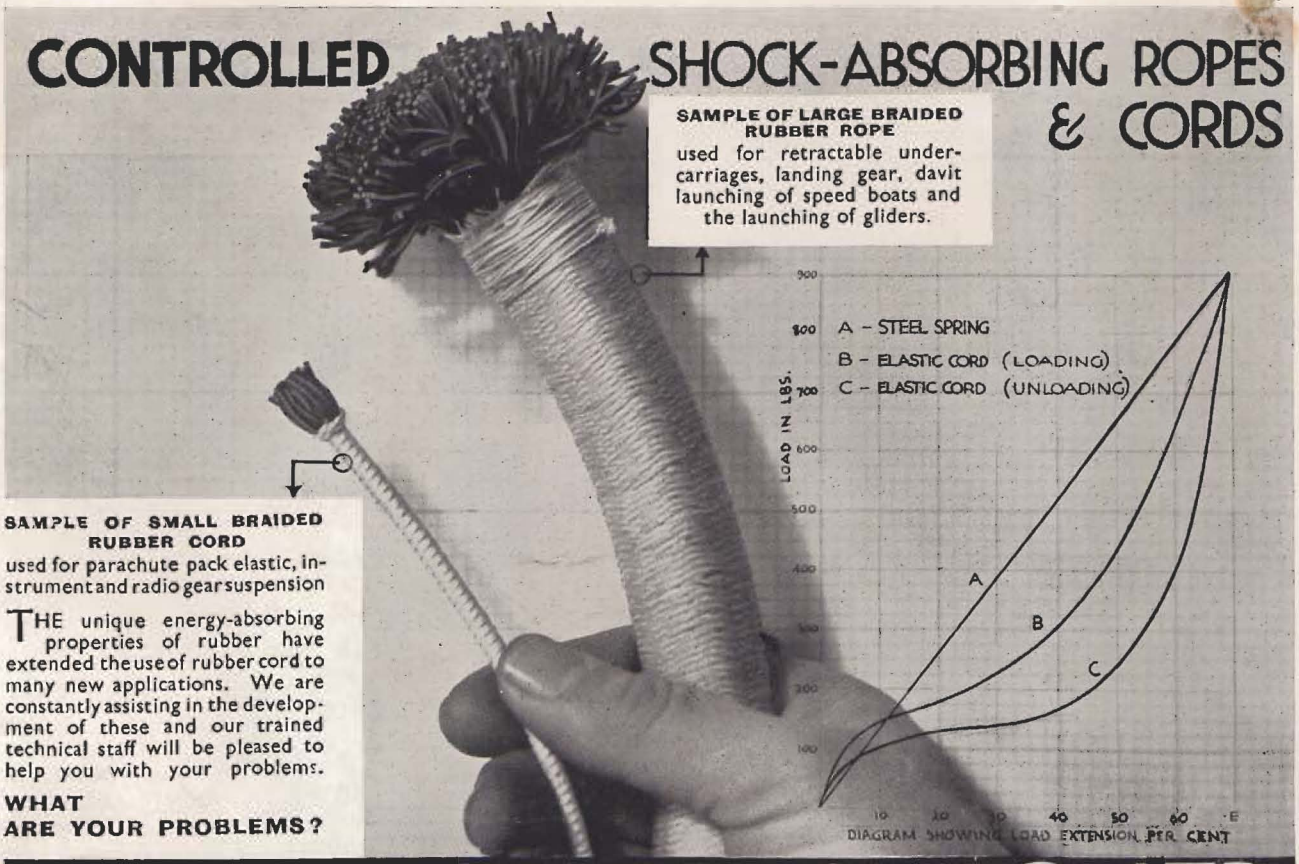
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