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October-November 1980 85p



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SAILPLANE & GLIDING

Magazine of the BRITISH GLIDING ASSOCIATION

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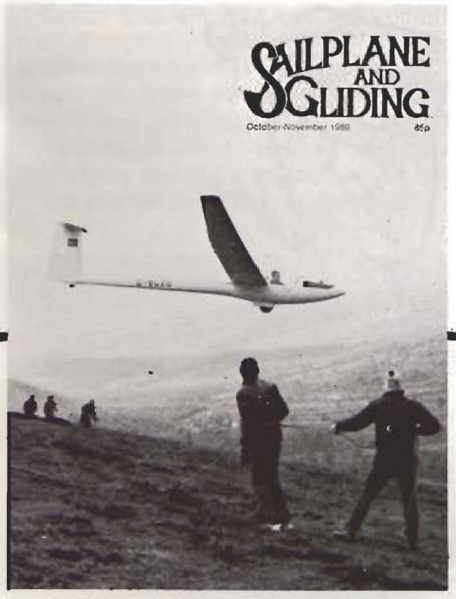
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Cover: Tony Spicer photographed the first bungey launch of a Kestrel 22 at the Long Mynd, home of the Midland GC. It was flown by Dave McQue in ideal conditions.



210 **Tail Feathers** Platypus
211 **Lively While It Lasted** A. E. Slater
212 **Paderborn 1980** Rika Harwood
214 **International Vintage at Sutton Bank** A. E. Slater
216 **A Flying Visit to Glasflügel** P. Light
217 **Regionals' Result**
218 **Early Calculations with the Polar** The Arm-Chair Pilot
220 **Sailplane News** Rika Harwood
221 **Competition Kitty** M. R. Carlton
222 **"Pressing On" Welsh Style** P. Cullen
223 **Follow My Leader** I. Shattock
225 **Two Weeks in Torremolinos** D. B. James
228 **Robert Kronfeld and the use of a Variometer** P. Riedel
231 **Keeping a Sense of Proportion** G. H. Haworth
232 **Overseas News** A. E. Slater
234 **Competition Enterprise** Rhoda Partridge
238 **BGA and General News**
Philip Wills Memorial Fund C. R. Simpson
239 **Accident Summary** A. W. Doughty
241 **Gliding Certificates**
244 **Club News**
251 **Service News**
254 **Your Letters** R. R. Rodwell, R. Sheppe, R. B. Stratton, I. Patterson.

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TAIL FEATHERS



First in a new series of irreverent columns by

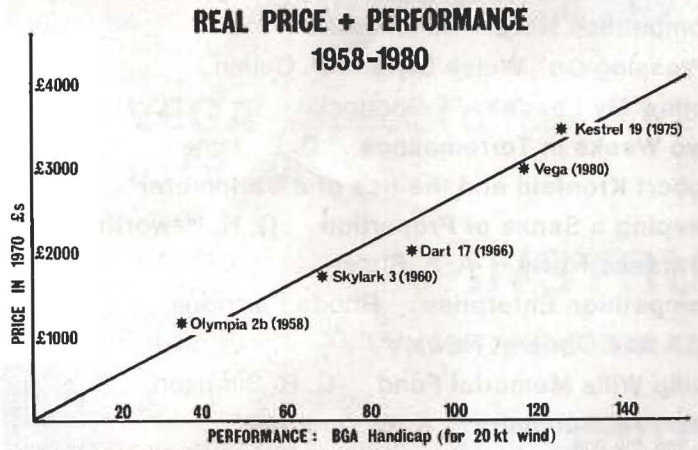
PLATYPUS

Believe it or not Department

I can't remember what my last trick was, but as the conjurers say, for my next trick I will do the impossible. I will prove that gliding is not really becoming more expensive. (Cries of "chuck 'im aht etc etc" from the innumerate louts at the bar.) Seriously, folks, it can be contended that in *real* terms gliding is no



more ruinous than it ever was — it may even be cheaper. Look at this little graph. It shows the cross-country performance of



British-built gliders since 1958, when I joined the movement, compared with their real price after taking out inflation. (I have left out foreign gliders because of the problem of calculating exchange rate changes, transport costs, duty etc.) As performances have increased, so have real prices — but more or less *pro rata*. So a Kestrel cost three times more than an Olympia, but performed three times as well.

Just goes to show you can prove anything with figures, doesn't it?

Well, yes, up to a point. I admit to massaging the stats a bit; so for instance the wind speed I have assumed to be 20kt. That sounds a bit high, since the average wind speed at 3000ft April to September is 17kt. However I have increased the wind factor — which effectively reduces the performance index of the older gliders — to allow for the well-known facts that lower performance gliders:

(a) Often fail to cross the gap to the next thermal — something totally ignored in handicap tables which assume all gliders have no difficulty whatever in reaching the Standard British Thermal.

(b) Make *zero* ground speed into wind in some conditions and cannot complete the task at all.

(c) Have to use the nearest available lift rather than the strongest, therefore achieving lower rates of climb than high-penetration ships.

(d) For the above reasons also have to make large diversions from track to stay airborne.

All in all I would say that the handicap factor necessary to take all of that into account should be at least 10kt extra, not just the extra three I have used.

Sorry, I haven't finished. In 1960 nearly every cross-country ended in a retrieve. A typical Diamond goal flight of 300km would entail 800km driving, countless phone calls and dinner for a ravenous crew. Nowadays the marginal cost of a 300 and 500km flight is £6 or so for an aerotow.

In short the real cost per kilometre flown was far greater 20 years ago than it is today. So let's have less whingeing, as JJ would say.

A Glider Pilot Bold was he . . .

That little ditty about the farmer's daughter and the other expenses incidental to cross-country flying in days of yore might soon be a nostalgic memory if Mike Fairman's suggestions in the last S&G, p203, are taken to heart. He suggests an end to out-landings in farmers' fields by removing some of the distance points achieved when a contest pilot fails to land at a safe, recognised landing field. At present the points lost or gained in a failed race can be quite disproportionate to the distance flown and the temptation to fly on till a spud hits the wheel is strong. The damage — and worse — is likewise out of proportion. We have already got away from the silliness of frantic road races back to the field by simply banning relights

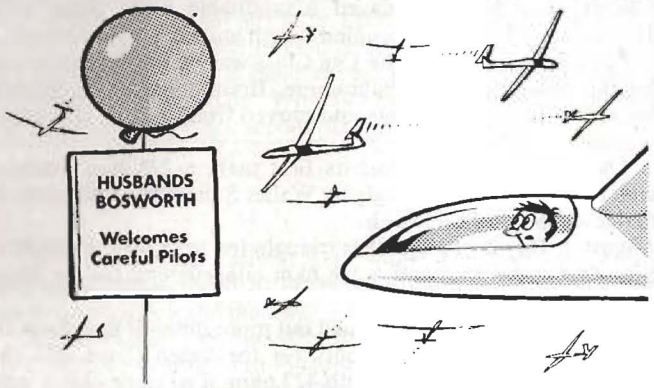


from outlandings. Penalties for not landing on a proper site (or a farmer's field that is safe, aerotowable and agreed with the owner in advance) are easy to apply. In fact scoring would be much simplified since the nit-picking over exactly where a pilot came down would be eliminated: he could only be scored as having landed at one of a specified list of places, the details of each of which one could, if need be, store in the computer at the start of the contest.

I Must go Down to the Sea Again

One of the conditions which I insist upon in agreeing to write this column is that I am not required to be consistent either from one issue to the next, or even from one paragraph to the next. After the above call for due retribution to be exacted from pilots who stray from approved fields, I now want to lament the passing of one of the great delights of long-distance flying in the old days — the sight and smell of the sea.

Generations of young contest pilots have never soared the cliffs of North Devon, chased the sea breeze along Portland Bill or inspected the multi-coloured shallows of The Wash from cloudbase. A typical contest these days is six or seven triangles



all going through Husbands Bosworth. One flight merges into another in the memory, with little that is unforgettably colourful to savour in the winter months.

Next season (it's always Next Season when these great things get done) I'm going to set myself the task of photographing Britain's lighthouses — and getting back home. Many a time I've flown in thermals that leaned miles out to sea and beautiful it was too. It's ultra-cautious to assume that any place within 30 miles of the water will be sea-breezed and unsoarable. Part of the trick is to get there early before the sea breeze forces its way inland; in addition, a reasonably strong wind day is needed when the wind is blowing more or less straight towards the coast. The cumulus can sometimes be seen streeting way out over the water. It can be done in Skylarks, so it can be done in modern ships. *(What can be done? ED).* Getting back, of course.

If you can't be Good be Careful

Saw a chap climbing into a desperately tatty-looking glider the other day — discoloured, patchy paint, odd holes and graunch-marks everywhere, seemingly held together with Sellotape (the glider I mean, not the pilot) while wearing a quite superb new parachute.

First reaction was "how daft, having a run-down aircraft like that and spending so much on an immaculate 'chute!"

On second thoughts, *not* daft at all . . .



50 YEARS AGO

Lively While It Lasted

A. E. SLATER

The assumption that a flourishing gliding club is one that goes from strength to strength, year after year, was disproved just 50 years ago by the sudden demise of a Scarborough Gliding Club. It started as the result of a dance band leader seeing a newspaper report of the Gliding Lunch of December 1929 and coming round to see Fred Slingsby in his furniture shop, knowing him to be an ex RFC and RAF pilot. They put a piece in the local paper and got a response from lots of people including the manager of a luxury hotel in the middle of the town who invited them to hold committee meetings in it and was at once made club Chairman.

After the Itford demonstrations in June by Kronfeld, with his Wien, and Magersuppe, with his Professor, both were invited to demonstrate at Scarborough on Castle Hill, which includes a cliff facing the sea.

Before a crowd of 5000 Magersuppe, who was launched first, went into a steep bank, caught the lower wingtip on a fence at the edge of the cliff, and flopped down onto the sea, where he sat on top of the glider till rescued.

A difference of opinion

As to the cause of the accident, Slingsby said the wingtip holder hung on too long; Latimer-Needham, who was present, told me that Kronfeld held the wingtip and kept it rather low; and Kronfeld in his book attributed the accident to wind currents around windward-facing cliffs and steep slopes, on which he gave a long dissertation.

Magersuppe was then taken on as instructor. He soon got bored with the Dagling and recommended a Kassal dual control two-seater, costing £250. But how to raise the money? The hotel manager had the answer: he gathered his wealthier regulars to listen to a pep talk about Youth and Britain's future in the air and all that, in which Amy Johnson and some BGA bigwigs took part, and actually raised the money. But the club still owed the BGA £75 which they had lent to help in laying on the Castle Hill show, and to get it the BGA sued the club, won the action, and took the Kassel in lieu of payment. They then sold it to a London Club group — I forget how much for, but my share was £5. Slingsby's reaction was to go off and build his first glider, a Falcon 1, so that's how the club ended and he began. ■

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PADERBORN 1980, July 20 — August 10

RIKA HARWOOD

Paderborn 1980 was much more of a mini World Championships than one could have anticipated as many countries had entered their top pilots. They came from Argentina, Australia, Austria, Belgium, Brazil, Czechoslovakia, Denmark, France, Gt Britian, Guernsey, Holland, Italy, New Zealand, Norway, Poland, Romania, South Africa, Sweden and Switzerland. In all 89 pilots flew 83 gliders, of which 34 were entered by German pilots. The Classes were divided as follows:

Open Class, 19 pilots (incl 4 German) flew 16 gliders, 12 pilots had flown in previous World Championships.

15m Class, 39 pilots (incl 12 German) flew 37 gliders, 17 pilots had flown in previous World Championships.

Standard Class, 31 pilots (incl 18 German) flew 30 gliders, four pilots had flown in previous World Championships.

It is therefore more than pleasing to note that our Team Squad members acquitted themselves so well including a (last) Day win in the Open by George Lee and in the 15m Class by Brian Spreckley who finished in third place overall. (Neither Brian or Chris Garton had ever competed abroad, Ted Lysakowski having been to Angers once.) The experience our Squad members gained shows the importance of flying in a new area with different features and meteorological conditions, getting used to different maps and a host of other things without being under the same stress as the World Championships themselves would create, but with little time to get accustomed to them then.

Luckily we got some flying in during the practice week as only five contest days were achieved in the Open and 15m Class, whilst the Standard Class had to be content with the minimum of four days.

July 29, Day 1 Open Class, 287km triangle.

Under difficult conditions which turned out rather worse than forecast no one completed the task. Rantet of France and Broch of Germany both in Nimbus 2c shared equal first with 274km. Chris and Ted came fifth and sixth with 243.5 and 240.6km respectively. Hidden stones broke the tail end of Chris's fuselage but an all night repair at Oerlinghausen was quickly arranged and the Nimbus was back on site the following day.

The 15m Class had been set the same triangle but this was changed on the grid to a goal and return to the second TP — 188km. No one completed this reduced task either but four pilots managed to reach the airfield at Paderborn-Lippstadt, 175km, to share equal first — Colombo (Italy), Peter, Schramme and Gantenbrink (Germany), the first three in ASW-20s, the latter in a Ventus. Brian was 24th with 144km and 752pts. The task for the Standard Class was cancelled.

July 31, Day 2 Open and 15m Class, 308km triangle.

In general conditions proved better than forecast and all in the Open Class completed with speeds ranging from 99.54km/h for Rantet to 58.13km/h for David Innes (Guernsey). Chris came second with 90.5km/h and Ted, who flew the task without a vario, and had his last launch for the day one hour after the majority had gone, managed a creditable ninth place with 83.53km/h. They now occupied fourth and sixth place overall.

The winning speed in the 15m Class was 94.94km/h and a win for the second time by Schramme. Brian achieved 91.58km/h for eighth place and 939pts and moved from 24th to 11th place overall.

The Standard Class had its first task, a 273.2km triangle, which was won convincingly by Walter Schneider (Germany) in his new LS-4 at 88.75km/h.

August 1, Day 3 A 506.8km triangle for the Open; a 446.8km triangle for the 15m and a 398.6km quadrilateral for the Standard Class.

Like Day 1 conditions turned out more difficult than forecast and again it was distance only for the Open Class with the Czechs coming equal first with 427.6km. Ted came eighth with 391.4km for 904pts and Chris took tenth place with 372.2km and 853pts. Ted kept his overall position and Chris was fifth.

In the 15m Class only Ingo Renner (Australia), LS-3, landed within 1000m of the finish line to achieve full distance marks. Brian did well with 415.8km for fifth place and 922pts while six pilots did not score. Brian gained another two places in the overall positions and was now ninth.

World Champion's day

In the Standard Class the current World Champion, Baer Selen (Holland), won the day with 349.8km.

August 4, Day 4 After two no flying days the tasks for the Open and 15m Class was a 373km triangle. A 293.6km triangle was set for the Standard.

Unfortunately first take-off was delayed with the result that at the end of the day a number of pilots landed one or two thermals short of the finish. Only Broch (Germany), in the Open Class crossed the finish line having averaged 60.43km/h to get full distance marks.

At last George Lee had entered the flying arena as the previous weekend had been a washout and all he had achieved so far was a short test flight. He "mislaid" himself a little towards the end of the day and by the time he had located himself he could no longer reach the finish line. He and Ted came equal fourth with 360.6km and 917pts apiece. Chris was not too happy having landed about halfway along the route in a difficult patch and too low to make a recovery.

In the 15m Class there was a tremendous upheaval when, within the first hour, landing reports came in from well-known pundits such as Gantenbrink, Renner, Peter and Manfred Dick, all less than 40km out. Another bunch landed around the first TP between 70 and 118kms. Then after a long pause Brian's landing pin, short of the second TP, showed him well ahead as he had landed relatively early 254.8km away, but slowly he was overtaken by the last 18 still airborne, 16 of which managed over 300km. However, having beaten five of the eight pilots ahead of him in the overall placings he moved ahead to fifth overall although only 19th for the day.

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In the Standard Class, 13 pilots flew over 227km, the winner with 271.4km was Heinz Hämmerle (Austria), in a DG-100. Seven pilots did not score.

August 7, Day 5 No flying took place on August 5 and 6 and today's task was a 211.4km triangle for the Open and 15m, and a 207.8km triangle for the Standard Class.

They were cautious tasks as there was a threat of cirrus coming in during the afternoon, but so far the conditions had been either better or worse than forecast — today they were better although not entirely without problems especially near the first TP. For the first time during this contest start times became important. In the Open Class they took place between 1305 for David Innes and 1358 for George Lee. The first five at the end of the day had all left after 1323 with George 32min after Rantet. When he called to change to the finish line frequency we knew he had 3min in hand to beat Rantet who had averaged 85.55km/h the best so far. With 87.57km/h George flashed past the finish to win on his second day in the contest.

Time lost initially

Chris had left too early at 1315 whilst Ted lost time on the first leg. They averaged 70.34 and 70.91km/h and were 11th and tenth respectively for the day.

Only three pilots started after Brian who had left at 1340 with times ranging from 1254 to 1344 for the whole Class. He was not too happy around the first TP when he had to slow down somewhat not realising that others had the same trouble. With a fast last downwind leg, however, he was the only pilot to average over 80km/h and with his 1000pts he moved up to third overall.

The winning speed in the Standard Class was achieved by Dierkes (Germany), LS-1f at 72.70km/h.

This proved to be the last day's flying — once more the weather intervened and the contest was over.

As already mentioned, the experience gained by our Team Squad members by flying against pilots of known ability in this mini World contest will stand them in good stead if selected to represent our country next year.

Final Leading Results:

Open Class	*Points*
1 Rantet, France	*4783*
2 Broch, Germany	*4499*
3 Matousek/Vavra, Czechoslovakia	*4374*
6 Lysakowski, Gt Britain	*4079*
10 Garton, Gt Britain	*3629*
15 Lee, Gt Britain (two days)	*1917*
(All in Nimbus 2C or 2B except Lee in ASW-17)	

15m Class		*Points*
1 Schramme, Germany	*ASW-20*	*4385*
2 Bluekens, Belgium	*ASW-20*	*4244*
3 Spreckley, Gt Britain	*ASW-20*	*4151*

Standard Class		*Points*
1 Schneider, Germany	*LS-4*	*3351*
2 Navas, France	*Std Cirrus*	*3221*
3 Kepka, Poland	*Std Jantar*	*3191*

The Organisation

Taking into account the large number of foreign entries and the fact that this contest was arranged without any subsidy, organised largely by Paderborn club members, many of whom had never taken part in an international contest before, one can only praise their efforts. Seen as a dress rehearsal many lessons were learnt by the organisers and without doubt these will be discussed and improved upon over the next nine months. Possible improvements have already been made known to the organisers by various members of the International Jury of which good note was taken. The one thing we hope they will not change is the marvellous welcome each and every guest received. The members as well as their families, who had taken on a job, fell over backwards to try and help and please wherever possible. No problem was too much to sort out and everything was done with a smile whether it was laundry, electric lights for our tents, repairs, even accommodation — a solution was always found.

We therefore would like to join Fred Weinholtz who in his closing speech on behalf of CIVV thanked the helpers in the kitchen, the bar and the basement and would only add — "and so say all of us".

The announcement that the German Aero Club has found a way to appoint Fred Weinholtz as World Championships Director in 1981 was welcomed by all those present. It was felt that with his great experience at International level and World Championships he more than anyone can guide and steer his team of organisers and helpers to ensure a successful 17th World Gliding Championships — we wish him luck and hope that the weather gods look favourably on Paderborn and its surroundings come next May.

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International Vintage at SUTTON BANK

A.E.SLATER

Eighth International Vintage Glider Rally, July 26-August 3

For the first time in its history would-be entrants to an International Vintage Glider Rally had to be turned away. But only just: there were 53 applicants for 50 places so only three were disappointed, but there may be a lot more than three of them in future. The number of sailplanes entered by each country (with number of pilots in brackets) were: Gt Britain 24 (60), W Germany 11 (18), Switzerland 6 (14), Holland 4 (7), France 5 (5). But total campers vastly exceeded total pilots because so many brought their families to sample the pure air of a Yorkshire moor at 1500ft. To accommodate them all, a large field had to be hired from a neighbouring farmer and campers were asked to pay him direct, so each briefing would end with the words: "Will those who have not yet paid the farmer . . ." (There were 90 tents in this field).

As at Münster in 1978, the International Vintage Glider Club's tent under Frances Furlong's direction soon became the social centre of the meeting, but this time with lots of outside chairs interspersed with standing room, from which more German than English chatter would float out over the airfield. Also it had to be stocked with a far greater supply of food, since the Yorkshire Club's kitchen only laid on supper and two kinds of breakfast — "English" and "Continental" (most of the Continentals chose the English).

Faces from the past kept turning up in ones, twos and droves, beginning with Dudley Hiscox who had just celebrated his 86th birthday (he last flew solo in 1978). There were far too many of them for individual mention but many were former Yorkshire Club members, and there was an air of expectancy before the arrival of Norman Sharpe, Chairman of the Yorkshire Club for much of its life and, before that, founder or its leading predecessor, the Bradford Gliding Club, in 1930. "Fluff" Slingsby also looked in. Another veteran was Jack Desbery, who came to the London Gliding Club from Oxford University Air Squadron in 1931 and soon became its leading pilot. He was so enthused with it all, what with a spell of ridge soaring in a T-21, and seeing the marvellously resurrected Rhönsperber in which he held an original share, that he felt the call again and has joined the Thames Valley Gliding Club at Booker.



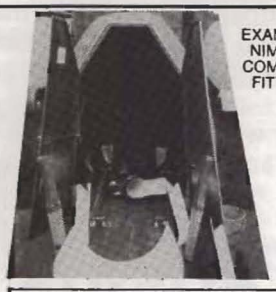
"Fluff" Slingsby talking to Mike Russell. His recently and partly restored Petrel alongside was designed by Slingsby Sailplanes in 1938. Photo: Chris Wills.

The weather was the only disappointment of this year's Rally. On every early morning but one the site was bathed in mist or fog, though cumulus, not very good looking, would sometimes be seen through it as it thinned. The sea breeze was usually blamed for any later deterioration. One outstanding feature of the flying was the entire absence of prangs, either on the site or from outlandings, during the whole ten days.

Monday, the first competition day, brought a record number of launches for a vintage meeting — 108, plus 24 by Yorkshire Club members, making 132 for the day, thanks mainly to the number of tugs satisfying the demand for repeated launches, there being no more than a short spell of possible soaring weather in the early afternoon. The Tutor got away to the only outlanding, in a recommended field two-thirds of the way down the hill, identifiable by some bordering bushes cut into the shape of birds.

Tuesday brought lots more launches and two events: a children's party and, for adults, a showing of the film "Plane Sailing", mostly made around this site in 1934; unedited except for removal of the last few seconds of the Wren's spin with

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accompanying terminalogical inexactitude about the pilot being uninjured.

Wednesday was pretty poor, starting with the site in cloud and around 9am thunderclaps three to five seconds after each lightning flash; but a bit of sun in the afternoon allowed 30 launches with 1hr 15min soaring on the west slope. Evening: bottle party with bonfire.

At briefing a request had been put out to keep children around the launch point under control "since they are the glider pilots of tomorrow."

Thursday brought good cumulus giving over 80hrs' flying time from a record 160 launches, with two outlandings. The English-owned Moswey 3 reached cloudbase and was up over 3hrs "because it took the pilot so long to get back." Thermal strengths were up to 6kt.

On **Friday** a spot landing competition was laid on as unstable weather was not expected till 1800hrs. In the afternoon the Lord Mayor of York paid a visit. In the evening a Dutch bonfire wouldn't light, unlike the Swiss one of the night before.

On **Saturday** night the big hangar was cleared for a folk dance evening with music by a local folk-dance band. A party went 40 miles to Sir George Cayley's country seat to see John Sproule unveil a memorial plaque to him after a talk on his life's work by a descendant, followed in the village hall by Sproule's film showing that an aeroplane built on principles already known to Sir George would actually fly in the hands of Derek Piggott. The party from Sutton Bank was then entertained to a twilight supper in the descendant's garden.



The Spyr 5 which gained second place in the Concours d'Elegance. It is owned by the Roth brothers who have taken 2700hrs restoring the glider. Photo: Chris Wills.

The Cayley party got back to see the country dance festival still going strong. There had been a distribution to each pilot of a beautiful numbered plate inscribed "8th International Vintage Glider Rally, England 1980," around a painting of an airborne sailplane against a cumulus sky and you know it's a vintage one because the sun shines through its fabric.

Prizes

First prize to Rodi Morgan for 12 000hrs' work on his Rhönsperber (BGA 60). This was the showpiece of the meeting. It spent the war out of doors and got into a dreadful state: many hands had a go at it, but it needed someone of Rodi's energy to complete its rehabilitation. Second prize to Roth brothers (Switzerland) for their Spyr 5 two-seater (HB 369). Third prize to Ken Fripp for his Hütter H17 (BGA 490). Prize for longest flight to Werner Tschorn (Germany) for a total of 7hrs plus in his Weihe 50.

What of next year's prizes? Chris Wills, President of the international body, who seemed to be here, there and everywhere ensuring the meeting's success, announced that the next Rally will be in Germany at Bad Feuerstein, the site of many international motor glider contests in the past.

Entries

The glider types entered were:

Gt Britain: Rhönsperber, Scud 2, Gull 1, Viking, 2 Petrel, Tutor, 2 Grunau Baby, H-17, Sky, Kite 2, Kranich, T-21, T-31, Olympia-Meise, Kestrel, Rhönbussard, Rheinland, Mu-13D, Weihe, Moswey 3.

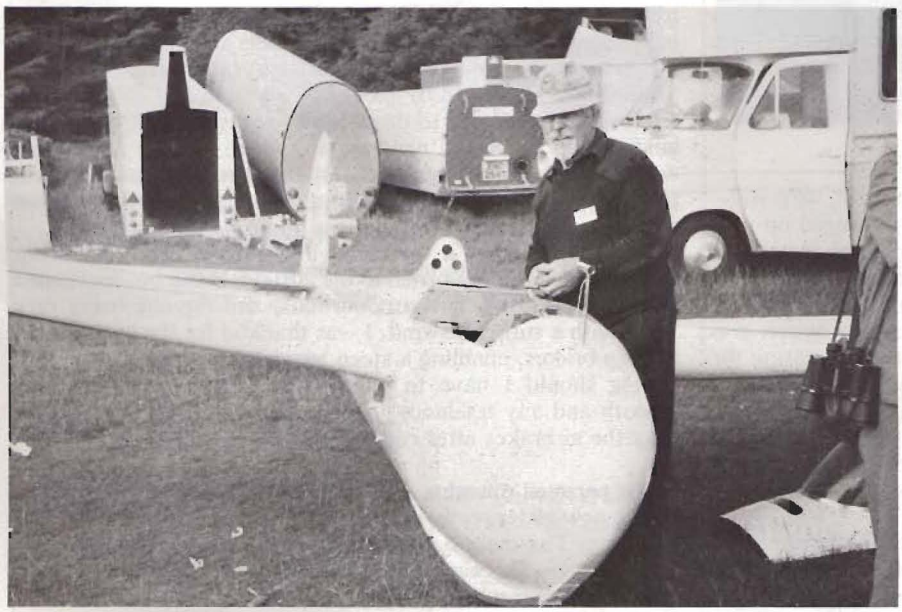
Germany: 2 Grunau Baby, 2 Meise, Mu-13D, K-6, Condor 4, Cumulus, Weihe, Libelle.

Switzerland: Kranich, Minimoa, Moswey 3, Spyr 5, Spalinger S18, Meise.

Holland: 2 Prefect, 2 Goevier 3.

France: 3 Nord 1300, Castel 301S, Castel 25S.

Of course no vintage enthusiast will be satisfied with a mere list like this. He (or she) will want to know, of every aircraft, a vast number of details, starting with how, where and when found and ending with by whom, when and where restored, with lots of technical details in between. You will find these in the bulletins of the Vintage Glider Club of Great Britain: Secretary Mrs. Frances Furlong, 60 Well Road, Otford, near Sevenoaks, Kent.



Rodi Morgan with his prize-winning Rhönsperber which was flown this year for the first time since 1940. This glider was first in the 1938 and 1939 British Nationals. Photo: Chris Wills.

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A Flying Visit to Glasflügel



A flight test on the 304 by PETER LIGHT who has been gliding for ten years, instructs and currently flies a flapped 15m at Avon Soaring Centre.

Ever since I'd heard about it in April and particularly since I'd seen the prototype, helping to retrieve it from a soggy field near Duxford during the 1980 Dunstable Nationals, I'd fancied flying Glasflügel's new ship, the GLASFLÜGEL 304. (The result of listening to the radio chat when your own task week is getting washed away can keep you busy!)

In June I unexpectedly found myself on a business trip to Germany and by sheer coincidence enough time to hop on three trains, a bus and a car to visit Glasflügel's factory in a picturesque valley between Stuttgart and Ulm. (All after hurried organisation *via* Tony Hanfrey, the UK agent). The General Manager, Dieter Fürst, who was most hospitable, explained the concept behind the new machine before I shared a trip with a German couple to the local gliding site for a test flight. The small strip is at the foot of local hills (complete with fairytale castle) and on that day was operating with a 15kt crosswind.

Even with the unfamiliar "root at the front", German trailer rigging was quick and simple — controls connected automatically and only the main pin was loose. The wings rig tongue in fork with the main pin to one side and a tool is provided to draw the wings together.

In appearance the ship is typically Glasflügel, the most obvious new features being the almost pointed nose, the completely new canopy arrangement and the attractive paint scheme. I also noticed the new fuselage air exhaust neatly faired in behind the tailwheel.

Hinged instrument panel

As I'd come so far it was my turn first. Getting in, surprise — there was no instrument panel in the way — it hinged up with the canopy. There was little chance of taking-off with the canopy closed but unlatched as two very obvious black handles stick out from the canopy frame until you fold them away flush to lock it. Unlike its predecessor, the 304's canopy action was beautifully balanced, the supporting gas strut either easing the canopy lightly but firmly to the open or shut position from a neutral point and no assistance was necessary. A second pair of handles, in red, operate latches that secure the canopy to the instrument housing. Operating this releases the canopy together with instrument cover, either for instrument servicing or for emergency bail out.

As I settled into position I felt that the cockpit was designed around the pilot rather than something having to be fitted into the aircraft. Fresh air is available through new small car-type vents on the corners of the panel and can be directed and opened and closed by the pilot — additional distributed outlets feed air to the canopy for demisting. The panel is large enough to take a full complement of instruments that we regard as so important in the UK.

Being well over 6ft I was particularly grateful for the adjustable rubber pedals, seat back, head restraint and thigh supports, which I could change in flight and I found the cockpit area comfortably large enough for a warmly dressed me, maps and other kit.

Having noted that the altimeter and vario read in metres and the ASI in km/h I settled down to enjoy my flight. The take-off run and tow out behind the Robin tug were smooth and uneventful, but in true Robin/Germany style, steep! Aileron control was excellent from the start.

Flew for more than an hour

Being confined by airspace restrictions in the vicinity of Stuttgart Airport to 2100ft over site, I flew near the tops of the hills/mountains in the region. I was fortunate in finding weak and scrappy thermals coming off the west facing slopes to extend my flight to well over an hour. The glider displayed all the qualities we have come to expect from Glasflügel — light controls, responsiveness, push button trimming and flap lever coming easily to hand. It was a truly effortless and pleasant glider to fly. I found I was able to thermal very comfortably at 45kt. Stalling was preceded by plenty of warning and displayed no tendency for the wing to drop. Stall speeds varied from 35kt in landing flap to 38kt in neutral flap, which in view of the high wing loading of the much filled, smoothed and modified prototype wings bears out the claim that the stall speed has been reduced (these figures will be less on production gliders).

Before the end of a very enjoyable flight I had a last zoom over the castle and returned to the airfield. Being unaccustomed to the slope of the surrounding hills, and the site being very small with a stiff crosswind, I was thankful for the very powerful flap brakes, enabling a steep approach with no fear of pancaking should I have to close them. The touch down was smooth and any tendency to float killed instantly by opening fully the airbrakes after round out.

A few personal thoughts and technical details from the factory

The new glider really is a second generation 15 metre flapped sailplane. The main departures from earlier designs lie in two aspects — in the new wing profile designed with the help of Akaflieg Braunschweig, whose recent exploits include the World Championship winning SB-11, and the world's best performing glider, the SB-10. The new profile retains a normal

thickness chord ratio which makes for a light weight and economic structure in glass, and a strong structure in carbon to enable a 17 metre tipped version to be built, without compromising flap or weight limits.

I understand the carbon version will be available early next year and that a motor version is also being contemplated. In flight the new section is claimed to provide a much improved climb rate, with a 10% lower stall speed and therefore thermalling speed. High speed sink rates are also reduced by 10%. Comparison flights with today's most successful Racing Class gliders have been very encouraging and show that the 304 can outclimb the opposition while running with it at a given wing loading, or else climb with the opposition and outrun it when carrying higher wing loading.

Concealed plumbing and wiring

The other aspect is the cockpit ergonomics. Here Glasflügel appear to have gone much further than I believe any other manufacturer. The instrument housing pivots upwards at the front together with the canopy. A new tongue and groove seal with a soft inlaid tube gasket, and gas strut support, ensures perfect sealing with well balanced stiction free opening and closing. The whole assembly is well finished, with flush fitting latches and concealed operating rods. Plumbing and wiring is hidden from sight and runs through the pivot centre and under the forward cockpit floor which is double skinned for strength. (It struck me as useful for those finding themselves flying through dry stone walls at Camphill or landing wheel up on a little Rissington runway!)

You remember the German couple? As I left for the airport, having decided that our syndicate could just about afford one, the German couple ordered a 304 and a carbon Hornet — one each!

REGIONALS RESULT

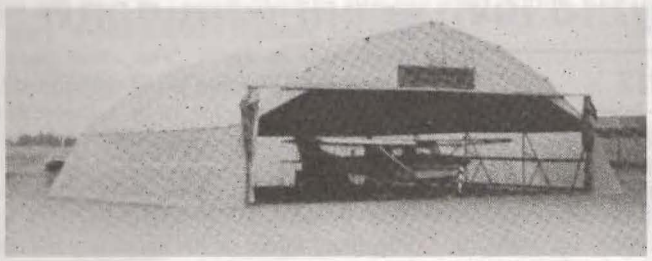
WESTERN REGIONALS — Nympsfield, June 6-15

No.	Pilot	Sailplane	H'cap	Day 1 8.6 217.3km ■	Day 2 9.6 207.1km →	Day 3 12.6 168.05km ■	Day 4 13.6 150.05km ⌐¬	Day 5 15.6 117.6km ▲	Total Points
1	Roberts, D.	Kestrel 19	114	832	66	938'	865	422	3123
2	Burton, G. E	Carman JP 15-36AR*	96	844	0	1000	1000	22	2866
3	Jones, R.	Nimbus 2	118	819	52	971	702	250	2794
4	Bleaken, L.	Nimbus 2	118	586	43	972	611	271	2483
5	Crawshaw, G. H.	DG-100	100	804	DNF	289	873	238	2204
6	Sharman, R.	K-6CR	84	208	0	766	700	501	2175
7	Morris, G. D.	Std Cirrus*	98	186	0	718	788	313	2005
8	Hodsman, D. A.	Mini Nimbus	108	836	0	56	698	337	1927
9	Shadrach, D.	DG-100	100	609	0	566	440	238	1853
10	Parker, S.	Std Cirrus	100	141²	0	481	761	410	1793
11	Keogh, B. F.	Libelle 201	98	186	0	584	602	343	1715
12	Findon, D. E.	Std Libelle	98	175	14	476	805	223	1701
13	Hawkins, P.	Mini Nimbus	108	610	0	361	471	212	1654
14	Hill, B.	Std Cirrus	100	0	—	511	—	290	
	Winning, E.			—	15	—	628	—	1444
15	Manwaring, A. J.	DG-200*	106	125	0	511	685	41	1362
16	Dean, M.	DG-100*	98	175	38	449	655	0	1317
17	Szabo-Toth, G.	Skylark 4	86	70	3	373	660	179	1285
18	Harrington, T.	Vega	108	87	19	334	597	232	1269
19	Tull, V. F. G.	Kestrel 19	114	0	61	442	556	196	1255
20	Giddins, J.	Astir CS	99	167	2	0	670	317	1156
21	Hall, R. A.	ASW-19	102	164	—	375	—	0	
	Woodward, N.			—	17	—	594	—	1150
22	Barrett, R.	Vega	108	80	19	334	576	65	1074
=23	Aldridge, K.	PIK 20	114	152	0	146	599*	108	1007
=23	Szulc, B.	Nimbus 2	118	31	0	326	610	40	1007
25	Williams, R.	Astir CS	99	—	0	405	—	3	
	Guthrie, P.			120	—	—	443	—	971
26	Easey, J.	K-6E	90	0	0	406	512	0	918
27	Webster, J.	ASW-20	108	174	0	387	0¹	297	858
28	Hoy, S.	IS-29D	94	184	0	0	643	0	827
29	May, R.	Std Libelle	98	186	19	0	582	0	787
30	Langrick, J.	K-6E	90	0	0	123	621	0	774
31	Sampson, D.	Astir CS*	97	173	25	0	538	DNF	736
32	Breeze, D.	Bergfalke 4	92	0	—	402	—	131	
	Wilson, T.			—	0	—	0	—	533
33	Swann, C.	ASW-20L	106	61	DNF	DNF	205	181	447
34	Lucas, B.	Kestrel 19	114	100	0	330	DNF	DNF	430
35	Roberts, D.	K-6E	90	168	—	153	—	0	
	Gibbons, J.			—	1	—	3*	0	325
36	Haszlakiewicz, M.	SZD 30 Pirat	82	—	0	51	—	—	
	Marczynski, Z.			0	—	—	14	20	85
37	Nightingale, C.	PIK 20D	104	—	0	—	0¹	DNF	
	Towson, D.			0	—	0	—	—	0

*= without waterballast facility; 1 = 50pts TP penalty; 2 = 25pts TP penalty; 3 = 481pts TP penalty; 4 = 506pts TP penalty; 5 = 325pts TP penalty; 6 = 100pts TP penalty; DNF = did not fly.

Day 1 was won with a speed of 52.52km/h and five finished; the best distance on Day 2 was 84km/h and no one reached the TP; four finished on Day 3 with 52.19km/h the winning speed; on Day 4 it was 70.4km/h and 33 completed the task and on Day 5 the best handicap distance was 120.2km with only one passing the first TP and no one finishing.

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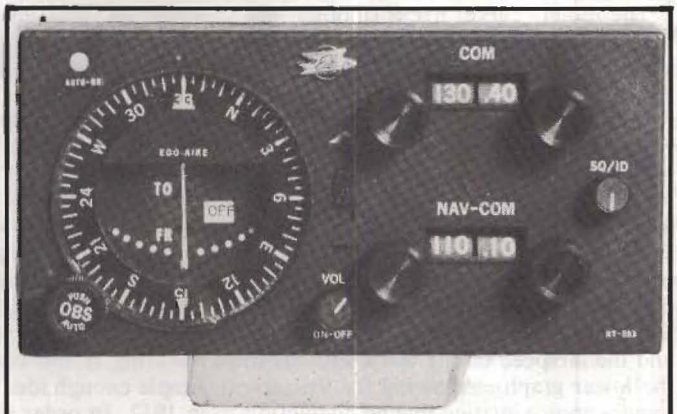


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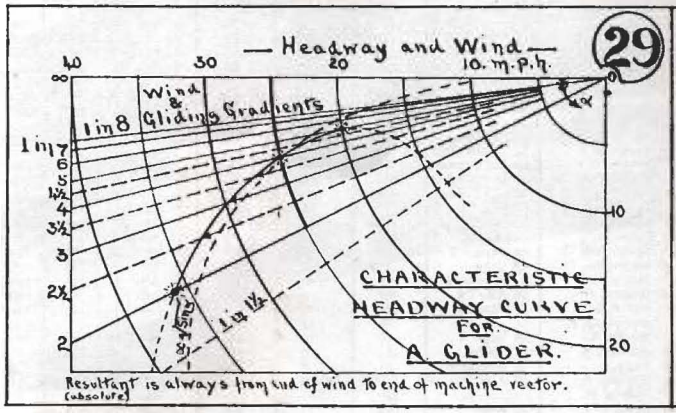
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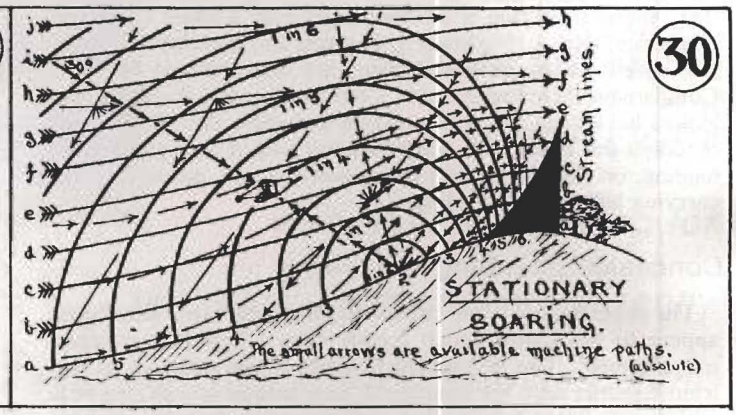
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Early Calculations with the Polar

THE ARM-CHAIR PILOT





As soon as one starts looking into the history of best-speed-to-fly calculations (see "Why does the Best-Speed-to-Fly Construction Work?", in the June issue, p126) one realises how dependent they have all been on the notion of the polar curve, that familiar representation of a glider's performance. Someone had to be the first person to draw a polar curve, and someone had to be first to use it to find the optimum speed for a particular purpose, such as to achieve the best gliding angle into a headwind. Who?

The polar curve itself (though not under that name) appeared in the well-known early text-book **Aerodynamics** by F. W. Lanchester, published in 1907 by Constable of London. Fig 112 consists of two graphs: the lower is a cartesian plot of the gliding angle in degrees (y-axis) versus the airspeed (x-axis) whilst the upper shows the modern form of the same curve but with the co-ordinates of a point specified by the gliding angle directly (*ie*, the angle of inclination of a line drawn from the origin to the point) and the airspeed (along the x-axis, as in the lower graph). Allowing for the customary approximation that no distinction is made between the airspeed and the horizontal component of the airspeed, the best-gliding-angle speed is found by Lanchester by drawing the tangent to the curve from the origin, and the speed for minimum sink by noting the maximum of the curve. Thus any writer who, later than 1907, reinvented the modern form of the polar curve, with its minimum-sink and best-glide points, did so in ignorance of its appearance in the standard English text-book of the day on aerodynamics. Whether its introduction can be traced further back I do not know.

The next stage in the evolution of the use of the polar must have been the appreciation of the optimising constructions to be used when determining the best flying speeds in air moving with both horizontal and vertical components of velocity, such as the air flowing over a hill. Here, again, we need look no further than a text-book which, if not standard, was popular enough at the time to run to a second edition within a year of its publication in 1912: S. L. Walkden's **Aeroplanes in gusts. Soaring flight and the stability of aeroplanes,** published by Spon of London. An eccentric work in many ways, it has its original moments, and any glider pilot of the 1920s looking along the few feet of shelf-space a library then needed to accommodate all the books on flight could not have helped but notice the **Soaring flight** in its title.

Far-sighted in 1912

The author devotes a chapter (VIII) to what he calls "stationary soaring", by which he means hill soaring whilst facing directly into wind, with the possibility of hovering if the conditions are right; a simple enough idea to us, but far-sighted in 1912. In order to investigate the possibilities he needed to imagine the airflow over a hill (his Fig 30) and to characterise the performance of a glider (Fig 29). The latter figure is instantly recognisable as a polar curve, though back-to-front by our standards. "Headway" is Walkden's word for airspeed. Like Lanchester's diagram (which was presumably its inspiration), the co-ordinates are the airspeed and the gliding angle α, with the difference that Walkden uses polar co-ordinates to the full: the airspeed is actually represented by distance from the origin. Thus the justification for the name "polar diagram" is that when we think of the pair (airspeed, gliding angle) as polar co-ordinates the familiar diagram appears, even though we usually use cartesian axes with different scales and label them "forward speed" and "sinking speed". Historically, it seems that the name "polar diagram" has simply been transferred from the aerodynamicist's diagram of the same name graphing the lift coefficient against the drag coefficient. But that, too, was originally presented in polar co-ordinates involving the resultant force and its inclination to the vertical.

The solid line in Fig 29 is Walkden's polar. It has a dotted extension at the high-speed end, but as V_{NE} for his glider is 36mph it "cannot be used"; it is also dotted for speeds below the "best gliding point" (20mph) since "no pilot can balance the machine in these glides" (don't laugh, this is *1912*). The other dotted curve in the diagram is not mentioned in the text, but appears to be a theoretical polar given by the equation $v=50\sqrt{\sin\alpha}$.

Thus far Walkden has done little more than Lanchester, but he now puts his imaginary glider on his imaginary hill and launches it. To find out what happens, he needs to be able to determine the resultant motion arising from the glider moving through the air, and the air moving relative to the ground. Nowadays we solve this problem by representing what the air is doing by a point in the diagram whose (cartesian) co-ordinates are given by the headwind and the sink, and drawing a line from it to the polar. We explain this procedure by saying that it amounts to shifting the axes of the graph which has the effect of shifting the polar curve by an amount corresponding to the air movement in order to find the polar with respect to the ground. This has been common knowledge at least since Lippisch's lecture to the joint meeting of the Royal Aeronautical Society and the British Gliding Association in 1931. The

resultant motion is represented by the vector from the "wind" point to the "machine" point on the polar.

But this is exactly Walkden's procedure. In Fig 29 we see that the "headway" curves are labelled "headway and *wind*", whilst the "gliding-gradient" lines are labelled "*wind* and gliding gradients". Since the author was trying to hill soar, he was only interested in headwinds and rising air, and not tailwinds or sinking air. Then, under the diagram, he explains that the resultant motion of the glider on the hill "is always from end of wind to end of machine vector". None other than our old friend the triangle of velocities.

Having invented this indispensable procedure, Walkden uses it to find out what his glider can do on his hill. First, he places his unfortunate pilot near the top of the hill at the point marked 5 (Fig 30), which means the hill is there 1:5. The wind is 25mph. Now 1:5 is the best gliding angle, achieved at 20mph, at which speed the pilot is therefore obliged to fly, just skimming over the grass — backwards: "This velocity, unfortunately, causes the glider to vanish over the top of the hill". Try again; start at the 1:4 point and "stationary soaring just becomes practicable". There follows an analysis of various hill soaring policies that might be adopted, which provide copious evidence that Walkden had a clear idea of how his diagram was to be used to determine a best speed to fly.

For example, the best-gliding-angle speed is found in order to escape from the point *e* directly over the top of the hill, and avoid the black "area of no return", and on another occasion the speed is found which produces the smallest absolute resultant velocity by finding the shortest vector from the "wind" point to the polar (a curious requirement, but that is not the issue). We may safely conclude that however peculiar a question was put to Walkden, he would have been able to answer it with the aid of his diagram. Thus was established, in 1912, the basic procedure for selecting one's airspeed in order to optimise, in some specified way, one's flight path relative to the ground. No further developments took place until, twenty-five years later, cross-country pilots began to appreciate that they needed to maximise their average speed through the air, whatever the wind, which required a new theory.

Had Walkden not been prejudiced against the possibility of thermal soaring, he might have developed the new theory, too. But he favoured circular dynamic soaring as the explanation for the soaring of birds, holding that they would not be able to tell if they were in a rising column of air at a height of more than 200ft because their eyes were too close together to see the ground receding. He did admit that birds might take advantage of rising air by feeling how their angle of incidence changed as they encountered an upgust, but he clearly preferred the dynamic theory.

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SAILPLANE NEWS

RIKA HARWOOD



DG-202

It is not quite clear if the DG-202 supersedes the DG-200C and DG-200/17C described in the June issue p111. As the technical data also varies slightly we summarise their latest information in order to avoid confusion.

Glaser-Dirks lists nine improvements on their new 15m, 15/17m sailplane which will be known as the DG-202 and will be available from November in glass or carbon-fibre.

1. Single-piece forward-hinged canopy with one-lever jettison capability.
2. Automatic Kestrel-type trim control over the whole speed range.
3. Wheel and airbrakes connected to the same lever for better braking effect.
4. New instrument console positioned 3cm nearer the pilot for optimum control.
5. Airbrake and flap lever moved 3cm back for easier handling.
6. Automatic elevator connection, an important safety measure.
7. Automatic connection of waterballast system. New valves guarantee a higher standard of reliability.
8. Spring mounted landing gear allowing good ground clearance to be maintained.
9. Higher take-off weight for the 15/17m when flown at 15m wingspan.

	DG-202		
Technical data:	**15m**	**DG-202 15/17m**	
Span (m)	15	15	17
Wing area (m²)	10	10	10.57
Aspect ratio	22.5	22.5	27.34
Wing loading (kg/m²)			
Carbon-fibre	—	29-48	27.7-42.6
Glass-fibre	31-45	32-48	30.5-42.6
Empty weight (kgs)			
Carbon-fibre wings	—	220	223
Glass-fibre wings	240	248	251
Waterballast (kgs)			
Carbon-fibre wings	—	160	160
Glass-fibre wings	130	130	130
AUW (kgs)	450	480	450
Min sink at 80km/h (m/sec)	0.59	0.59	0.53
Maximum speed (km/h)	270	270	270
Max L/D at 110km/h	42.5:1	42.5:1	45.5:1
Stalling speed (km/h)	62	62	60

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COMPETITION KITTY

MIKE CARLTON

We now have six Kitty Comps under our belt and the prize week in Barbados is anybody's. As with the first three, the last three have had their ups and downs (a phrase with extra meaning for glider pilots!), the weather has been both good and bloody, and the Team Squad have been severely tested by the natives.

Here is what has been happening:

WOLDS — Kitty *ee ba gum*

We had serious language barriers at Wolds, with the local pilots at a loss to understand where the bloke from London actually wanted them to go, but these were finally ironed out amid laughter and the tasks flown.

The Saturday saw a 151km triangle, Rippon/Carlton Moor, and the Sunday a 134km out and return to Masham. Ted Lysakowski romped home for the Team Squad in his ASW-20F on Day 1, with John Hart hard on his heels in a K-6CR, but Ted couldn't keep it up on Day 2 so that John had his revenge with a handicapped speed of 55.2km/h and in so doing won the weekend.

Mention must be made that the second Team Squad member was Chris Garton who on each day found a very nice field in which to position his Oly 2. There must be a moral there somewhere.

Wolds — June 7-8, 1980 — 151km triangle — 134km O/R

Pos.	Pilot	Glider	Speed (Dist)	Pts	Speed (Dist)	Pts	Total Points	ASS
1	E. R. Lysakowski	ASW-20F	54.1	1000	49.5	765	1765	(1.65)
2	J. Hart	K-6CR	46.6	956	55.2	793	1749	1.64
3	R. Stoddart	Dart 15	43.0	934	(7.8)	35	969	.91
4	N. Fisher	ASW-20	(37.7)	192	51.3	774	966	.91
5	B. Svenson	K-7	(158.8)	807	—	—	807	.76
6	E. Room/J. Durman	Cobra	(37.7)	192	(89.1)	405	597	.56
7	M. Chana	K-6CR	(111.3)	566	—	—	566	.53
8	A. Townsend	ASW-20F	(93.7)	476	—	—	476	.45
9	G. Johnson	K-6CR	(47.5)	241	(47.9)	218	459	.43
10	P. Norrison/B. Stott	K-6E	(42.1)	214	(45.5)	207	421	.39
11	C. Garton	Oly 2	(72.7)	369	—	—	369	(.35)
12	M. Gibson/J. Reeves	M-100	(8.7)	44	(31.3)	142	186	.17
13	E. Acey	K-6E	(36.5)	185	—	—	185	.17
14	W. Young/R. Milner	DG-100	(2.0)	10	—	—	10	.01

ASS Winner — J. Hart 1.64

LASHAM — Kitty goes (south) West

It rained and it rained and it rained, so Saturday was spent doing what all glider pilots like doing when they're not actually flying — talking about it. A very productive forum was held at which the inseparable Team Squad duo, Al Kay and Dave Watt, held forth at length on what cross-country flying is all about.

We are relieved to report that on the Sunday they matched action to words by finishing first equal over a 150km triangle, Didcot Railway/Pewsey Railway, with a speed of 50.1km/h. The best performance by a local was that of Martin Eldridge in his Astir with a distance of 72.4km who thereby won the weekend.

Lasham — June 14-15, 1980 — 150km triangle

Pos	Pilot	Glider	Speed (Dist)	Pts	ASS
1 =	A. E. Kay	ASW-20F	50.1	277	(1.00)
1 =	D. S. Watt	ASW-20F	50.1	277	(1.00)
3	M. Eldridge	Astir	(72.4)	115	.42
4	A. Ginever	Mini Nimbus	(53.1)	73	.26
5	D. McCarthy	Mosquito	(52.9)	72	.26
6	T. Sly	Cirrus	(23.9)	8	.03
7	L. J. Sole	SF-27	(21.7)	4	.01

ASS Winner — M. Eldridge .42

DUXFORD — Kitty visits the Air Museum

Well, not really, but we might have done had the weather been less clement than it in fact was. As it turned out, we had two good flying days and were able to do a 140km out and return to Snetterton Heath on the Saturday and a 194km triangle, Shipdham Airfield/Mendelsham Mast, on the Sunday.

Al Kay, again representing the Team Squad in his ASW-20, managed 56km/h on the first day to win it, whilst David Garnett came in first amongst the locals in his K-6E with a handicapped speed of 45km/h. On the Sunday, the day was won outright by another local, Peter Baker in his Cirrus with a distance of 101km. This performance clinched the weekend for him, although the overall winner was the other Team Squad member, Nick Hackett in an LS-3.

Duxford — June 21-22, 1980 — 140km O/R — 194km Triangle

Pos	Pilot	Glider	Speed (Dist)	Pts	Speed (Dist)	Pts	Total Pts	ASS
1	N. G. G. Hackett	LS-3	46	879	(97)	485	1364	(1.02)
2	P. Baker	Cirrus	42	830	(101)	505	1335	1.00
3	A. E. Kay/ G. N. D. Smith	ASW-20/ Std Jantar	56	1000	(60)	300	1300	(.98)
4	S. Foster/F. Prime	Dart 17	40	806	(47)	235	1041	.78
5	Janet/D. Garnett	K-6E	45	866	0	0	866	.65
6	S. N. Longland	Kestrel 19	(91)	317	(81)	405	722	.54
7	J. M. Scott	Vega	(105)	380	(49)	245	625	.47
8	R. C. Haddon	Dart 17	(86)	295	(35)	175	470	.35
9	Catharina Edwards	Astir	(96)	340	0	0	340	.26
10	K. S. Whiteley	PIK 20	(84)	286	0	0	286	.21
11.	B. H. Bryce-Smith	Kestrel 19	(26)	27	(11)	55	82	.06

ASS Winner — P. Baker 1.00

ARCTIC LITE GLIDING CHAMPIONSHIP — 1981

Big, big prizes are to be won in this three-day Championship which is to be sponsored by Allied Breweries to round off the series of Competition Kitty weekends held throughout the year. It will be Lasham on May 2, 3 and 4, 1981, to celebrate the departure of the British Team to the World Gliding Championships at Paderborn. To say Thank You to all who have supported Competition Kitty the British Team will be directing this event.

It is intended to hold the Arctic Lite Championship in wooden gliders (K-6s, Darts, etc). The entry list will be made up from the top 40 pilots who have flown in any of the Competition Kitty weekends. So, if you are eligible, keep the above dates free and come and join the British Team at Lasham.

Full details of how to enter will be published in a later issue.



PRESSING ON WELSH STYLE

ON AND ON AND

AND ON AND ON AND ON AND ON AND ON AND ON AND ON AND ON AND ON AND ON AN

Paul Cullen

This is a "how I/we 'dun' it" story about my first venture into the Welsh mountains, the Brecon Beacons. For some time Ivor Shattock had been talking of the fantastic soaring to be had in the Beacons when the northerlies blew. Unfortunately the stories of the few white faced, eyes on organ stops, pilots who have followed Ivor into the mountains are a little disturbing. Nevertheless one day in April I arranged for Ivor to lead me into his mountain lair.

Before we left he pointed out our route on an ordnance survey map. It looked fairly simple, just jump from ridge to ridge until we got there. (Understatement of the year.) Unfortunately Ivor had radio problems — he could receive but could only transmit his carrier frequency. So we agreed to a code: one click "No", two "Yes", three "Say again" and four "Ask me a question so that I can give you the answer in yes or no."

The wind was about 20kt, NW. Ivor was the first to launch and towed to Abergavenny to wait for me at the Blorenge, a hill just to the south of the town. I followed soon afterwards, but after releasing I paused in a convenient thermal and consequently arrived high at the Blorenge.

"I'll press on to the next ridge Ivor, will you catch me up?" "Click, click" was the reply. Soon afterwards I realised that I wasn't quite sure where the next ridge was and had to turn back and join Ivor. Lesson one, know where you are going. Having rejoined Ivor, we set off up the valley. By 1500ft (hill tops 1700ft) I began to get worried. Ivor was some way ahead of me soaring a ridge but I was picking fields and headed out into the centre of the valley where there was some landable countryside. There then followed a barrage of frantic clicks from Ivor. I replied "HELP! — I can't see where to go."

Then just as I was about to start my circuit round a chosen field a four knotter saved the day. Meanwhile Ivor was soaring a ridge, a sheer rock face, further up the valley and I joined him when I had enough height. I arrived about a quarter of the way up it and then all hell broke lose. I was in the rotor where the gently sloping valley sides met the sheer rock face. Eventually things smoothed out and I climbed above the ridge. So far the first few minutes of this "pressing on" venture had been fairly heart stopping and I was looking forward to a rest at the top of the ridge with a chance to regain lost adrenalin, but already Ivor was on his way to the next ridge and I had to follow.





Ivor Shattock took these photographs of Paul (Pirat) following him into the Brecon Beacons.

This ridge worked well but there was still no sign of Ivor pausing. He made one exploratory tour of its length and was off to the next one. However this time I decided to delay and make the most of this one. I heard Ivor's clicks over the radio and eventually spotted the white wings ahead of me on the next ridge. Well at least I thought it was a ridge but in fact it was a cone called Tor y Foel, the top of which was around 2000ft. I arrived at 1500ft through some bad sink and could see the ground coming up as I followed the contours of the hill to the lift. Although I had 1500ft on the clock the ground was only about 150ft away. Only a small proportion of the hill was working and it was also throwing off a thermal. (Ever tried ridge soaring a thermal?) The sides of the hill were quite gentle so it appeared that one was soaring close to the ground. Exhilarating stuff.

Eventually I climbed above the hill and started to circle in the thermal. This got my adrenalin flowing for as the circle took me over the back of the hill I fell out of the thermal and had to dive for the edge. Finally I got away and could look down on my spectator, a lone hill walker.

The next hill was about a three mile jump into wind and Ivor was already there, but *en route* I encountered heavy sink and doubts as to whether the hill would work at the height that I would arrive raced through my mind. I snuggled in close to the wooded slope (not very close by Ivor's standards) to the bottom of the hill and was saved by a two knotter. Onwards once more, but the going was getting easier.

We reached the Brecon Beacons — from a plateau long fingers pointing north descended into the valley. Ivor demonstrated what to do. He dived at right angles to one of the fingers, disappeared down the other side and then reappeared above the bowl at the back where the fingers joined together. I followed and as I neared the finger to cross over I was hit by the down and rotor

caused by it, then as I crossed all went smooth with 2kt lift. I then followed the finger up its length to the bowl. This was quite an experience, for the ground was climbing faster than I was and it felt as though I was sinking until right at the bowl all that was visible was sheer mountain side. Here the lift was a good 6kt and one turn in the bowl and the ground was left far behind. The scenery was fantastic, the sheer sides of the bowl covered with scree and striped with greens and purples of the rock and grass.

Biggest of them all

But the best was yet to come. I crossed the next finger and climbed once again in the next bowl and there in front of me was Pen y Fan, at nearly 3000ft the biggest peak of them all. I crossed the finger that led up to Pen y Fan near its top. As I crossed it and turned at the bowl the tail was suddenly flicked up, everything shot up in the cockpit and then I was slammed into my seat. The varios were on the stops and with one turn I climbed from 2000 to 3000ft. By 3800ft the lift tapered off and I spotted Ivor further down the finger. We paused for a photographic session, watched by a number of hill walkers.

There was a great sense of achievement, fear, excitement and curiosity all mixed up. The rewards of my struggle from the Blorenge were now realised. Ivor said he had contacted wave and being addicted to height I asked if this was a good place for wave. "Click, click" was the reply. But after 40 minutes of searching I set course for home to let someone else have a go in the aircraft. The return was without difficulty, setting off from 3800ft with a slight tail wind.

Flying in such surroundings really has to be experienced. My few words do nothing to explain the fantastic soaring to be had and the potential of this area has only been exploited by one man.

Follow my leader

IVOR SHATTOCK

Paul has pestered me to write my version of the flight. He's always asking me something anyway and it was doubly rewarding to take him on a more adventurous trip than the usual cross-country thermal gaggles — yes we do that as well sometimes. He did very well not to abandon the task at each difficult bit. I have tried for years to find a follower willing to ridge soar to Brecon.

After Paul's query about wave I realised he could find his own way home as it was all downhill, literally, and so I tried the west faces of the Black Mountains.

Passing over the Talgarth glider strip I could see the tug but no glider. The air was very good and I lost no height until I dashed at the hill for the fun of it. Back at the Brecons again I soon found the 6kt in the bowl of Pen y Fan which was by now covered in thick cumulus blotting out the sun over the peaks. Before getting to cloudbase at around 4000ft, it was obvious a wave was inducing the cloud to form and the leading upwind edge showed a steady 4-6kt. I was in brilliant sunshine at 6000ft and climbed to around 10 000ft until I decided to explore to the SW where a better looking bank of cloud appeared. Sometimes the grass is greener somewhere else! This showed 9kt at 9000ft!

By the time I got the oxygen organised I was at 12 500ft. After taking a few photographs for the disbelievers I dashed off at VNE to the SW and eventually located Swansea, the Iougher valley and Ammonford.

As it was now getting on a bit (the whole flight was seven hours), I returned to Brecon and crossed the Black Mountains at around 7000ft to round Hereford. (Ivor ridge soared in the NNW wind, flying over Monmouth at 2000ft and arriving back at 2600ft.)

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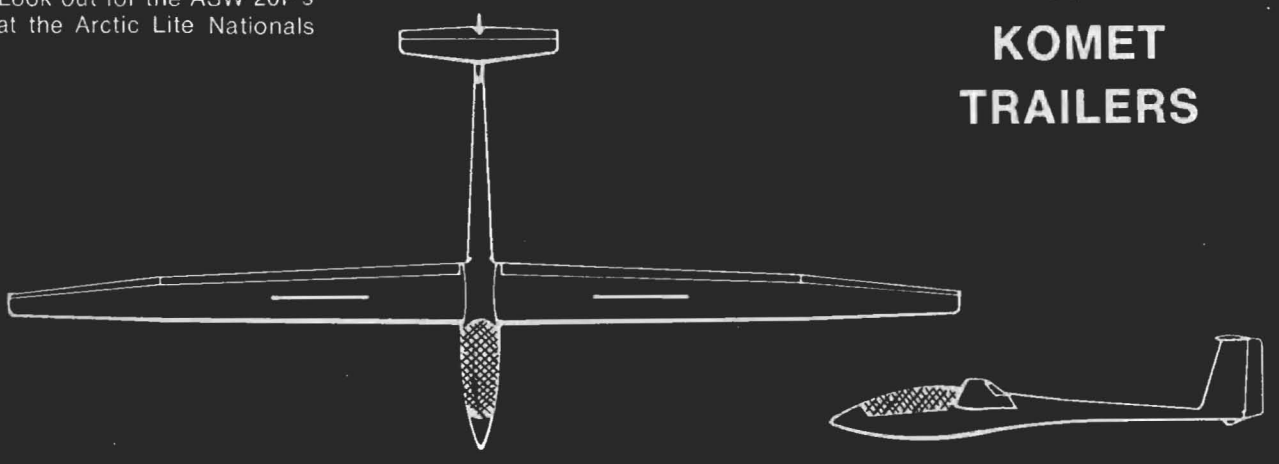
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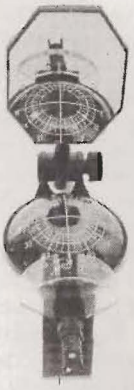
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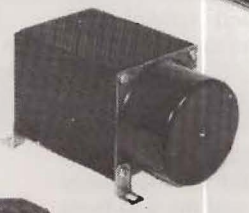

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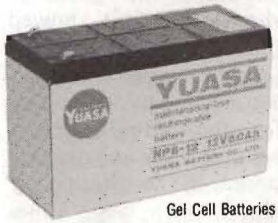

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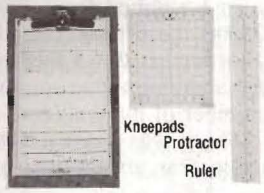

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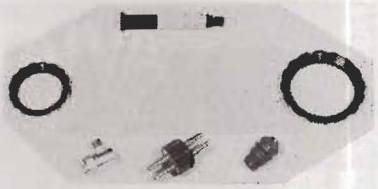
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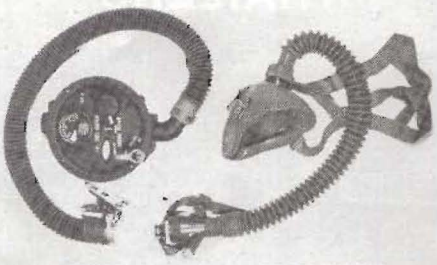

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TWO WEEKS IN TORREMOLINOS

BRENNIG JAMES writes about his Spanish exploits last summer when he travelled in his SF-27M Cy motor glider.

As Tug Wilson was flying his motor glider to Hong Kong, I felt I had to do something to keep my end up, so I planned to go down to North Africa *via* Spain then up the leg of Italy and if there was time, continue to Germany, Sweden, Norway, Iceland and Scotland, calling in at Camp Hill on my way home.

I took-off from Booker at 4 pm on June 22 but landed after 20 minutes to clear the carburettor of a mild air lock and get a bit more power. I next landed at Lydd and Le Touquet where I put up for the night as I felt I could not get to Angers safely before dark.

Next morning I found the ignition assembly had become unbolted from the cylinder head. I had evidently crossed the channel with the coils hanging from the engine by their leads. I found a couple of spare bolts at the back of the hangar and screwed them back on, sealing the threads with my beloved silicone rubber. I resumed the journey and on passing the airfield at Aigle St Michel, I flipped the ignition switch, always a wise precaution, and found a mag drop so I landed, cleaned the plugs and resumed my journey. I had to land back again, finding navigation unusually difficult as I was sitting on my map, but at last I was on my way.

Arrival at Angers was enlivened by a fair number of parachute jumpers but their tower radio was working so I was warned in time. Angers is slowly growing from an airfield to an airport. It now has a tower and a Met office. Before many years are out they may be asking the gliders to move on. Forty-five miles a gallon sounds cheap but by the time you have spent £3 or so getting a taxi to a hotel, things are not so attractive.

Next day's flight was to Bordeaux, the country steadily getting more interesting. Most powered aircraft either fly high over the cloud cover or fly on radio aids. I seem to be one of the few power pilots who still flies by map reading, laboriously ticking off the features as they pass below the aircraft. In one's gliding career, initially, one's concentration is focused on the view above the horizon, but later, as the excitement of competition and task flying begins to pall, the view below the horizon gradually takes a hold of you. The sky is relatively easy to read, the ground is much more difficult. One is so overwhelmed by detail that air photography followed by study at leisure is the only way to deal with the vast amount of detail one can see. The same problem has arisen in athletics. Sweden's track stars have taken up orienteering as a change from monotony of running around in circles.

Bordeaux is a large military international airport. They had a little difficulty in seeing me on the downwind leg as they were expecting something bigger. Everyone is always very pleasant at these places and amused to see such a small aircraft. On leaving I got rather a fright when I saw wall to wall woodland to the Spanish border, so I immediately circled in a thermal to gain height and got a rocket on the radio from ATC for soaring too near to the airfield. Further south approaching Biarritz I could fly down the coast and enjoy the view of coast and seaside resorts.

So much for France, now for Spain!

Guards and machine guns

I landed at St Sebastian and found myself surrounded by armed guards. This is quite normal in Spain; there are a large variety of guards all carrying medium machine guns. I spent a pleasant evening on the sea front and next day set off for Pamplona. I took the wrong turning going through the Pyrenees but sorted it all out and experienced a dramatic change in scenery as I flew the last thirty miles to Pamplona. Spain is like Nevada or North Africa, large expanses of nothing, dry and hot. There are only thirty airfields in Spain, mainly spread around the edges so the standard distance between them is about 150 miles. I refuelled at Pamplona and was warned of numerous cu-nims near Madrid. However, I thought there would be ample time before they got going.

All flights in Spain require a flight plan even if they are only local and the authorities are concerned that the same people get out on landing as embarked before take-off. Due to political troubles there is often an army presence on the airfield in addition to customs, airport security guards and the police, all heavily armed.

Taking-off for Madrid from Pamplona, I was a bit daunted as it was a long way to go and there were a lot of mountains in the way. I have 30 litres in the tank and do eight litres/hour straight and level at 70kt and 22 litres/hour climbing, so on a long leg some soaring is essential. The sky looked dead but as I flew close to the first big mountain in the way, lift materialised and I was soon up to 6000ft. Thermals were few and far between but I was finally getting 8kt to 12 000ft. The countryside was most impressive, the bare bones of the geology poking right through the soil.

Landing out could be a problem of survival, not merely one of finding a telephone. There is hardly any habitation outside the towns which are a concentration of houses huddled up for mutual protection. There are vast spaces without any landmarks so a high altitude helps the navigation as otherwise you don't see anything marked on the map.

Finally, I glided down to Madrid, skirting it to the west to find the general aviation airfield at Quatros Vientos to the South. The Royal Palace is on the top of a cliff on the edge of the city so it was quite easily visible without getting too close.

Madrid was just a bus ride away on the line Cibeles-Fortuna, names I could never forget. Next day I returned and one of the airport attendants, very apologetically said, "I hope you don't mind we tethered your aircraft down last night as it got very windy." I heard there was a gliding competition at Moro del Toledo, 50 miles south, so I filed a flight plan to go down to visit, then only to be told that as it was a military airfield I would have to get permission in person from Madrid. I returned to the Reao Aero Club to find that that did not open until 3pm, then was referred to the Ministry of Sport (Aviation) who opened at 6pm, then to the Ministry of Civil Aviation 8 to 11am, next morning, then to the Ministry of Military Aviation, at this point I gave up. Everyone was very pleasant and polite but the formalities were precisely adhered to and telephones rarely used.

Before leaving I was told that I could fly over Moro but could not land. I did so but saw nothing but a small grass field with a couple of sheds, so I assumed I

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was a little more west off course than I had expected. The scenery this time was even more impressive but at an altitude of 10 000ft or so it was fairly easy to thread one's way between the cu-nims which were beginning to build up. About 30 miles out of Cordoba I heard a fluttering sound behind me and thinking that it might be a helicopter looked around but seeing nothing assumed that something had fallen off the engine, as it often does.

After landing at Cordoba a Spanish army helicopter came in and a Captain strode into the control tower. I was summoned to ATC and asked to produce my flight plan. The first two I produced were the wrong ones but on producing the right one, everything simmered down and I was told that all was well. So far as I could see, they must have been following me on radar. When I slowed to 40kt and circled in thermals, the anticlutter wiped me off the screen so they saw a blip which moved then disappeared then reappeared. Thinking that I might be dropping ammunition and explosives for ETA they scrambled a chopper to shadow me just to be sure.

Anyway, Cordoba was a very rewarding place to fly to. You cover a long distance over very rough country, you find a lake which gives you a fix, you correct your course and the ground falls away to a fertile valley. Like the keys to the kingdom in the valley there is a city and in the white city there is a large brown building and in that there is something glittering and gold. In the case of Cordoba there are two gold objects, a cathedral and a Mihrab, both inside the same roofed mosque.

To go for a long flight is much more fun if you end up at a place which is foreign and exotic. You tend to get brainwashed at school that winning or getting lots of marks is all important; this is just to make you learn your French irregular verbs, being second can be great fun also. The winning is everything philosophy results in pilots packing up and going off home from competitions when they think they have no chance of winning.

The next day I set off for Seville where I refuelled and left for Malaga. Getting into the cockpit is always a struggle. One has to carry passport, flying licence, money of several kinds, bankers card, cheque book etc and at every take-off make a check of all documents, since if you lose one, you are scuppered. I wore a sports jacket to hold all this and to appear presentable, so in the hot weather it was like a sauna bath until I climbed 4000ft.

When I looked up the tower frequencies for Malaga, the penny should have dropped as there were about four of them plus four approach and several others. The flight was uneventful as by now I had become adjusted to dramatic mountain scenery. I arrived with a good deal of height and found that the airfield was screened by a thin layer of cloud. I received landing instructions but as I descended on the downwind leg, discovered half a dozen jumbos taxying about but fortunately also a Motor Falke at the General Aviation end. I touched down near an intersection and shot off to the dispersal. I spent the night at Malaga and returned the next day to fly to Almeria.

Back to Heathrow

I started up but after refuelling when I re-started I oiled a plug. As I changed it, the plug just went round and round. I had stripped the thread on the light alloy head. In disgust, I went over to the international building and took a plane home to Heathrow. While I was doing this, Jimmy Calderhead, one of the local gliding enthusiasts, turned up, saw the aircraft and getting my number from an advertisement in S&G rang my home address to see what I was doing in Spain.

I collected my trailer and drove down to Malaga. On the way I passed the Spanish Air Force base at Moro del Toledo which hardly to my surprise turned out to be a grass strip with a couple of sheds where they were having their Nationals with a few invited German pilots, but due to cu-nims they had had hardly any flying.

As far as my experience was concerned, the rain in Spain was seldom on the plane or to put it another way, in Spain the plane was seldom in the rain or if you prefer, the plane in Spain was seldom in the rain . . . Quick nurse, the Hypodermic!

Defeated by all the problems

Ah yes, where was I? In Malaga; thanks to a very friendly British Airways engineer I had a wire insert put into the cylinder head and got the engine running quite happily. For thirty pesetas, about 25p I got briefed by a Met section which resembled the average university department of meteorology and filed my flight plan for Almeria, exploring on the way some impressive mountains rising to 11 000ft and only thirty miles from the sea. I got as far as the runway when the plugs oiled up so I decided to scrub, as I was defeated by all the problems of radio noise, heat in the cockpit and the difficulty in taxying downwind, not to mention several jumbos taxying around. When I closed the canopy the perspex steamed up , when I opened it I couldn't hear the radio for the din from the engine. To cope with motor gliding on a major airport you must have a steering tail wheel, excellent radio plus cockpit refrigeration.

Spanish controllers have the clever knack of gargling and talking at the same time. You think the set is U/S until you hear a British Airways skipper come through loud and clear.

I decided to de-rig and disappear by road, one of the wisest decisions I have ever taken. I then discovered to my dismay that I required permission in writing from Madrid before I could proceed and this took the best part of a week to obtain. During this time I lived a most agreeable life, thanks to the kind hospitality of Jimmy Calderhead, David Schofield and Hans Dekker. Most days were spent swigging cerveja (beer) at the aero club or the Lima Bar and swopping yarns about gliding, so the time was spent very pleasantly.

Finally I got permission, rigged and away and drove for La Montagne Noir. I arrived in the district rather late and put up at a hotel nearby. I went into the reception and found two couples drinking at a table. I asked if there was room, yes, room for my trailer? "Yes, behind the hotel. By the way what's your name? James. You're not the chap who writes all those articles in S&G are you?" I thought that if all continental hotels were as knowledgeable as this, things were looking up.

I ended up at Gap which is crowded with German and Swiss pilots as they find the weather there better than Samaden and Zell am See. It is one of the most delightful spots for gliding in Europe but the mountains are so close that you tend to complete your final glides with 6000ft in hand. I got over all the local peaks making 11 500 on my best climb. Above 8000ft it pays to make a dumbell beat as one's turns take up such a lot of room. Despite a good deal of rough air the engine stayed in its kennel quite politely.

After a few days of this idyllic life it was time to return home, having sampled somewhat unsuccessfully some of the most interesting flying in Europe. Spain seems the most excellent country for gliding. Good as South Africa or Texas and much easier to get to. Interesting towns, large spaces and powerful weather. The Spanish government are beginning to take an interest in promoting gliding. Within reach by road from the UK, its future prospects for British pilots are very exciting.

ROBERT KRONFELD and the use of a VARIOMETER

PETER RIEDEL

It is an historical fact that Robert Kronfeld was the first soaring pilot to fly with a variometer. The time: Rhön Contest 1928. The plane: Rhöngeist, the prototype of the Professor model. Variometer: very probably type Badin 0-5 m/sec, sold by AERA-Paris, France. Kronfeld won a prize for the first out and return flight to the Himmeldank-Berg on August 6, 1928, circling repeatedly up to cloudbase without the benefit of slope currents. Professor Dr Walter Georgii, the Director of the Research Institute for Soaring of the Rhön Rossitten Society, in his report about the 1928 contest credited Kronfeld with having become the veritable teacher of the new soaring technique by this flight. This is undoubtedly true.

It is also a fact known to many old timers in German soaring that Robert kept his variometer a secret by taking it to his plane hidden in a paper bag, installing it shortly before take-off and removing it immediately after landing. Asked about the contents of his paper bag, he had spoken about food and tea or something like that. Afterwards, when the secret leaked out, most of us took it humorously while some criticised Kronfeld.

Günter Groenhoff had variometers in his Fafnir from the 1930 Rhön Contest on, and Wolf Hirth made his much publicised blue sky thermal flight from Elmira to Oswego, New York, on October 2, 1930, using a variometer in his Musterle. One can state that from 1930 on, all German soaring pilots knew about the need for a variometer. It was only the cost of it which made its purchase a problem for some in those economically lean years from 1929 to 1933.

Came to help British pilots

Robert Kronfeld first came to England in June 1930, invited by The Master of Sempill, with all expenses paid by some British millionaire. Robert was employed at that time as a gliding instructor by the soaring school on the Wasserkuppe, a part of Professor Georgii's Research Institute for Soaring. Kronfeld was sent with the understanding that he was to assist the fledgling British soaring movement by demonstrating cloud soaring and telling the British soaring pilots how to do it.

Probably it should be mentioned here that Carl Magersuppe, a much less experienced young German soaring pilot, was brought to England in 1930 by the *Daily Express*, mainly to do soaring demonstrations on hill sites. Magersuppe had not yet flown with a variometer and his cross-country flying experience was very limited. He could not act as a teacher like Kronfeld. Even after his return to Germany he never reached the group of really successful soaring pilots such as Robert Kronfeld.

Robert came again to England in 1931. He crossed the Channel both ways with his Wien on June 26, 1931. After having himself towed up very high the crossing in each direction was a pure glide, unassisted by upcurrents. By this feat he won £1000 offered by a British newspaper. *FLIGHT's* comment: "£1000 for what?"

Since 1973 I have been busy researching for two volumes called **Erlebte Rhöngeschichte** (Experienced Rhön-History).[1] Together they will cover the time from 1911 to 1939.

One question intrigued me especially and I did extensive research to find an answer to it: Which type of variometer did Robert Kronfeld use in 1928?

A few years ago Alexander Lippisch claimed that it was he who called Kronfeld's attention to the usefulness of variometers for soaring pilots. He did not say this in 1928, I do not doubt Lippisch's words, but his memory after so many years. My theory is that perhaps balloonists in Kronfeld's Austrian Aero Club told him about variometers which they had used for many years to show if their balloons were rising or descending.

How he got the idea doesn't really matter, but the question remained about the origin of his variometer. Old timers from the Wasserkuppe contradicted each other. Somebody's assertion that Kronfeld's variometer was built for him on the Wasserkuppe could not be proved.

Then I remembered my first self-taught thermal soaring flights in April 1932 in Robert's old Rhöngeist. At that time a French made Badin variometer was installed on its instrument panel. The plane was owned since 1928 by the Wasserkuppe Soaring School. There was no reason for the school management to change the instrumentation during the following years. Therefore one could assume that this meanwhile antiquated variometer was the one Kronfeld used in 1928. I tended to accept this conclusion as the most likely one.

However, conscientiously reporting historical facts only, I wanted to confirm this hypothesis by searching through the book **Kronfeld on Gliding and Soaring** (1932).[2] My hope was to find in it Kronfeld's own report on how he got the idea of using a variometer in 1928 and which model he chose. His book was published in English only. I thought it had been written for the benefit of the soaring movement in the English-speaking world, covering all phases from primary gliding to thermal soaring. To my surprise there was no mention even of the word "variometer" in Kronfeld's otherwise encyclopedic book about soaring. I was thunderstruck, because in my records there was a telegram Kronfeld had sent from London to the German instrument manufacturer ASKANIA-Berlin on July 1, 1931. It read:



askania instruments anlaesslich aermel kanal flug und wolkensegelfluegen in england glaenzend bewaehrt besonders askania variometer fuer segelflug unentbehrlich • robert kronfeld

ASKANIA INSTRUMENTS WORKED BEAUTIFULLY ON OCCASION OF CHANNEL FLIGHT AND DURING CLOUD SOARING FLIGHTS IN ENGLAND, ESPECIALLY ASKANIA VARIOMETER INDISPENSABLE FOR SOARING FLIGHTS.
ROBERT KRONFELD.

To be absolutely certain I went through Kronfeld's book again with a fine tooth comb. No recommendation to use a variometer! And this in 1932, when soaring in Germany forged ahead because of the spreading use of variometers in soaring planes! It appeared that Kronfeld intentionally kept his English-speaking readers in the dark about the decisive importance of variometers, a rather unpleasant conclusion which I had hesitated to bring out into the open.

Now I read Frank Irving's "50 Years of Peering at the Dials"[3] in the December, 1979 issue of S&G, in which he wrote: "In his book (Kronfeld's), he is not very explicit about its (the Wien's)

instrumentation . . . " and "Curiously, there doesn't seem to be any explicit mention of the variometer: this is particularly strange because Peter Riedel credits him with the clandestine use of such an instrument in his Rhöngeist in the 1928 Wasserkuppe Contest."[4]

I would be very happy to hear from British old timers who might be able to tell whether Kronfeld *verbally* instructed them to use variometers or not, when he visited England in 1930 and 1931. I plan to publish the gist of this report in my second volume of the **Experienced Rhön-History.** Any information regarding the above conclusion would be very welcome and certainly be mentioned in my book.

From studying contemporary British soaring publications I found definite proof that Eric Collins for example did not use a variometer until July 1, 1933.[5] A friend of his gave him a home-made variometer which he used in his rather clumsy two-seater soaring plane. Being an especially gifted pilot, according to Philip Wills, Collins soon afterwards established English distance and altitude records. He became the first English soaring pilot to acquire his Silver C, No. 26, on May 17, 1934. Collin's feats might have been accomplished at least one year earlier, if he had read about the "indispensable" variometer in Kronfeld's book.

To those who consider my conclusion unfriendly towards Robert Kronfeld I have this to say:

I am writing my **Experienced Rhön-History** not just with the idea of flattering the pioneers of soaring. They were human like everybody else with their strong points and their weaknesses. Readers of today want to know the plain truth and I will give it to them as best I can. Those who suspect personal prejudices should wait to read what I will say in the book about the incredible injustice done to Robert Kronfeld, by assigning the No. 1 Silver C to Wolf Hirth and placing Robert in second place. This happened in Germany between 1935 and 1938, after Kronfeld had already been shown in the No. 1 position in all publications from 1931 to 1935. I will just as vigorously defend Kronfeld's right to position one, as I will criticise the responsible ones, without regard to their reputation as great soaring pioneers. See the list below from the **1938 Handbuch des Segelfliegens, (Handbook of Soaring Flight),** edited by Wolf Hirth.

1	Wolf Hirth, Stuttgart	15. 2. 31	9	Heinr. Dittmar, Schweinfurt	3. 4. 33
2	Robert Kronfeld, Wien	15. 2. 31	10	Paul Steinig, Grunau	24. 5. 33
3†	Günther Groenhoff, Frankfurt/Main	15. 4. 31	11	Eberh. Muschick, Dresden	24. 5. 33
4	Kurt Stark, Darmstadt	13. 5. 31	12	J. K. O'Meara, New York, USA.	10. 6. 33
5	Otto Fuchs, Darmstadt	13. 5. 31	13	Peter van Husen	17. 7. 33
6†	Hermann Mayer, Stettin	10. 8. 31	14†	Walter Fremd, Frankenhausen	25. 7. 33
7	Peter Riedel, Wasserkuppe	6. 7. 32			
8	Martin Schempp, Stuttg.	14. 11. 32			

Robert Kronfeld was a loner, but I was happy to have his friendship. In the summer of 1936 he phoned me right after his arrival in Berlin, together with The Master of Sempill. I alone accompanied them that afternoon to a big reception in the German Aero Club. In October 1936 I visited London and Robert invited me for dinner in the RAeC or the R Aeronautical Society's clubrooms. We parted as friends — it was the last time I saw him. He knew that I was not prejudiced against him.

What could have motivated Robert Kronfeld in failing to mention the "indispensable" variometer to the English-speaking soaring people? He certainly felt friendly towards them and he finally became a British subject. But he was a professional soaring pilot in 1932, trying to make a living with his soaring circus by rushing from one air show on the continent to the next one. It was a precarious existence which could not last for long. His future in Germany might have been promising in 1929 and 1930, but the political clouds there were getting darker as the anti-Semitic Nazi Party gained more and more votes. Thus he must have decided to keep the clue to his success as a soaring champion a secret for as long as possible. In Germany the variometer was no secret any more, as stated before. In the English-speaking world it still had the value of a "secret weapon". So he must have chosen to use the word "altimeter", where the word "variometer" should have been the right one, on p212 and 213 of his book.

References: *1. Riedel, P.:* **Erlebte Rhöngeschichte, 1911-1939,** *Motorbuch-Verlag, Stuttgart, 1977; 2. Kronfeld, R.:* **Kronfeld on Gliding and Soaring,** *Hamilton, London, 1932; 3. Irving, F.:* "50 Years of Peering at the Dials," *S&G, December 1979 p264; 4. Riedel, P.:* "Robert Kronfeld and the First Variometer," *Soaring, May 1976; 5. Horsley, T.:* **Soaring Flight,** *A. A. Wyn, 1946, p269-271.*

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Keeping a sense of proportion

A CAUTIONARY TALE FOR FLEDGLING PILOTS

GEOFFREY H. HAWORTH

I suppose there comes a moment of truth in the flying life of every glider pilot. Despite statistical proof to the contrary, flying without the benefit of power is potentially dangerous. Crises appear quickly and without warning, particularly when concentration lapses and confidence begins to grow. At that time a sudden emergency quickens the heartbeat, raises the blood pressure and leaves the victim in a somewhat salutary mood.

The story is probably familiar to many but the events happened to me early in a flying week after a period without practice. Of course I knew all about the circuit procedure and heights at various points. I had devoured my Piggott and digested the sage's advice about cutting the circuit if necessary to the virtual exclusion of a crosswind leg. A multiplicity of instructors had produced some ambivalence of advice but all, at least, were agreed on the unreliability of altimeters and the necessity to disregard instruments on the latter parts of the circuit.

A tender trap for the unwary

So far, so good, but most instruction to A and B standard is based on the supposition that the air is more or less stationary, at least in the vertical plane, whereas the whole stuff of gliding depends upon the fact that air can ascend quicker than the glider descends. Yet meteorology and common sense dictates that rising air must somewhere be replaced by sinking air. Therein lies the tender trap for the unwary.

The flight was my second of the day, the first having been a quick turn to get the feel of the Skylark. A general jubilation on the airfield announced that thermals were beginning — ("there's a bit about" — "it's just popping" — you know the sort of thing) and I thought I would try my hand despite an indifferent launch. A quick left turn after release took me over the black roofed hangars where previous experience and A level physics had taught me that thermals were likely to be generated by the "black bodies".

A spellbinding effect

The club Skylark has two variometers, a fascinating green and red ball affair and the more clinical looking Cook's. I prefer the former which seems more friendly though it has its drawbacks. The green ball has a spellbinding effect which can be distractingly dangerous, especially if it sticks halfway up the tube. The delight of gliding, to my mind, is its simplicity yet there are those who clutter up their cockpits with wireless sets, screaming variometers and enough paraphernalia to fill a flight deck. They are the sort, I expect, who cannot enjoy a picnic without a portable barbecue range, TV and inflatable boat. Let's keep things simple — I am essentially "a bit of cotton sellotaped onto the canopy" man. But I digress — back to my flight.

The search for rising air, as I said, had led me over to the left of the release point and several circles in, more or less, zero sink had brought me to a position where completion of the circuit should begin. In fact it should have begun earlier but I was not aware of that — I was happy and confident. "Now let me see, USTAL — hand on brake, ignore altimeter, judge all heights". By this time I was beyond the beginning of the runway and about to turn left into the crosswind leg, when I realised that the trees were considerably taller than they ought to have been, so were the houses. I was much too low and uncomfortably far away from home, and it was too late to shorten the circuit.

Running out of height must be one of the oldest mistakes in the book and yet, it is inexcusable. A combination of inexperience, over confidence and a lack of sense of proportion were the main ingredients. Let me elaborate. Judging height is an exercise in proportions — twice the height of tall trees, three times the height and so on. Let us suppose that the judgment is correct to 100ft. This would be an error of one tenth at 1000ft but one third at 300ft. The former error is tolerable, the latter potentially disastrous. One can argue that the estimate should become progressively more accurate as height reduces, but an early soaring pilot has his hands full at this stage and preoccupation may impair judgment.

There can be few situations quite so desolate to a pilot as the gradual realisation that the glide angle of his machine is insufficient to guarantee his safe return to the bosom of his pals on the airfield. It is not the sudden surge of fear that accompanies awkward cable breaks, but the inexorable nightmare situation of impending, inevitable disaster. One's regard is not so much for one's personal safety as for the sheer ridicule and disgrace which may follow — not so much with meeting one's Maker as the CFI.

A landing of sorts

By this time the skid seemed to be touching the trees, the overwhelming instinctive action of pulling the stick back was resisted, a quick prayer seemed to generate a bit of lift, the runway was comfortably close now, over the road adjoining the airfield (thank heaven there's an infrequent bus service) and we scrambled down to a landing of sorts.

The few moments of silence before the arrival of the retrieve crew were quite delicious. The advice from those witnesses on the ground was comprehensive, blunt and quite superfluous. The lesson had been learned the hard way and it was some time before I was to cross the boundary on landing at less than 200ft.

I think the Almighty must have been smiling on me that day — I looked up to see the K-7 plus the CFI carelessly soaring at 3000ft oblivious of the personal drama below.

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DUTCH NATIONALS

These were held at Terlet from June 8-22 with 19 pilots flying in the 15m Class and 11 in the Standard Class.

The contest appeared to be almost a repeat or extension of the 15m Class at Dunstable with a very complex weather situation persisting throughout, providing as many outlandings and hence similar results. The highest speed achieved was 97.64km/h on Day 4 and the lowest winning speed was 53.60km/h on Day 5. Tasks were set on seven days which resulted in six contest days in both Classes.

I believe that Holland is the only country left which still uses winch launches for their Championships. This worked well in general but could be a problem if the Classes are very large. At Terlet it took normally about 45 to 50min, and up to one hour if there were any cable breaks, to launch the 30 aircraft. It is achieved by dividing each Class on two grids and using two four-cable winches giving a launch height between 1300 and 1500ft.

The tasks set for the 15m Class were two quadrilaterals of 321 and 277km. Three triangles of 237.5, 217.5, and 437.5km (2 x 218.76km). A goal and return of 201km. The Standard Class flew slightly smaller tasks on three days.

The combined total distance set was 54 838.5km of which 35 169.5km were flown giving a percentage achieved of 64.13.

Three of the Dutch Team Squad pilots took the first three places in the 15m Class — Daan Paré, Mini-Nimbus, Cees Musters, ASW-20, Baer Selen, LS-3.

In the Standard Class Tony de Bruine, DG-100, won more than handsomely with a lead of 1016pts by never dropping below third on any day. Second, Ferdi Kuypers, and third Terlet instructor, Henk Frohwein, both flying a Std Cirrus.

R.H.

CANADIAN NATIONALS

The British had an impact on the Canadian Nationals held at Claresholm, Alberta from July 9-18. Paul Sears (Std Libelle) won the Standard Class; Andy Gough Jnr came fifth in the 15 Metre Class and Sigma was flown to third place in the Open Class by Dave Marsden.

There were eight contest days and the Standard Class flew more than 1600km while the Open Class, which had fewer entries, flew the same tasks as the 15 Metre Class. Their total distance was 1855km. The Open Class lost two of its leaders, Dave Webb and Dick Mamini (both former Canadian Team members) due to accidents.

The Open Class was won by Peter Lamla (Nimbus 2), gaining 7608pts with Mike Apps (HP-14) second with 5807pts and Dave Marsden third with 5604pts.

The 15 Metre Class was dominated by the brothers Hal and Uli Werneburg, Hal (Mini Nimbus) coming first with 7446pts and Uli (Mosquito) second with 7305pts. Dick Coffrin (PIK 20B) was third with 6007 pts.

Paul Sears won the Standard Class with 7285pts with Willem Langelaan (Std Jantar 2) second, gaining 6968pts and Bruce MacGowan (ASW-19) third with 6232pts.

Condensed from a report by Colin Tootill.

AUSTRIAN NATIONALS

Dr Alf Schubert (Nimbus 2) scored his sixth victory by winning the Open Class in this year's Austrian Nationals at Mariazell from May 24 to June 7. Hugo Ebner (ASW-20) was second in this Class which had seven competitors.

In the Standard Class (21 entries), Heino Steiner (Phoebus B) won with Heins Haemmerle (DG-100E) second. Andreas Haemmerle (Mini Nimbus) was first in the 15 Metre Class (14 entries) and Reinhard Haggermüller (ASW-20) in second place.

The fastest flight was 107.5km/h by Stogner of the Standard Class on the fifth day.

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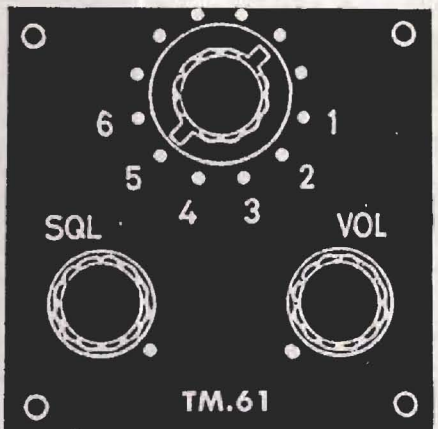
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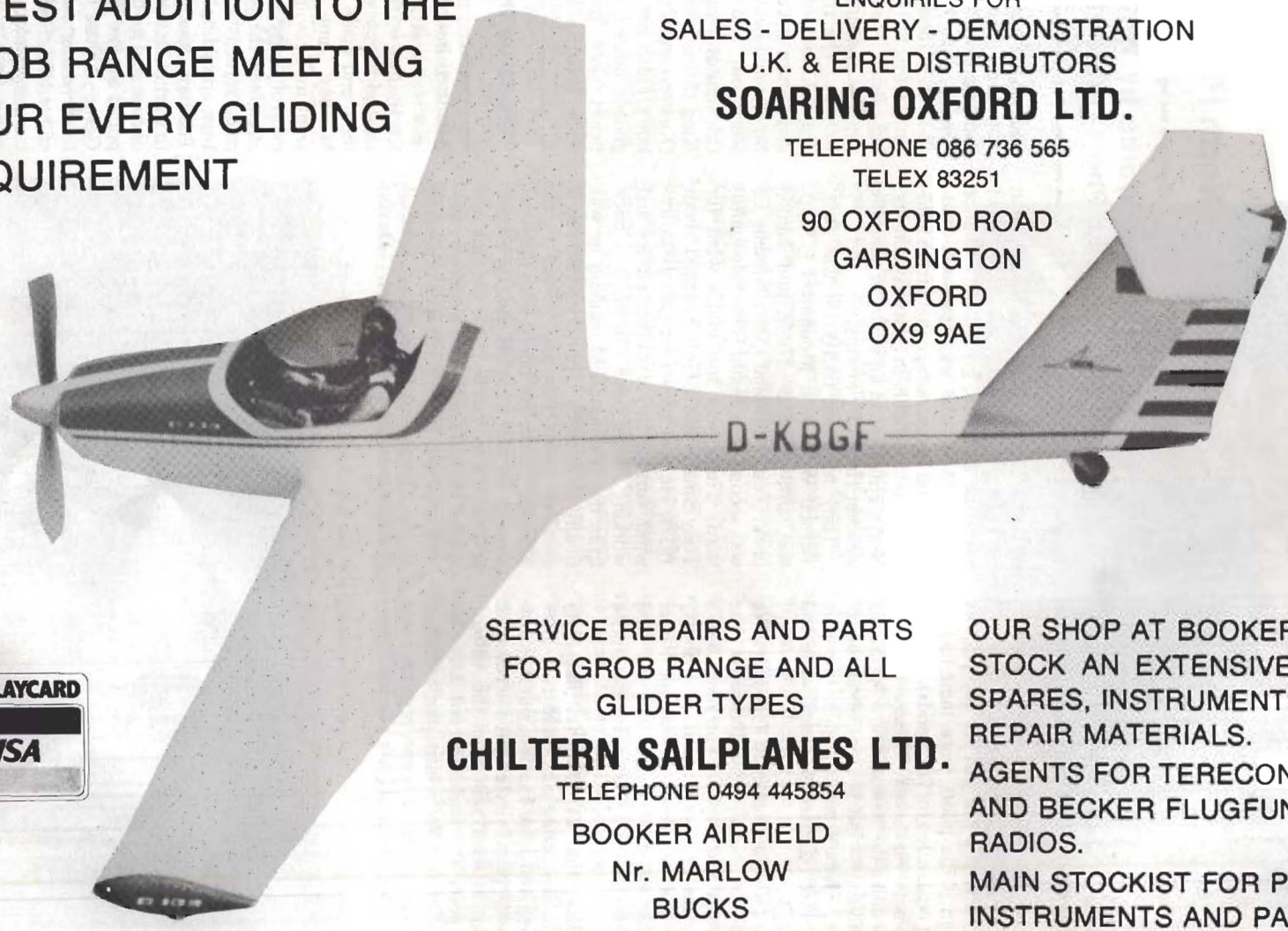
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North Hill, June 21-29

Words by RHODA PARTRIDGE
Photos by TONY SMALLWOOD

It's not a nursery Comp to prepare embryo pilots for the rigors of a "real" Regionals. It's not just for top pundits (though if the pilots wore their badges you'd be dazzled by Diamonds). It's certainly not a task week. There are usually possibilities for 300kms and a sprinkling of 500kms — but it's not about badge flights. There's nothing quite like it in the world. (If there is, please write and tell me.)

Here's what happened this year. We arrived at North Hill (home of the Devon & Somerset GC) on June 20 to a NW gale and lashing rain, obviously early March. I was crewing for Roger Harlow, his first Comp and my first crewing job (I'd flown in Enterprise twice).

Saturday, June 21. Still felt like early March. Bucketing rain, cold NW gale. Briefing and John Fielden, our task setter, said "pilot selected out and return to a point at least 5km from the airfield. One point for each km out and two points for each km return, plus one point for each minute airborne provided you land back at North Hill". Gasps! Surely no one would even launch? But the man isn't actually mad. Here was a task to get everyone airborne, give them a chance to "suss" out the area, pinpoint landmarks and to discourage them from landing in sodden fields in gusty conditions. North Hill clear in an island of soarable weather ringed by storms.

Tony Moulang (ASW-15) was first. Turned Wellington Monument (15km), was airborne 6hrs 57min and landed back. Tony Maitland (Mini Nimbus C) was second with Justin Wills (Mosquito) third. There was too much wind for Tony Smallwood's Gull (hatched about 1937). He was blown inexorably downwind, turning tiny exquisite circles and working all the time. On his way back from the Wellington Monument he was finally seduced by Upottery airfield as it unrolled under him and landed there. Maurice Clarke got bored with the local soaring bit and went off visiting Exeter and the Coast, but he came unstuck and landed his Std Cirrus at a motorway service area and had his retrieve organised by the Devon and Avon police. Caused confusion at the base control. "Devon and Avon here". "No , Devon and Somerset", repeated a few times, each thinking the other rather thick.

John Fielden, task setter, discussing the weather with Met man Brian Hunt and Jenny Hunt.



Sunday, June 22. Highly unstable SW 18-25kt. Good vis. Heavy showers. Re-briefing at 10am. The Met was amazing. Brian Hunt promised us a small window of soarable weather due around 1500hrs. The rain radar had shown it. The field took-off at 1530 on a 100km out and return race to Winkleigh airfield. Streets and heavy showers made it hard work out and downhill back. Justin (Mosquito) won in 1hr 16min. Philip King (Mini Nimbus C), Chris Simpson (Kestrel) and Roger Harlow (Mini Nimbus C) also got round smartish. Sixteen gliders landed out, two at the TP in heavy rain. Irish Dan Begley landed with great skill under some wires.

"Made us International"

Admitted later that it might have been less skilful if he'd seen them. He and Cecily had brought their Phoebus from Ireland which was most enterprising of them and made us international.

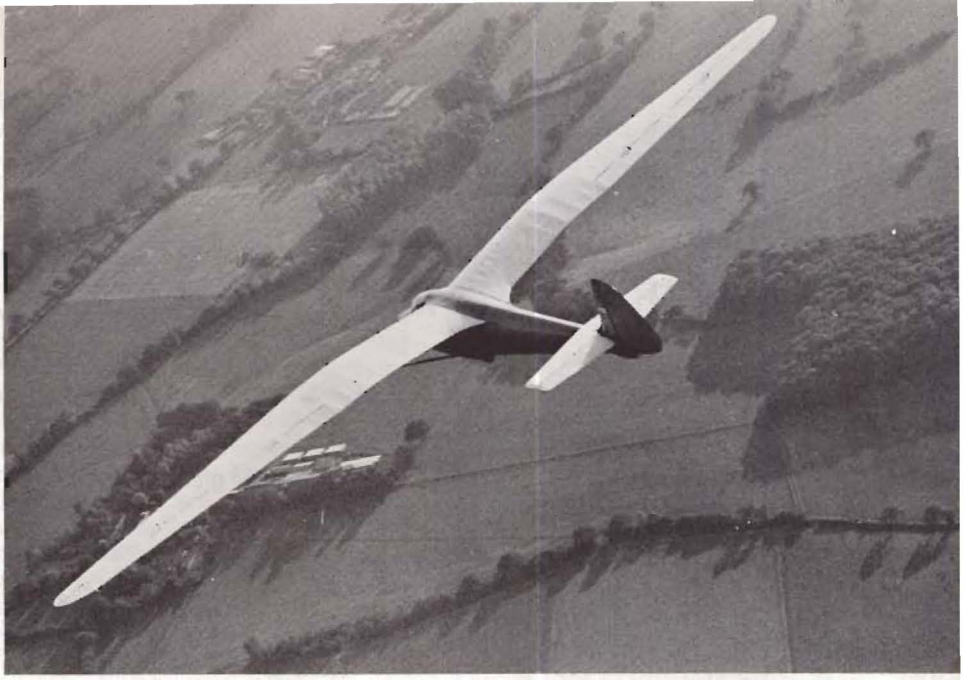
Monday, June 23. Duff. Some of us went to Yeovilton and were shown the control tower by Peter Moorhead. He explained the goings-on on the various radar screens with such clarity that even I got an inkling of what they were up to.

Tuesday, June 24. A triangle that had to start at Exbridge. After that you could choose and go to South Moulton, Chard pond, Sutton Bingham, the old man at Cerne Abbas (why "Old Man"?, he looks young and virile to me). Still unstable NW. Five turned Exbridge and all but one landed out. The sky was really mean and nasty and the wind much stronger than forecast. Tony Maitland (who had three attempts) said "Nastiest day I ever flew on." Tony Smallwood got fed up trying to punch his little Gull into wind so he photographed a quarry

ENTERPRISE



Kitty Wills, with Justin in the background.



Tony Smallwood's Gull I over Broadhembury.

(as far into wind as he could get) and then fled downwind to Cerne Abbas and landed on the way back. Maurice Clarke (Std Cirrus) photographed all the TPs and landed back. He said it was his crew's fault, got him launched first before he was ready. The wooden ships revolted and wrote rude things on the briefing board. Too much punching into wind. The Pocklington mob had a wild and confused story of being forbidden the pub loo at Dunkeswell by blacked up Marine Commandos who took them for terrorists.

In tightly packed bunch

Wednesday, June 25. Still very unstable NW. Horribly moist air. Task an out and return to Cerne Abbas (John had this Freudian fixation about the virile gent and felt that he should be seen by as many people as possible). Then a choice of TPs to the west. It got wetter and wetter. Tony Maitland (Mini Nimbus C) won. He took off early, watched apathetically by the field (who didn't fancy it). After lunch (and a lot of rain) a Skylark took-off to local soar, whereupon the field scrambled into the air and fell down in a tightly packed bunch in the Charmouth area. When John puts pins in the map to show who was where, it looked like bunches of flowers, some towers of four too. Tony Maitland and Chris Simpson both did cloud climbs (Tony to 10 000ft) and gave serious talks next day about the horrors of being covered in ice with no ASI and bucketing about in the murk to the sound of thunder.

Thursday, June 26. Fifteen knots NW, risk of thunder, downpours, super vis. John set his "Curates egg" (good in parts) task, of which he is justly proud. There would only be a smallish soarable island, so he gave ten TPs, the nearest 40km and the farthest 106km. You set off and photographed one that looked reachable and then back to photograph North Hill. Off again to another TP, or you could land and wait for the storm to pass. If you landed out you could trail back and have another try. There were some remarkable flights done. Chris Simpson did 406km. Chris Ellis flew his 460 beautifully to do 244km. Maurice Clarke did 296km. Justin (who, strangely, had been away at work) did 307km. But there were two prangs. The DG damaged a wingtip groundlooping in a field but Roger Harlow did what he described as a "tree loop" and ended up with his nose on the ground, his tail straight up and his wingtips cradled by branches. He suffered a severely bruised ego and, after a careful feel over, he discovered a small tender spot on one elbow. Moral. If you wish to touch down vertically instead of horizontally, head for the woods. But wasn't he lucky? At 6am the next day ten noble people, led by Terry Jenvy, set off armed with ropes and saws and brought her back in time for briefing. We are deeply grateful. In

Rhoda Partridge judging the "most enterprising beard of the contest" at the end of the Enterprise week. Tim Parsons (left) was the winner with tug pilot Alan McHason (right) the runner-up.





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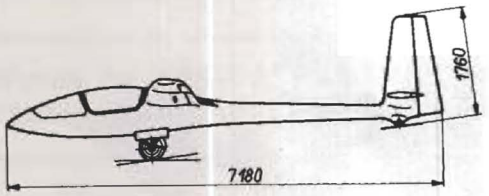
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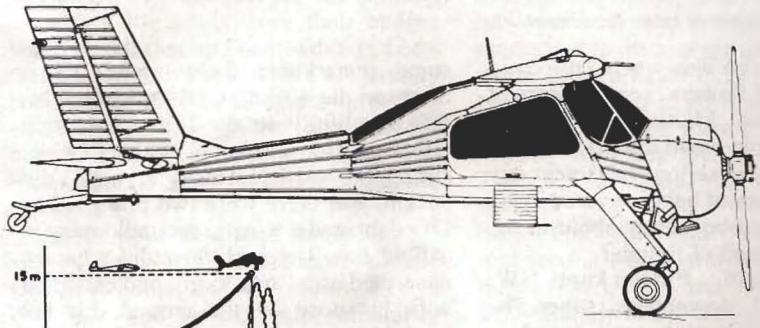
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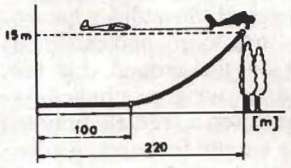
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the event she wasn't as badly hurt as one would have expected. A total of 3133km were flown on this unlikely day.

Friday, June 27. Ridge, high to SW, cloudbase to 4000ft, lift to 4kt. Justin launched to try cross-Channel before briefing but John wouldn't send the fleet. Not quite good enough. He set an elastic sort of free distance task. You could use Lasham or Dunstable as dog leg TPs, or you could return from them. Interesting to see competitors and crews bustle out of briefing, looking hugely cheerful. No groans about expensive retrieves or mutinous crews. The tasks to date had been very economical in retrieves and the idea of heading off with a following wind (about 10kt) really delighted the pilots. Tony Smallwood won the day. Enterprise people love to see Tony and the little blue Gull do well. He did 301km, and was airborne over seven hours. He turned Eastbourne and then found a sea breeze front and floated back to Shoreham. Said it was the easiest day ever. He was never below 3000ft. Tony Moulang, second, turned Lasham and sunk to earth at the bottom of the rising ground that leads to North Hill. Justin, third, said it was so nearly on to go foreign, but just not quite. He landed at Dover and had his impeccable Mosquito used as a rubbing post by bullocks, which also lovingly licked his canopy. Did his profile no good, but not disastrous.



"Rolly" Trotter who kept the clubhouse looking immaculate.

Saturday, June 28. Very heavy rain during the night. We woke to a grey misty morning with a scatter of cars and trailers where they'd been abandoned as their pilots and crews stumbled into their tents and caravans. Only local soaring, but an excellent party in the evening. Kitty Wills presented the trophies. Chris Simpson was the winner, Tony Maitland second (only 17 points between them) and Justin Wills third (well, if you must go off to work . . .). The Enterprise special goblet went to Tony Smallwood for his flight to Eastbourne and Shoreham. There were three two-seaters competing and the Bocian won. Mike Mayo said he'd learnt more flying Enterprise than years of club flying would give. They all did good flights and it seems an excellent way to have a lot of fun, learn a lot and cut costs.

Sunday, June 29. We all made off saying (hopefully) "See you next year". Quite a number flew home with empty trailers trundling below. I don't know how they all did, but Tony Maitland landed back at Shobdon.

Competing against the weather

That's what happened. So what's different about Enterprise? I think it shows on the puzzled faces of the competitors as they come out of briefing. What will be the clever task to do? How to win the most points? One or two admitted that it was easier just to mark the task on their maps and go zotting off mindlessly without being lumbered with decisions. But the way John sets up a day's flying means that you've got to really think hard. As he said, quoting Philip Wills, "the competition is against the weather". The pilots were learning to extract the last drop of flying out of a given day's conditions. Mind you, we were lucky to have Brian Hunt as our Met man. As well as being a skilled and meticulous forecaster, he has the happy knack of being able to explain clearly the situation and how it could develop. He's also an attractive man with a smashing wife who worked in the control caravan every flying day. They're a great addition to any Comp.

Intimate "family" feeling

North Hill is the perfect place to hold Enterprise. We hosted the Comp at Shobdon last year and it was a lot of fun, but I have, regretfully, to admit that North Hill works better. Unadulterated by power and parachute clubs, there's an intimate "family" feeling. The grass field on the hill with the three great beech trees and wide view of Devon is most beautiful and has a very lovely atmosphere. The members work so hard to make us welcome and they have an excellent clubhouse and bar. It looked so neat and pretty when we arrived I hope it didn't look wrecked after we'd left. It's a special place to hold a special Comp.



Richard Fortescue, Competition Director.



Justin and Gillian Wills at the grid.



Mike Pope waiting for his launch.

BGA AND GENERAL NEWS

AN EXCEPTIONAL NATIONALS

The Open Class of the Arctic Lite Nationals, at Lasham from August 16-25, ended on a cliff hanger with only 12pts separating Ralph Jones (Nimbus 2cs) in first place and Bernard Fitchett (ASW-17) in second position. Chris Rollings (Nimbus 2) was 57pts behind Bernard. And these results weren't known until minutes before the prize-giving late on the Monday evening after the strict scrutiny of TP photographs.

Ralph had 6489pts, Bernard 6477 and Chris 6420pts.

The final day's task was also dramatic. George Lee was just six seconds in front of Bernard Fitchett after completing a 390km task. They both scored 1000pts.

The Standard Class Champion, Andrew Davis (Std Cirrus) gained 6265pts with Ted Shephard (Std Cirrus) second, 5340pts, and Martin Wells (DG-100) third with 5332pts.

Bill Scull, Competition Director, worked out that of the 93 410km set for the Open Class 80% were achieved with 86 869km flown. The Standard Class completed 24 190km of a possible 51 755km, giving an approximate 47% of the total set.

Full report and results in the next issue.

MOGAS FLIES OK AT 14 000FT

The BGA are progressing with the motor-spirit trials, funded by the Light Aviation and Gliding Foundation. In a progress report, Dick Stratton, BGA Chief Technical Officer, said the MOGAS test aircraft, a Beagle Airedale with a Lycoming 0-360 engine, was recently climbed to 14 000ft on BS 4040 "4 Star" and then the AVGAS supply was selected with no detectable difference in engine operating performance.

This altitude test will be repeated from time-to-time to determine whether the difference in vapour pressure between AVGAS (7.0psig) and the more variable MOGAS (7.5-14psig) induces vapour locking in a typical fuel system.

The Airedale has been fitted with cylinder head temp gauges on each cylinder, induction and exhaust gas temp gauges, as well as large scale manifold pressure and RPM instruments.

PHILIP WILLS MEMORIAL FUND

Following the death of Philip Wills in 1978 the BGA, after consultation with his family, decided to establish a Fund in his memory, the object being to promote sporting flying in gliders. The Fund was duly established as an entirely independent entity with Trustees who are however appointed on the nomination of the BGA. I am glad to say that the response to appeals on behalf of the Fund has resulted in the Fund raising a sum to date of £8050.

During Philip's lifetime in 1970 he gave to the BGA the sum of £3250 and the BGA matched this on a pound for pound basis which resulted in a Fund appearing in the BGA's balance sheet entitled The Philip Wills Reserve Fund. In accordance with Philip's wishes The Philip Wills Reserve Fund has been used to make loans to member clubs to enable them to acquire or improve sites or buildings. The policy of the BGA when administering the Fund was to make loans to clubs at interest rates below those currently prevailing in the open market. I am delighted to say that the BGA has now decided to transfer the Reserve Fund to the trustees of the new Memorial Fund so that the Memorial Fund will be an entirely independent body administering funds with a net value of some £18 000.

At a recent meeting of the Trustees of the Fund it was decided that the general policy of the Trustees would be to continue to make loans to clubs for the purchase and improvement of sites and buildings.

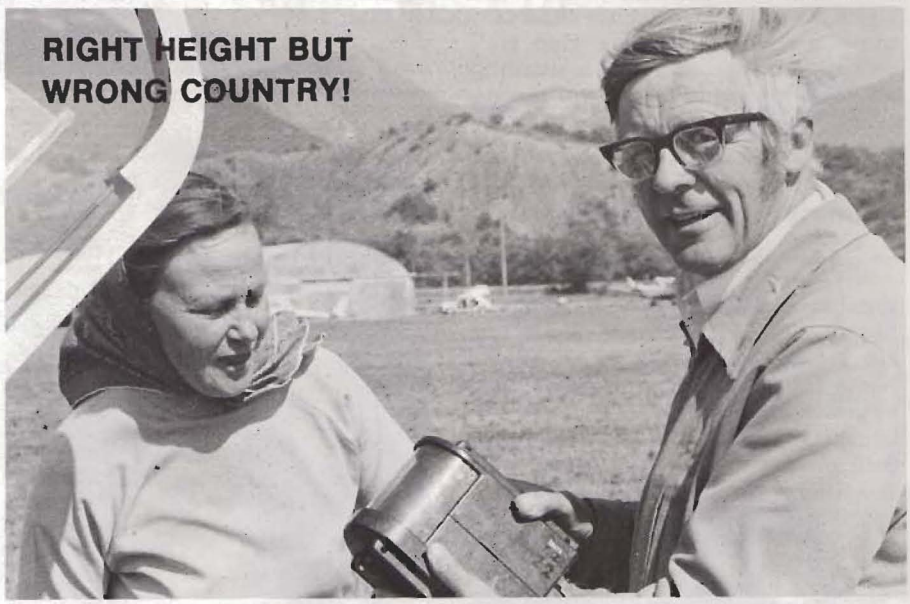
Over the course of the years the Reserve Fund has made loans to clubs as follows:

£2000 to South Wales in April 1971 towards buildings.
£300 to Dumfries & District in August 1971 towards hangar.
£1000 to Blackpool & Fylde in October. 1971 towards freehold purchase.
£2000 to Staffordshire in November 1971 towards freehold purchase.
£500 to Blackpool & Fylde in March 1972 for site development.
£500 to Blackpool & Fylde in July 1972 for site development.
£2000 to Northumbria in January 1974 towards freehold purchase.
£400 to Dumfries & District in August 1978 towards buildings.
£2000 to Northumbria in August 1978 towards clubhouse.
£1000 to Staffordshire in July 1979 for site development.

At the time of writing the Trustees of the Fund have in hand about £12 000 available for lending and any clubs which wish to apply for loans should write to me c/o the BGA and the Trustees will consider all applications which are received.

I need hardly add that the Fund is always open to receive contributions from time to time which anyone may wish to make.

CHRISTOPHER SIMPSON, *Chairman, Trustees of Philip Wills Memorial Fund*



Tom Zealley, BGA Chairman, photographed with his wife June by Roger Barrett, immediate past BGA Chairman, after his wave flight to 22 500ft at Sisteron, France, in June. But Tom isn't claiming his Diamond as he wants to get it in British airspace.

SUPER CUB FLIES ATLANTIC

The Essex GC's new Super Cub has been flown across the Atlantic from the Piper factory in Pennsylvania by ferry pilot Ernie Kuney. The aircraft had fuel tankage for 100 US gallons and the longest leg from Hornafjordur, Iceland, to Prestwick took 8hrs 40min. The entire trip took 53hrs.

This is the second new Super Cub to be delivered to a UK gliding club this year, the first going to the London GC.

NEVER TOO OLD!

Two years ago Josée Mosley-Williams, daughter of the aviation pioneer José Weiss, went solo at Wycombe Air Park having been told by her own club that she was too old at 72 years. She has now had 21 solo flights, one of 90min with a 4000ft climb, and is poised to complete her Bronze C. *(Information condensed from the Vintage Glider Club's newsletter.)*

NOT SUCH A BAD SEASON!

The points at the top of the National Ladder are now more than have been achieved since that fabulous summer of 1976 and it is early in the season yet, notes Mike Randle, National Ladder Steward.

Open Ladder

Leading pilot	*Club*	*Pts*	*Flts*
1 L. E. Beer	Thames Valley	7252	4
2 F. J. Sheppard	Airways	6682	4
3 D. S. Watt	Airways	6364	4
4 M. Bird	London	3785	4

Club Ladder

Leading pilot	*Club*	*Pts*	*Flts*
1 P. A. Gaisford	Swindon	3840	4
2 R. Pentecost	Surrey & Hants	2125	2
3 R. Crossley	Thames Valley	1325	4
4 A. Brierley	Midland	1281	4

FATAL ACCIDENT

David Hawkins was on the final stages of a 4hr 10mln cross-country during the Booker Regionals on July 22 in an Astir when he is thought to have spun in. The barograph trace showed that seven minutes before the accident the glider was too low to glide to Booker and the lowest point immediately prior to the crash was 350ft above Wycombe Air Park. The field in which the glider crashed was approximately 150ft below airfield height (370ft above msl; WAP is 520ft above msl) but from the low point the glider may have climbed 300ft or so before crashing.

DISUSED AIRFIELDS TO AVOID

Several gliders from the clubs in the south have recently landed at the Ministry of Defence Propellants, Explosives and Rocket Motor Establishment, Westcott in Buckinghamshire. The Director of the Establishment is most concerned at this increase in landings because the runways are in a poor condition and a large number of the buildings which surround, and in some areas have encroached onto the perimeter, contain hazardous materials. It might be almost impossible to recover a glider from some parts of the Establishment and could be extremely expensive.

Gaydon, near Stratford-upon-Avon, is another aerodrome to avoid. British Leyland use it as a vehicle proving ground and they have complained that pilots are landing there which is dangerous both for them and Leyland employees.

WAVE SOARING DAYS

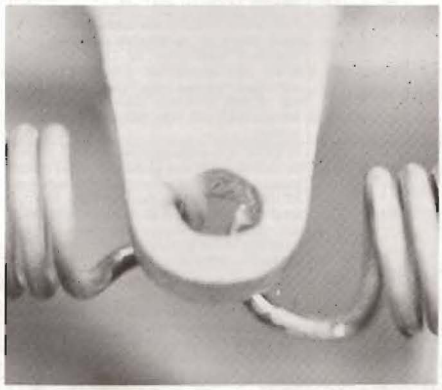
You may remember Tom Bradbury's letter in the June issue, p150, when he appealed for basic details of exceptional wave soaring days to help him with the survey he is hoping to make on Met conditions over the British Isles on those days. The response has been encouraging but he would still be pleased to hear from more pilots who can spare the time to go back over their logbooks. A simple note such as: 1.24 Oct 69 (am) 2. 17 000ft 3. Portmoak, would be adequate and Tom feels it is worth going back as much as 25 years. Please send details to him at 87 Point Royal, Bracknell, Berks.

BGA ACCIDENT SUMMARY — Compiled by ARTHUR DOUGHTY, Chairman of the BGA Safety Panel

Ref. No.	Glider Type	BGA No.	Damage	Date Time	Place	Pilot/Crew Age	Pilot/Crew Injury	Pilot/Crew P/Hrs.	SUMMARY
47	SHK	1578	M	03.05.80 14.00	1 mile SSE of Dufftown, Banffshire	28	N	200	Hilltop field selected at 1500ft and decision to land made at 800ft. Approach from lee of escarpment aiming to land well into field but failed to recognise that first part sloped uphill and second part downhill. Landed on downhill section and groundlooped to avoid running into farm building.
48	Olympia 463	1389	M	04.05.80 13.30	Pershore	20	N	?	Pilot did DI prior to glider being flown by another pilot and during pre-flight check before flying himself found controls operating normally. During flight he found elevator was not functioning correctly. On landing safely it was found the starboard outer elevator hinge pin was missing.
49	K-2	1418	M	04.05.80 14.00	Long Marston	43	N	3	Pilot low in circuit made approach almost at right angle to established landing path. Approach obstructed by Tiger Moth tug which had landed just previously. Closed airbrakes, hopped over Tiger Moth kissing top of fuel tank with main wheel, landed heavily and ran into pontoons stored on runway.
50	SD3-15T	2305	W/O	18.05.80 ?	Birchwaite Road, Windermere	25	N	121	At 6000ft above Windermere decided to land as area to north was unsuitable. After 20min inspection decided to land on athletics track. At 100ft on approach decided track was too small. Turned right for small field with approach over houses and trees. Struck trees 30ft above ground with wings level. Fell tail first to ground.
51	Pik 20b	?	S	10.05.80 17.00	Wycombe Air Park	24	N	160	On approach with flap and full airbrake pilot found he was undershooting. Apparently confused airbrake and flap lever and instead of using airbrake to adjust the glide path he raised the flap. Descended rapidly in semi-stalled condition through downwind boundary hedge and collided with concrete blocks.
52	Dart 17a	1293	M	27.04.80 13.00	3 miles west of Lashenden	39	N	57	Pilot crowded approach into selected field and realised he would not be able to land in it. Overshot into next field breaking telephone wire along road separating fields. Touched down about 140 yards into second field and 10 yards before a ditch 5ft deep and 8ft wide. Ran across ditch collapsing U/C on far bank and slid for another 60 yards before stopping. 500 yards of field beyond ditch.
53	T-21b	1315	S	18.05.80 15.30	Falgunzeon	—	—	—	After landing the glider was moved back to the launch point with the downwind wing being held. At the launch point the wing was held level for the next crew to board when a thermal gust lifted the wing. An instructor shouted "Get the wing down" and the member holding the downwind wing lowered it, thus further exposing the underside of the upwind wing to the gust which turned the glider onto its back.
54	ASW-19	2360	M	04.04.80 14.20	Weston-on-the-Green	48	N	34	Lowered U/C and turned finals at 300ft and confused U/C lever with airbrake lever. Realised he would not get in from straight approach and initiated "S" turn to lose height still not realising he had hold of wrong lever. U/C retracted at touchdown and glider landed on belly.
55	Olympia 2b	1040	M	17.05.80 18.30	Kingsomborne, Nr Stockbridge, Hants	23	N	17	Selected field at 2000ft but on downwind leg changed choice to adjoining playing field because crop looked long. Sideslip approach to avoid power wires. On touchdown decided field was short and to avoid running into upwind boundary put skid on ground and veered right. Noticed swings and slides and veered left. Wing struck swing, glider rotated and tail hit see-saw.
56	Swallow	1017	M	26.04.80 14.15	Tarrant Rushton	36	N	1¾	First flight on type. Approach at excessive speed and failed to level off for landing. Bounced into air in nose up attitude then over-corrected and landed heavily on nose.
57	Eagle	847	M	19.04.80 11.30	Tarrant Rushton	38 P 2 20	N N	1052 —	Cockpit checks completed but due to a delay while tug refuelled the opportunity was taken to reseat air experience passenger in front cockpit. At 300ft on tow side hinged front canopy opened and rear hinged rear canopy opened backwards. Apparently front canopy not correctly locked after reseating passenger.
58	K-6e	2527	M	04.04.80 16.30	Nympsfield	23	N	300	For practice pilot attempted a short field landing in light wind conditions. Misjudged clearance over angle iron and wire boundary fence and struck underside of fuselage and starboard tailplane on one of the posts.
59	Olympia 2b	795	M	04.05.80 16.40	Doncaster	44	N	26	Pilot was offered and accepted a winch launch despite obstruction of launch path by another glider which had landed adjacent to cables. As launch progressed it was noted cable was under K-13 and "Stop" was given. Pilot released and landed ahead.
60	Phoebus C	1570	M	05.05.80 16.45	Portmoak	36	N	103	Pilot failed to level off for landing and touched down heavily collapsing U/C and damaging bulkhead to which it is attached. Ballooned into air, partially closed airbrakes and then landed heavily in stalled condition from about 1ft.
61	Astir CS77	AGA 17	M	16.05.80 12.00	Lasham	21	N	118	During a short soaring flight in windy conditions a runway change was effected. Underestimated wind strength and gradient and undershot striking wingtip on concrete post in downwind boundary hedge. Glider yawed about wingtip and landed sideways.

OWNERS ALERTED TO HAZARD

What was described by Dick Stratton, BGA Chief Technical Officer, as "a most excellent piece of aeronautical detective work" by Keith Mitchell investigating the wreckage of an LS-1C which spun in, has resulted in owners of this particular glider-type being alerted. It was discovered that the rear trim-spring, which locates in a hole in the trim lever, was poorly formed, see photograph.



Initially this was thought to have been stretched in the accident, but further inspection showed wear and polish marks on the cadmium plating of the spring end which indicated that only the very end of the spring had been bearing in the hole in the trim lever. Movement of the spring lever caused the end of the rear trim-spring to slowly and progressively move out through the hole until only about a millimetre of the spring was engaged in the hole in the trim lever. A gentle push disengaged it altogether, whereupon the forward spring pulled the control column sharply forward.

The loads on the control column with the trim system intact were about 1½ to 2lb for full back and full forward stick movement. With the rear trim-spring disengaged it required a force of 6lb to return the control column to approximately the neutral position. As a result of this malfunction, which occurred at low level, a pilot induced oscillation (PIO) is believed to have contributed to the cause of this accident. The trim system is permanently buried in the structure and inspection isn't possible without cutting access holes.

INTER-UNIVERSITY TASK WEEK

Saltby, June 30-July 4

On the Wednesday, after two days of screaming gales and torrential rain, the weather calmed down enough for a 110km goal race (crawl!?) to Duxford *via* Eyebrook Reservoir. Brian Spreckley, our enthusiastic task setter, forecast the arrival at Duxford of five of the 12 competing gliders.

The Cambridge K-7 arrived first, winning the day. Six minutes later Edinburgh's K-13 zoomed into second place followed fairly quickly by the Armchair Pilot's Astir, the Durham Skylark 4 and the Saltby K-6. Nottingham's K-2 landed near Baldock, the Cambridge K-6 near Grafham Water (for

62	IS-29o	1961	M	05.05.80	Holberrow Green, Nr Redditch, Worcs	23	N	207	Pilot was down to 1000ft before starting to look for a field and then found all those within range were unsuitable (small and sloping). Picked largest, 2 acres, and on touchdown realised he would not stop so hopped hedge to overshoot, ½-¾ acre, and landed normally but at 45° to side hedge with which he collided.
63	Pirat	1845	M	13.04.80	North Scarle, Nr Lincoln	36	N	18	Picked large pasture field but failed to assess wind correctly and approached downwind. Overshot to next field and collided with a ewe and a lamb.
64	LS-1	2449	W/O	28.05.80 13.40	Parham	40	S	64	On base leg the glider was seen to turn away from the site, pitch nose down and make a spiral descent to the ground. Preliminary investigation suggests control difficulties due to hook on end of one of the trimmer springs becoming detached from anchorage. Further details awaited.
65	DG-200	2603	M	30.05.80 16.00	5½ NM south east of Filton A/F	47	N	1400	Competition cross-country. Weather deteriorated to showers. Flew to clear air arriving at 1500ft over poor field landing terrain. Selected best available field but failed to assess wind direction correctly. On touchdown wing dropped and glider veered towards hedge. Succeeded in changing heading but not direction of travel and skidded side ways into hedge and ditch. Wind was 45° on tail.
66	ASW-15	1606	S	25.05.80 13.40	1 mile east of Theddingworth, Leicestershire	60	N	772	Attempting to return to A/F after poor start to cross-country. Down to 700ft about three miles from A/F decided to land in pasture field. Noted ridge and furrow at east side but north-west corner looked smooth. On landing run glider ran into furrow and nose due to poor clearance struck ridge.
67	K-8	2332	M	17.05.80 13.24	Parham	23	M	15	Glider snatched at start of winch launch, wing dropped and pilot released cable. Glider rolled on slight gradient in front of launch point and pivoted about wingtip through 180°. Collided with second glider in line adjacent to launch point and awaiting launch.
68	Speed Astir	?	M	10.05.80 ?	Bredenbury, Nr Bromyard, Worcs	54	N	586	Attempting to thermal at indicated altitude of 1200ft over ground about 800ft high with 20 galls waterballast. Initiated water dump and decided to land in field below which was suitable. Failed to ensure U/C was correctly locked down. On touchdown in turbulent air glider bounced, U/C retracted, then landed heavily on belly with 7-8 galls still on board.
69	Eagle	825	M	11.05.80 14.25	Cranwell North P 2	38 18	N N	443 —	After 10mins of flight following a winch launch the side hinged front canopy opened and the rear hinged rear canopy opened backwards. P1 states he checked the front canopy (which retains rear canopy in closed position) was properly closed before flight. Rough thermals at time. Latch checked — satisfactory.
70	Sovereign	1811	M	18.05.80 16.30	Swanton Morley P 2	55 55	N N	1800 ?	Pupil, PPL conversion, initiated approach with airbrake but P1 elected to take over to avoid intrusion of power approach. An "S" turn was commenced and at the same time an attempt was made to close the airbrakes but P1 could not move the lever. Due to high sink the glider struck the ground with port wingtip and main wheel before recovery from "S" was completed. Subsequent inspection revealed that wheelbrake cable (which is linked to airbrake operating rods) had wrapped round the axle thus tensioning and effectively shortening the cable. When the airbrakes were opened it released the tension in the cable and the shortening due to wrapping round the wheel axle prevented closure.
71	Astir CS	2249	W/O	07.06.80 12.40	Stoford Water, Kentisbeare, Devon	45	F	703	A 2000ft aerotow was requested but pilot released apparently normally at 1300ft 2-2½ miles upwind from site at North Hill. He flew back towards site and was lost to view. An independent witness stated that shortly after seeing the glider release he saw it "spiral" downwards until it disappeared from sight and was heard to strike the ground. Further report awaited.
72	K-6E	2527	M	04.04.80	Nympsfield	23	N	300	Duplicate of report 58/80.
73	K-6E	1449	S	13.05.80 19.00	Aboyne	34	N	260	First flight on type and after 2½hrs wave soaring returned to circuit and noted wind had changed. Strong sink at downwind to base leg but too high at base leg to finals. Continued approach with indecision whether to overshoot to next field. Touched down on runway and ran off into rough ground.
74	Prefect	1141	M	11.05.80 12.31	Strathaven	24	N	1½	Low in circuit and approach with no airbrake. Failed to round out adequately for touch down on up slope (slow?) bounced into air and landed heavily on front of skid and nose.
75	Cirrus VTC	1865	S	24.05.80 18.30	Court Farm, Nr Nympsfield, Gloucestershire	28		123	After high speed runs just under V_{NE} of 120kt pilot heard a sharp crack when flying at 115kt followed by severe vibration of control column and airframe. Reduced speed climbing back to 1200ft, during which time the canopy and instrument panel became detached, and baled out. Damage noted included chordwise fracture of starboard tailplane at root.

76	Phoebus	1595	M	17.05.80 15.00	Thruxton	39	N	230	On finals pilot noted a Dove take off from runway and a light aircraft which had just landed cleared right and was backtracking down the glider landing area. Light aircraft failed to stop and give way to landing glider which to avoid collision turned left after touchdown and struck wingtip on runway light.
77	Blanik	1731	W/O	25.05.80 15.10	Thruxton	54	N	184	During last stage of finals boys on bicycles (trespassers) were seen on the perimeter track riding into the approach of the glider. The leading boy turned to ride in the same direction as the glider and ducked but was struck by the tailplane. Glider swerved right, pitched nose down with broken tailplane and collided with a glider trailer.
					P 2	21	N	Air exp	
					Cylist	?	M		
78	T-21b	856	W/O	14.06.80 17.40	Thame	—	—	—	Gliders were being put away as the wind strength had increased. An instructor was in charge of the T-21b which was parked and was at the lower wingtip. When the wind started to move it he was unable to restrain it and it was blown over.
79	Pirat	1706	S	01.06.80 18.00	Houghton, Nr Stockbridge, Hants	53	N	107	Large insect entered cockpit through front vent and struck pilot below eyebrow and then entered eye behind spectacles. Let go of airbrake lever and brakes opened fully as pilot knocked off spectacles. Temporary loss of vision and directional control and on recovery saw he was heading towards left boundary fence with which glider collided.
80	Pik 20b	2235	S	01.06.80 17.15	Lasham	58	N	292	At roundout to land to right of another glider which had just landed, pilot observed two males walking from right from perimeter track onto landing area. One was struck causing glider to yaw and groundloop. Pedestrians were non-members trespassing to take photographs.
					Pedestrian	?	M	—	
81	ASW-20	2423	M	25.05.80 14.15	Goring on Thames	45	N	380	On downwind leg noticed electric fence across middle of field. Approach was uphill to and beyond fence and then downhill to upwind boundary. Elected to land over fence but with excess speed failed to stop before rolling over brow onto downgradient. To avoid collision with upwind boundary initiated ground loop and stopped 20 yards short of boundary.
82	T-21a	570	W/O	12.06.80 17.50	Ridgwell Oatly	65	N	180	Pupil turned onto base leg at about 300ft and then made a fast diving turn onto finals. Instructor took over and attempted to correct but wingtip touched corn at threshold inducing yaw. The other wingtip struck upper wing of parked glider which arrested yaw and T-21a dropped backwards to ground.
					P2	57	N	?	
83	DG-200	2436	M	30.05.80 14.30	Limpley Stoke, 4 miles south of Bath	33	N	910	Attempting to penetrate rainstorm to TP but retreated in area of poor fields. Abandoned choice of field when on base leg because of high sink and tall trees on approach. Went for alternate immediately below traversed by two sets of power wires at telegraph pole height with tall trees on approach. Dived under power wires and with excess speed changed attitude for roundout but not descent. U/C collapsed.
84	Kestrel 22	2481	M	13.06.80 15.15	Dunstable	56	N	900	At about 150ft during a winch launch the canopy blew off.
85	Astir	2184	M	23.05.80 16.30	Bignor, Sussex	41	N	93	After hillsoaring South Downs for 3hrs at 200-600ft above top entered a patch of strong sink. Rather than turn back to good landing areas, tried to penetrate sink to part of hill where good lift had previously been found. Lift did not materialise and was committed to landing in field of corn. Wingtip caught crop and precipitated ground loop.
86	Libelle	1874	N	30.05.80	Lasham	40	N	500	Astir pilot joined circuit at 800ft and on downwind experienced heavy sink and rain so turned in early and stated he was lower than Libelle. Libelle on normal approach and pilot made shallow left turn to avoid collision, closed airbrakes and extended glide to land further into airfield.
	Astir	?	N			—	N	?	
87	K-6cr	?	M	25.05.80 16.00	Duxford	23	N	14	On landing run glider ran over molehill obscured by long grass causing damage to underside of fuselage aft of wing trailing edge.
88	ASW-15	2038	M	01.06.80 15.30	Terlet Holland	39	N	353	Undercarriage collapsed on landing run after rolling over wheeltracks across the landing area which was described as "not particularly rough".
89	K-8	1563	M	15.06.80 ?	½ mile south of Lasham	34	N	7	Local soaring with 20kt wind and cloudbase 1800-2000ft. Drifted downwind and returned twice but third time found it impossible to get back to A/F. Picked field but was undershooting. Stalled onto downwind boundary fence while trying to clear it.
90	ASW-20	2565	S	01.06.80 13.15	Nympsfield	28	M	593	Winch launch and just prior to unstick wingtip touched long grass. Continued launch and slight yaw developed becoming worse when wheel lifted off with tip still on ground. Glider lifted off and cable back released when winch driver cut power on receipt of "Stop" signal. Glider at about 40ft low airspeed pointing towards obstructions and trees on boundary. Dived to build up speed hoping to clear trees to ridge and valley beyond. Tailskid struck a trailer pitching glider nose down and it struck the ground and turned over onto its back 20ft from boundary wall.

Silver distance) and the Oxford K-7 within cursing distance of the goal.

The weather changed again for the worse. Thursday's task was a tiny 65km triangle. The only finisher was Cambridge's K-6cr. The rest of us were scattered round the task area, more or less pleased with how far we'd got! Three gliders landed in a playing field near Newark and the pilots were photographed by the local press. Smile please! because the last day, Friday, was a raspberry.

Congratulations to Edinburgh and Peter Whitehead (ex-Cambridge) for winning yet again, with many thanks to the organisers, to the Buckminster GC and especially to Tricia Horner for cooking breakfasts, looking after the grid *and* doing the scoring.

Next year's task week will be held at Duxford, probably from June 28 to July 5. For further information write to Dr A. W. F. Edwards, 56 Lantree Crescent, Trumpington, Cambridge.

Final results: *1. Edinburgh (K-13), 1095pts; 2. Durham (Skylark 4), 1057pts; 3. Cambridge (K-7), 1029pts; 4. Oxford (K-7), 995pts; 5. Saltby (K-6cr), 881pts; 6. Cambridge (K-6cr), 876*pts; 7. Nottingham (K-2), 860pts; Cambridge (Astir), 812pts; 9. Nottingham (K-6cr), 428pts; 10. Edinburgh (K-8), 135pts; 11. Portsmouth (Foka 5), 23pt and 12. Portsmouth (Kestrel 19), 0pts.*

**=photographic penalty.*

S. N. Longland

ATC GIRLS TO GLIDE

Hitherto girls have been admitted to the Army Cadet Force, the Sea Cadet Corps and the Combined Cadet Force but not into the Air Training Corps. This "anomaly", the RAF announces, is now to be removed with a trial scheme for girls of 13 to 18 years to join "a small number of selected squadrons from all parts of the country." They will take part in the same activities as the boys, including learning to glide.

GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	Name	Club	1980
105	C. D. Rowland	Thames Valley	9.5
106	L. Bleakin	Cotswold	18.4
107	M. Bird	London	27.6

DIAMOND DISTANCE

No.	Name	Club	1980
1/161	C. D. Rowland	Thames Valley	9.5
1/162	J. W. West	Surrey & Hants	9.5

DIAMOND GOAL

No.	Name	Club	1980
2/951	K. Stewart	Lasham	9.5
2/952	A. Roher	Narrowmine	20.12.79
2/953	J. W. Lang	SGU	20.4
2/954	L. R. Merritt	Southdown	19.4
2/955	N. W. Baker	Lasham	9.5
2/956	L. J. Sole	Surrey & Hants	9.5
2/957	D. M. Lush	Surrey & Hants	9.5
2/958	S. Samson	Narrowmine	18.3
2/959	M. P. Osborn	Bicester	19.5
2/960	D. A. Hawkins	Thames Valley	9.5
2/961	R. A. Harlow	Herefordshire	17.5
2/962	J. Sharples	Doncaster	7.6
2/963	A. S. Brodrick	Thames Valley	9.5
2/964	J. G. Bell	Surrey & Hants	9.5
2/965	A. Ginevor	Kestrel	9.5
2/966	J. M. Alcock	Bicester	12.5
2/967	J. A. Davies	Surrey & Hants	9.5
2/968	A. R. Wright	Thames Valley	9.5
2/969	A. Hegner	Thames Valley	21.7
2/970	D. Caunt	Bicester	22.7
2/971	R. M. C. V. Bailey	Buckminster	9.5
2/972	A. Crowden	Airways	24.7

DIAMOND HEIGHT

No.	Name	Club	1980
3/454	C. J. Wingfield	Midland	19.4
3/455	B. Stott	Wolds	18.4
3/456	L. Bleakin	Cotswold	18.4
3/457	J. C. Turner	Thames Valley	5.2
3/458	L. Cooper	Wolds	18.4
3/459	P. R. Norrison	Wolds	18.4
3/460	P. Kerrigan	SGU	19.4
3/461	M. Bird	London	27.6

GOLD C COMPLETE

No.	Name	Club	1980
754	K. Stewart	Lasham	9.5
755	A. Roher	Narrowmine	21.12.79
756	P. J. B. Wilby	Essex & Suffolk	7.4
757	J. W. Lang	SGU	20.4
758	L. R. Merritt	Southdown	19.4
759	N. W. Baker	Lasham	9.5
760	S. Sampson	Narrowmine	18.3
761	L. Cooper	Wolds	18.4
762	G. Read	Thames Valley	10.5
763	R. A. Harlow	Herefordshire	17.5
764	J. Sharples	Doncaster	7.6
765	A. S. Brodrick	Thames Valley	9.5
766	J. G. Bell	Surrey & Hants	9.5
767	W. R. Mayo	Avro	11.5
768	J. M. Alcock	Bicester	12.5
769	J. A. Davies	Surrey & Hants	9.5
770	A. Hegner	Thames Valley	21.7
771	M. D. Allan	Midland	24.7
772	A. C. Crowden	Airways	24.7

GOLD C DISTANCE

Name	Club	1980
P. F. Walsh	Norfolk	5.5
K. Stewart	Lasham	9.5
A. Roher	Narrowmine	20.12.79
J. W. Lang	SGU	20.4
L. R. Merritt	Southdown	19.4
N. W. Baker	Lasham	9.5
L. J. Sole	Surrey & Hants	9.5
D. M. Lush	Surrey & Hants	9.5
S. Sampson	Narrowmine	18.3
M. P. Osborn	Bicester	19.5
D. A. Hawkins	Thames Valley	9.5
R. A. Harlow	Herefordshire	17.5
J. Sharples	Doncaster	7.6
A. S. Brodrick	Thames Valley	9.5
J. G. Bell	Surrey & Hants	9.5
D. N. Frapple	East Sussex	17.5
A. Ginevor	Kestrel	9.5
J. M. Alcock	Bicester	12.5
J. A. Davies	Surrey & Hants	9.5
A. R. Wright	Thames Valley	9.5
A. Hegner	Thames Valley	21.7
D. Caunt	Bicester	22.7
R. M. C. V. Bailey	Buckminster	9.5
M. D. Allan	Midland	24.7
A. Crowden	Airways	24.7

GOLD C HEIGHT

Name	Club	1980
T. A. T. Chapman	Shropshire	20.4
J. D. Sorrell	South Wales	20.4
J. F. Wilson	Deeside	9.4
C. R. Haddow	Highland	9.4
J. K. McKay	SGU	10.4
J. Allwood	Midland	19.4
R. J. Nicholls	Midland	19.4
A. Roher	Narrowmine	21.12.79
D. A. Wilson	Enstone	19.4
P. J. B. Wilby	Essex & Suffolk	7.4
I. D. Edwards	South Wales	20.4
B. V. O'Neill	Wolds	18.4
M. A. Waundby	Wolds	18.4
F. F. Paradie	Phoenix	2.4
V. M. Roach	Midland	19.4
S. R. Nash	Swindon	11.5
V. J. Teague	Midland	19.4
P. J. Groves	Midland	19.4
W. Young	Wolds	18.4
L. Cooper	Wolds	18.4
O. H. Constable	Phoenix	2.4
J. C. Turner	Thames Valley	5.2
G. Read	Thames Valley	10.5
D. J. E. Howse	Cambridge Univ	2.3
E. A. Acey	Wolds	18.4
W. R. Mayo	Avro	11.5
M. S. Chana	Wolds	18.4
P. R. Norrison	Wolds	18.4
J. P. McNamee	Cambridge Univ	21.3
T. Gornall	Blackpool	11.5
C. Jennings	Fulmar	26.3

91	Astir CS 77	2365	M	07.06.80 14.10	Hinton in the Hedges	40	N	130	Elected to land on concrete strip leading to main runway beside grass landing area to leave space for following glider. Concrete strip previously used in winter and failed to observe tall weeds which had grown. On touch down wingtip caught in weeds inducing ground loop and further collision with low bank containing rocks and concrete.
92	Astir CS	2185	M	21.06.80 17.30	Lasham	27	N	49	Flew upwind seeking thermal but when down to 500ft turned back to A/F joining downwind at fast speed. Turned through 180° across runway in use to finals. Failed to round out for landing and bounced, lowered nose and bounced again and on third touchdown U/C collapsed.
93	Cirrus 75	2195	M	15.06.80 13.00	West Lane Farm, Sherborne St John, Basingstoke	27	M	109	Left site with 2300ft cloudbase and flew into rain about 6 miles north of site. Out of rain at 1700ft with no further lift. Failed to observe selected field was traversed by two barbed wire fences until on approach. Attempted to hold off over first fence but caught it with port wingtip and ground looped.
94	Astir Jeans	2401	M	08.06.80 14.30	Purley, Nr Reading	36	N	200	While de-rigging for retrieve after field landing dropped wingtip. Spar end damaged fuselage skin above the spar slot.
95	K-8b	1715	S	08.06.80 17.15	Camphill	25	M	4½	Low final turn in wind gradient and pilot was unable to raise lower wing to level up for landing. Witness stated lower wing dropped, nose rotated and accelerated, suggesting an incipient spin.
96	Motor Falke	G-BCTD	M	07.05.80	Camphill	66	N	1000+ gliders	Pilot landed well into field in light drizzle, ran onto rough ground and towards the end of the landing run the mainwheel entered a pot hole allowing the propeller tips to strike the ground.
					Pass	?	N	155 pwr air exp	
97	Motor Falke	G-BCTD	M	06.04.80 ?	Camphill	58	N	1470 glider	While taxying to the fuel pump to refuel, into wind and slightly downhill, the wheelbrake proved to be ineffective and motor glider continued to roll until it struck the pump and stationary field roller causing damage to both leading edges.
					P2	28	N	275 pwr 10 mins	
98	Olympia 460	1178	M	15.06.80 15.30	Northallerton	25	N	80	Selected rugby pitch for field landing with approach and landing diagonally across field. Approached high across power wires along one side followed by sideslip but recovered with excess speed. Ran into semi-derelict fence at upwind corner.
99	Open Cirrus	2426	S	28.06.80 14.15	Angmering Farm, Steyning, East Sussex	39	M	125	Selected field at 800ft agl and attempted to soar in weak lift until down to 450ft and then decided to land. Misjudged circuit, flew into sink so an alternate field was picked requiring a low tight turn onto approach with speed about 45kt in sink. Lower wing struck fence at corner of field and glider rotated coming to rest on adjacent fence. Incipient spin.
100	SD3-B15	2072	W/O	22.06.80 14.45	Sutton Bank	52	F	155	The glider was observed in the circuit at a height reported to be 400-500ft and flying "fairly slowly level attitude". A turn was initiated from which a spin developed and the glider was lost to view, still rotating, in trees adjoining the site boundary.
101	BG-135	1891	M	30.05.80 14.10	Whatfield	62	N	37	Pilot was about to turn from downwind to land crosswind because of strong sink when he saw another glider lower down also making an approach to land crosswind. Pilot watched the other glider land and as it obstructed the runway he extended his own circuit downwind, flew a base leg and as he was turning finals to land in normal direction the wingtip caught in corn at side of runway causing groundloop.
102	K-13	1497	M	21.06.80 16.45	Wycombe Air Park	57	N	103	While P1 was strapping himself in air experience passenger was asked to keep hand on open canopy to prevent it being blown by the gusty wind. Passenger apparently removed hand and canopy was slammed shut by gust and cracked.
					P2	?	N	—	
103	K-8b	2262	M	22.06.80 17.25	Portmoak	21	N	5	Pilot observed another glider in the area for which she had been briefed to land so decided to land short. Touched down in an area unsuitable for landing and groundlooped when wingtip caught in long grass.
104	LS3-17	2621	M	24.06.80 ?	Dulverton, Somerset	48	M	300	Landed uphill in barley field on lee side of hill at end of competition cross-country flight.
105	Mini Nimbus	2539	S	26.06.80 17.20	North Hill	48	N	363	Return to site after competition cross-country and got low on home ridge. Misjudged height required to get into field and caught wing in tree tops causing glider to pitch nose down into wood.
106	Sie 3	2349	S	27.06.80 14.30	Salisbury Race Course	56	N	142	Crosswind landing at end of competition cross-country. Bounced on touchdown on rough ground, drifted to port and touched fence with wing. Lifted wing and groundloop developed resulting in empennage striking a substantial post.
107	DG-100G	2179	M	26.06.80 ?	Brompton Regis, Somerset	36	N	630	Competition cross-country. Landing in small undulating field of mown grass. Wingtip caught in high row of grass and glider groundlooped.
108	Libelle	1686	M	25.06.80 17.00	Portmoak	54	N	115	First flight on type. Increased speed to 55kt for approach with wet wings. While running on ground after touchdown ran over a ridge which pitched glider about 2ft into air. It then landed heavily cracking wheelhub and bending axle.

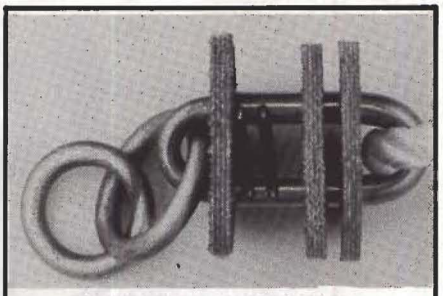
109	Silene	2548	M	06.06.80 19.00	Long Mynd	37	N	328	Experienced club member assisted air experience passenger to strap in then closed canopy and operated lock through clear vision panel, checking for security with a slight upward push. P1 could not reach lock but visually checked it was in closed position. Apparently not engaged and opened during launch.
					P2	?	N	Air exp	
110	K-13	1523	M	26.05.80 18.12	Tarrant Rushton	55	N	175	As glider lifted off the pupil allowed wing to drop inducing yaw. P1 called for release but pupil did not react so P1 released and attempted to raise dropped wing and straighten up but found difficulty overcoming pupil's grip on controls. Wingtip caught in tall crop at side of strip causing further yaw and glider dived into crop from about 3ft.
					P2	30	N	16½ min	
111	Olympia 463	1229	M	29.06.80	Portmoak	21	N	19	On approach pilot claims she was distracted by tug a/c approaching towards her to drop tow rope and also by a car turning into site from public road. Approach continued with airbrakes being continually adjusted and in last stage glider sank rapidly in wind gradient, touching down in long grass and broom just inside boundary and ground-looped.
112	Kite 2	751	M	05.07.80 18.00	Dunstable	26	N	100	First flight on type and on site. Approach made too high and too fast resulting in a heavy landing on a part of the field not normally used for landing.
113	Skylark 2	793	M	22.06.80 17.00	Currock Hill	26	M	33	Returned to site after local soaring and found wind direction had changed necessitating uphill landing with tailwind component conforming with other movements. High ground speed mislead pilot as to airspeed and on rounding out landed heavily from about 3ft.
114	Bocian 1E	1605	N	06.07.80 15.16	Stubby	40	S	459	Drifted downwind and allowed desire to pinpoint location of another glider down in a field to overcome attention to basic airmanship. Stretched glide back to site and in wind gradient of tall hedge at downwind boundary dropped to ground in stalled condition 10 yards short of airfield.
					P2	48	N	?	
115	Astir CS77	2345	M	26.06.80 12.30	Flecknoe, Nr Daventry	51	N	196	Selected field of new mown hay for landing with slight up gradient. When rounding out for landing pilot noticed mown hay concealed ridge and furrow surface. Bounced on two ridges and undercarriage collapsed on third ridge.
116	SHK 1	1426	W/O	13.07.80 14.15	Wyville, Lincs	50	S	600	On final glide back to base during competition task. 2 miles out at 250ft with some headwind component less than 5kt, pilot realised he would not reach A/F. Initiated turn to right into wind to land in cornfield and remembers nothing more until crawling from wreckage. Damage consistent with spin.
117	Skylark 3	871	S	21.06.80 17.00	Long Marston	51	M	23	Snatch at start of autotow launch causing wingtip holder to lose grip. Wing dropped and glider pivoted about wingtip and struck signal car parked in front and to one side. Rotation continued and glider then collided with K-13 parked on grass at side of runway.
	K-13	?	S		Pedestrian club member	?	M	—	

M=minor; N=nil; S=serious; F=fatal and W/O=write-off.

S. R. Lewington		Bristol & Glos	18.4
J. Dixon		SGU	20.4

SILVER C

No.	Name	Club	1980
5543	L. Cadogan	Wrekin	20.4
5544	D. Marsh	Dowty	9.5
5545	P. H. Little	Bristol & Glos	9.5
5546	Vivien Haley	Essex & Suffolk	5.5
5547	D. J. M. Williams	Surrey & Hants	9.5
5548	A. Somerville	Surrey & Hants	5.5
5549	P. A. G. Holland	Trent Valley	5.5
5550	A. Yorkas	Woodspring	20.4
5551	P. D. Foreman	Cambridge Univ	5.5
5552	J. Allwood	Midland	19.4
5553	P. J. F. Hewitt	SGU	4.4
5554	M. W. A. Bonthron	Fulmar	17.5
5555	M. Shuttleworth	Ouse	17.5
5556	C. J. Arch	Wyvern	17.5
5557	R. G. Hanwon	Chilterns	17.5
5558	C. D. Marsh	Stratford on Avon	17.5
5559	A. R. Judge	Woodspring	18.5
5560	T. C. Llewellyn Jones	Essex & Suffolk	18.5
5561	J. R. Hawkins	Wyvern	17.5
5562	J. Williams	Trent Valley	10.5
5563	R. W. Gent	RAE	18.5
5564	D. J. Eade	Surrey & Hants	17.5
5565	Jane M. Lewis	Surrey & Hants	5.5
5566	Kathleen Mitchell	Southdown	16.5
5567	P. Wright	Buckminster	18.5
5568	G. Cowling	Phoenix	18.5
5569	I. Godfrey	Surrey & Hants	4.4
5570	R. G. Rothon	Southdown	18.5
5571	M. Dean	Thames Valley	19.5
5572	G. K. Dodd	Cranwell	21.4
5573	Rosalind Holman	Bristol & Glos	1.6
5574	Mary L. Squire	Culdrose	28.5
5575	J. Haigh	Southdown	16.5
5576	D. Latimer	Aquila	18.5
5577	M. L. Alford	Bicester	18.5
5578	W. G. Gill	Blackpool & Fylde	11.5
5579	J. Edwards	Bicester	19.5
5580	T. A. K. Jay	RAE Farnborough	4.5
5581	A. Tolson	Four Counties	6.4
5582	P. Groves	Portsmouth	4.4
5583	K. Anscombe	Southdown	16.5
5584	R. A. F. Brown	Norfolk	18.5
5585	J. D. Lambert	Wrekin	17.5
5586	K. A. Beggin	South Wales	17.5
5587	B. Hoyle	Yorkshire	19.5
5588	T. J. Price	Vale of Neath	18.5
5589	L. Bailey	London	6.6
5590	R. M. Hamilton-Jones	Surrey & Hants	22.5
5591	J. N. Horrill	Bath & Wilts	30.5
5592	N. H. Tyler	Midland	27.5
5593	P. Shambrook	Two Rivers	18.5
5594	S. D. Wright	Heron	18.5
5595	J. Abbess	Essex & Suffolk	18.5
5596	J. H. Fox	SGU	1.6
5597	A. Goodman	Kent	30.5
5598	T. G. Brigden	Coventry	30.5
5599	J. S. Melville	Bath & Wilts	29.5
5600	E. W. Tremlett	Southdown	16.5
5601	G. C. Littleton	Bristol & Glos	18.5
5602	C. J. Lines	Trent Valley	10.5
5603	R. F. Newton	Stratford on Avon	29.5
5604	D. M. Haas	London	18.5
5605	M. A. M. Pirie	Cotswold	8.6
5606	J. H. Taylor	Ouse	17.5
5607	A. Povey	Fenland	8.6
5608	J. R. Smith	Dowty	4.5
5609	M. Hills	Surrey & Hants	28.5
5610	J. H. France	Herefordshire	24.5
5611	J. S. Howton	Thames Valley	10.5
5612	D. J. Rickman	Dorset	17.5
5613	B. K. Holman	Bristol & Glos	18.5
5614	G. T. Wilkinson	Blackpool & Fylde	5.5
5615	C. J. Townend	Doncaster	6.6
5616	A. M. Thomson	Bicester	6.6
5617	Angela Watt	Bicester	29.5
5618	C. Hale	Two Rivers	17.5
5619	A. G. Evans	Pegasus	10.5
5620	E. Kendall	Lakes	1.6
5621	P. Farnham	Derby & Lancs	29.5
5622	D. J. Gilder	Essex & Suffolk	7.6
5623	G. E. McAndrew	Northumbria	30.5
5624	K. T. Tutthill	Blackpool & Fylde	30.5
5625	P. R. Cox	Essex & Suffolk	7.6
5626	Kathleen Lee	Norfolk	9.6
5627	F. A. Wright	London	8.3



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Judith Mountford, the 16 year-old who was filmed by the BBC for their "Girl in a Glider" feature as she progressed from early training to first solo at the Yorkshire GC's Sutton Bank, with her instructor, Mike Wood, deputy CFI. The film, shown on September 19 in the north, was conceived and directed by Keith Massey, an experienced glider pilot.

CLUB NEWS

Copy and photographs for the December-January issue of S&G should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 47725, to arrive not later than October 14 and for the February-March 1981 issue to arrive not later than December 2.

August 12, 1980 **GILLIAN BRYCE-SMITH**

BLACKPOOL & FYLDE (Chipping)

Some members are showing confidence in the potential of our site by investing in glass ships — a PIK-20E and a Std Cirrus have arrived. Paul Gibson did 110km to Carlton Moor in an SF-26 just before emigrating to Australia. Roy Greason, our resident beachcomber, managed 190km on his latest attempt at a 300km.

We had visitors from Nympsfield for our third club week as well as a member from Cairngorms.

Whilst we still have to compete with the hang gliders, mainly when there are SE winds, our relationship hasn't soured. We appear to be more tolerant and considerate of each other in spite of our apprehensions.

T.T.

BRISTOL & GLOUCESTERSHIRE (Nympsfield)

Unfortunately an accident with our K-13 has put it back in the workshop but, happily, nobody was hurt. With the Bocian and the Blanik, however, we are still adequately equipped with two-seaters.

The Super Cub has been re-engined and has joined our Scout tug so launch point queues are now mercifully short. The recently acquired Scout has been performing very well but provoked some adverse local comment regarding noise levels, so we are looking at ways of quietening it down.

A recent publicity drive piloted by Bernard Smythe has resulted in quite a few new members. One advertisement in the local press — "if you can drive a car you can fly a glider" — led to a tremendous flood of potential members.

Club members take on British Team Squad representatives at the end of August.

R.A.R.

BUCKMINSTER (Saltby Airfield)

The East Midlands Regionals, hosted by Buckminster, were opened by our distinguished neighbour the Duke of Rutland. Unfortunately the weather was not kind but we are pleased that one of our members, Phillip King won the Open Class, and Bob Fletcher was second in the Sport Class.

Over the last few months various of our members have been participating in an inter-club league event, and this has given some their first taste of competition flying and has been enjoyed by all taking part. The other clubs involved were: Essex, Coventry and Dunstable. We came second overall.

Congratulations to Mick Willett and Bob Fletcher on gaining Diamond goal and to Carolyn on going solo.

T.C.M.

CAMBRIDGE UNIVERSITY (Cambridge and Duxford)

We still fly Swallows at Duxford and Tim Prees recently revived the lost art of getting them cross-country by doing his Silver distance in one. Sadly the Oly 2B was written off again, this time undershooting into a very tough fence at Cambridge.

Our Competition Kitty weekend weather was good enough for tasks both days (see report on p221).

P.E.B.

CORNISH (Perranporth Airport)

The cloud that hung over us for some time has at last gone; the company wanting to develop the airfield had their planning application refused and have gone elsewhere, so we hope to continue operating on this site.

We have replaced our Swallow with a K-6CR for first solo flying and, with a number of new members, trust it will be well used.

Our thanks to Denis Jenkins for a most interesting and informative talk on flight instruments.

Peter Bone (K-6E) and Brian Phillips (Swallow) flew their five hours on April 19, the day we had a wave climb to 7000ft by Don Jones (Dart) and several other climbs of 5000ft.

P.T.B.

COTSWOLD (Aston Down)

While the weather has been poor the club has been as busy as ever. Dominating all thoughts is the impending sale of Aston Down. After a long fight it looks as though we shall have to go to the auction and bid, all our efforts to convince the Property Services Agency that it is legitimate to sell land by private contract having failed.

Because of this sword hanging over our heads a very big push has been made to fill up our bank account. An Astir and Skylark 3 have been sold and the K-2 is awaiting a buyer. We have had a tremendous and successful programme of evening experience flights.

At least the weather smiled during the August task week. A number of 300 and 400kms were flown and the *ab-initios* pounded the circuit to good effect leading to a considerable number of solos including three new lady pilots. Pat, Fran and Geralyn.

We were well represented in the Nationals whilst Dave Roberts (Kestrel 19) won the Western Regionals and Trevor Wilson, CFI, took the same Kestrel to victory in the Open Class at the Enstone Regionals, which seemed to be attended by half the club.

Whilst there have been no 500km flights, Larry Bleaken completed all three Diamonds with a height gain at Portmoak. Gary Fryer flew three Diamond heights in two days and Chris Batty also did a Diamond climb on the same Portmoak expedition, but his borrowed club barograph ran out of steam on the peak of the climb and he had to be content with a Gold. Incidentally, Chris now has his own barograph!

J.D.H.

COVENTRY (Husbands Bosworth)

The weather relented for our second task week in late July to give several good contest days. Lou Frank won the Glass Class, the Club Class went to Oly syndicate partners, John Osbourne and Ray Gardner with the

Two-seater Class being won by Mike Stevens (Blanik).

Our other main event, Competition Kitty, will be reported by the organiser in the next issue.

Our contingent to Sutton Bank for the Vintage Rally had lots of thunderstorms and lots of launches. They were full of praise for the way Henri kept things at full bore despite the weather.

B.R.

DEESIDE (Aboyne Airfield)

The variable July and early August weather dampened our spirits and our airfield. "Chalky" White and Santi Cervantes are off to the Northern Regionals and Bruce Cooper to the Standard Class Nationals.

Our wave hasn't deserted us, especially in the early mornings. Chris Rollings took off at 6.30am, declaring Husbands Bosworth and return for 1000km in Booker's new ASW-20. He got to the Scottish border before cloud undercast from the west forced him to return by noon, having covered 380km.

The club K-6E, which will soon be back in service, is to be sold and replaced by something tougher. The Sky is going to Portmoak.

Our task week is now on with visitors from Dallachy, Wick, Arbroath, Portmoak and Booker.

Good news for visitors — the very rough patch to the south of our runway has been graded, to the relief of many an undercarriage. The clubhouse area is being prepared for the foundations.

J.R.B.

DONCASTER & DISTRICT (Doncaster Airfield)

After a cracking start to the season, spring seemed to merge with autumn. The Northern League was won by Trent Valley and their yellow Olympia 2B put in two very good performances, putting most of the other pilots to shame.

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Paul Edderington completed his Silver C with a distance flight and Alan MacKay went solo. We have had some very unfortunate field landing incidents which emphasised the need for more care in selecting fields in June and July.

E.T.R.

DORSET (Tarrant Rushton)

With the end of our lease rapidly approaching we are having to face that this may be our last season at Tarrant Rushton. A very hard effort is being made by our Committee to explore all possible sites available but as yet we have no definite alternatives. There are, however, some very promising possibilities in the pipeline and we are awaiting decisions from planning authorities etc.

The club has achieved a great deal of publicity through television, radio and newspaper articles resulting in many offers from local landowners. Some are not suitable but others are being followed up and whatever the outcome we have a possible site to continue operating from on a temporary and restricted basis.

Our static glider display at the Hurn air pageant was very successful and created a lot of interest but the twin glider aerobatic display was cancelled on both days due to the weather.

We are getting ready for our last summer task week and looking forward to receiving Dutch visitors, some of whom appear to be addicted to Tarrant Rushton as this is their third visit this year!

J.R.C.

DUNKESWELL (Dunkeswell Airfield)

The inclement weather of June and July reduced our soaring activity considerably but failed to preclude Les Baskwill from gaining a second Bronze leg and Ray Busutill from completing his Bronze C. So far our courses have slotted into the few good weeks, providing opportunity for Roy Boddy and Ken Bunyan to re-solo after a two-year lapse. John Street and Andy Rigsby have also gone solo. Our weekend mini courses have also been successful.

We have enjoyed the company of many visitors to the site — Ian Whitmore achieved his Silver distance whilst with us.

Mike Fairclough has made several lengthy cross-country flights, the latest, however, having been curtailed 15km short of a Diamond goal by the inevitable sea breeze front. We have had an increase in usable wave which we hope may be exploited further in the future.

There are plans for another expedition to Portmoak and we are looking forward to our end of season party in October.

B.H.F.

EAST SUSSEX (Ringmer)

Wave was encountered over Lasham during our recent expedition there. Unfortunately, it turned out to be the wet variety. Nevertheless, we had some enjoyable flying on the one dry day of the week.

Wednesday flying has recently started and proved a great success. Wave has long been suspected over Ringmer, and the last few weeks have finally confirmed our suspicions with a memorable flight by Jackie Manley.

Bob Dall's Sport Vega has finally arrived. Congratulations to Fred Bishop on his Silver distance to Challock, and to Alastair Brand, Neil Kelly, Dave Martin, Vivian Nopper and Peter Whitmore on going solo.

V.N.

ENSTONE EAGLES (Enstone Airfield)

We seem to be breeding a new generation of pilots as two more members soloed on their 16th birthdays — Francis Lewin and Andrew Lees. Bill Piper also achieved his first solo this month.

We were unlucky with the weather for the Enstone Regionals, directed by Eric Giles, and only managed two competition days. But we amused ourselves with a car treasure hunt and various visits. Trevor Wilson (Kestrel 19) won the Open Class and Ian Robinson and G. Dixon (Skylark) the Sport Class.

S.G.

ESSEX (North Weald)

June and July proved to be pretty disastrous soaring months both home and away with disappointed pilots sitting on the ground under 8/8 clag commiserating with those returning from competitions which were almost non events. However there was some improvement at the end of the month when John Bailey and Chris Nicholas flew 300km tasks and Len Bailey achieved Silver distance.

We are happy to report that Tim Healey, who was involved in a gliding accident, is home again and making a good recovery. During his stay in hospital his spirits were wonderfully sustained by members of the Buckminster GC who treated him as one of their own. The inter-club competition has brought us many new friendships and we congratulate the London GC, the overall winners.

The private fleet has been enhanced by a Nimbus, a Cirrus, a Silene and a Mini Nimbus and we are shortly expecting the delivery of our tug, a Super Cub which has been flown across the Atlantic to us (see BGA News).

The courses are fully booked for the remainder of the season and have produced many new members. Our evening sessions when we give air experience flights have also produced several new enthusiasts.

S.C.

HEREFORDSHIRE (Shobdon Airfield)

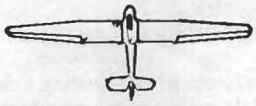
Gloom mostly. Sodden June, July and start to August. June 25 Roger Harlow broke 849 (Mini Nimbus C) while flying Enterprise (see p234). The press reported that he was "towed to 200ft behind an aeroplane and then dived into a wood." He was lying fourth when it happened. Anthony Maitland (Mini Nimbus C, 530) came second.

July 17 Charles Boucher did his Diamond goal in 530 with a 310km triangle, Malpas, Moreton-in-the-Marsh. Philip King took 530 to the Mynd for their task week. He was in the lead when 530 suffered an undercarriage collapse. Reg Mayo (Diamant) was fourth.

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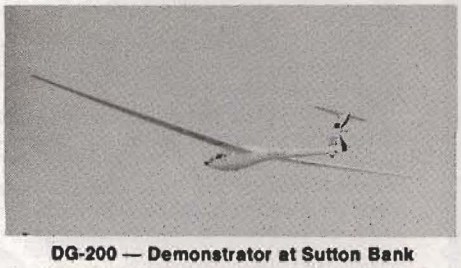
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Andy Williams and David Falls both completed their Bronze Cs. Bruce Hunter and Liz Lloyd got their Silver heights.

Our club is now twinned with Buno Bonnevaux, 50km south of Paris. We hope to arrange exchange visits. Should be fun.

R.P.

KENT (Challock)

Congratulations to Terry Bramfitt on achieving Gold distance in the Club Astir on July 24; to Caroline Bunyan on completing her Silver C and to Bill Waite and Tony Bradley on their durations.

We have had a record number of solos and many Bronze Cs despite the bad weather of June and July. The wet spell at least ensured the grass seed germinated on the large patch of airfield which had been re-graded.

We will soon have a Sport Vega syndicate headed by Tony Bradley.

D.H.

LONDON (Dunstable)

Poor weather has tended to inhibit flying recently with pilots on the latest advanced course getting less than five hours flying apiece. However Peter Whatford is to be congratulated on seizing the right day to complete a 300km triangle in his ASW-20L.

Mike Boxall possessed the Husbands Bosworth pot for a mere two hours following his duration flight before relinquishing it to a Hus Bos man who had flown the opposite way. Other Silver legs have included a five hours by Andrew Humphries in the open cockpit of his Grunau Baby — including 20min in heavy rain.

David Richardson flew his Kite 2 for the first time after its prolonged rebuild and pronounced it a delight to fly. Delight turned to consternation when it was seriously damaged on its second flight. A heroic repair effort enabled the Kite to be taken to the International Vintage Rally at Sutton Bank just two weeks later — one of eight Dunstable gliders to do so.

F.K.R.

MARCHINGTON (Marchington)

The last two months have been quite quiet for us due to the bad weather and tug troubles. During this period several members took their gliders to other sites and we would like to thank these clubs, particularly Saltby and Coventry, for their hospitality. The tug is now back to its former self, pulling two-seaters to 2000ft in under five minutes.

The grass is growing nicely on the strip, binding the ash and thus preserving the tug and gliders, but it makes the strip even more difficult to spot from the air and consequently an instructor has logged another field landing. The hunt for cash to buy the site continues.

S.D.B.

MIDLAND (Long Mynd)

Although the weather has been generally disappointing for cross-country aspirants, we picked one of the better periods for our task week. Almost 8000km were flown by 23 aircraft during the contest days. Tony Crowden's splendid achievement of a Diamond goal flight in our club K-6CR will be long remembered.

His out and return to Hungerford on a day which turned out to be more difficult than forecast was only equalled by Reg Mayo (Diamant) and Bob Scarborough (Kestrel 19). Malcolm Allen (Std Cirrus) almost made it back to gain his Gold distance.

The visiting tugs gave us efficient launching and most of the visiting pilots sampled a bungey launch and good local soaring. Overall winners were Chris Alldis and Malcolm Allen, sharing their Cirrus, with Ben and Trish Watson from Lasham in second place.

Twenty-six pilots were rather disappointed when Competition Kitty, arranged to coincide with the end of the task week, had to be cancelled two days beforehand because of a dearth of Team Squad pilots. However, we were pleased to meet Graham Smith and thank him for arriving quite literally at the eleventh hour (in the middle of our task week party) to offer his challenge. Unfortunately Sunday's weather was not suitable for a task, so Competition Kitty didn't get off the ground.

However, we were delighted when member Bob Nicholls won Competition Kitty at Husbands Bosworth (to be reported in the next issue), beating George Lee and Brian Spreckley. This was the culmination for him of the BGA Advanced Soaring Course. Several of our members have now been on these courses and found great value.

The recent open weekend was a great success, raising almost £1000 for the club. Our thanks to the many members who helped launch the ever willing public.

J.S.

NEWCASTLE & TEESSIDE (Carlton)

The weather has been disappointing this year. Our Easter course was a great success with some good soaring but conditions have been poor for the rest of the courses. Nevertheless there have been some achievements.

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Congratulations to Sally Storr and Martin Goodwill on going solo and to David Crews on his Bronze C. Durations flights were by David Crews, Ged Terry, Jonathan Smith, Phil Nichols, Jim Evans and Peter Irving, Peter also gaining a Silver distance.

Many more of the young pilots are flying the K-6E which has significantly increased the utilisation of this glider. The Auster tug is still under repair and aerotow facilities are sadly missed.

We have had several enjoyable social evenings at the clubhouse during the courses which in a small way helps when the weather limits flying activities.

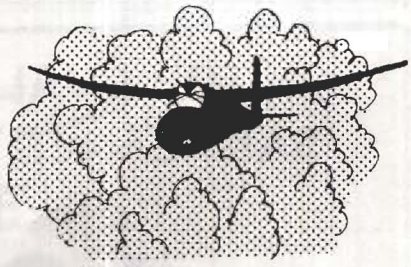
W.R.I.

NORFOLK (Tibenham)

Several visitors have arrived by air — on one occasion the John Jeffries's course landed without their leader.

Anthony Walsh (Mosquito) achieved a Diamond goal with an out and return to Thame and Nigel Stringer (K-6) and Eric Ratcliffe (PIK-20) did an out and return to Duxford. Brian Hulme went to Sheringham in the club K-18. Several members went to the Cambridge University GC's task week in May and one of us had the dramatic effects of rain on GRP wings demonstrated.

We have had one good car treasure hunt and another is taking place as this is being written. They are organised by CFI and Secretary, Roy Woodhouse. A film evening is being arranged at the University of East Anglia for November.



Smoking can damage your health!

We are hoping for some good stubble fires for our second task week in late August.

M.J.R.L.

NORTHUMBRIA (Currock Hill)

The courses are going quite well despite the dreadful weather, although two had to be cancelled due to the lack of winch drivers.

The new clubhouse was opened in June by the MP, Geoffrey Rippon, and we had guests from Newcastle, Carlisle, and Sunderland Airports. This was one of the days when it nearly didn't rain.

An expedition has just returned from Saltby where Lyn Greenwood completed his Silver C with a five hours, and Rob Thompson got two Bronze legs. Roy Wilkins covered 110km for his Silver distance.

Several members took part in the Pocklington task week, the most notable event being Derek Staff losing his glider (not breaking, *losing*).

We are looking forward to the first full club

outing for some time when we visit Carlisle Airport on August Bank holiday weekend.

After waiting so long to go solo, Bob Nichol has celebrated with two Bronze legs in a month.

J.W.

OBITUARY

Richard Walton

Rick Walton was killed in a tug accident at Wycombe Air Park on Sunday, June 29. He rejoined Northumbria GC in 1975, quickly soloed and gained a PPL and a Silver C. His ability and enthusiasm for flying the club's Chipmunk gained him the affectionate name of "Chippy" Walton. He was an active member of the Management Committee, and did an excellent job while in charge of ground equipment maintainance.

Rick left our club in 1979 to take up a new post in the south. He continued his gliding at Booker.

The thoughts of us all go to his widow, Trysh, and his two children, Andrew and Dawn. He will be sadly missed by us all.

F. T. Greenwood, Treasurer.

OUSE (Rufforth Airfield)

After a promising start to the season the weather has recently closed in giving us few flights of note. We have had the tea bus on the airfield and the winch is in operation again. Our thanks to Pete and Margaret Edwards and to Barry Lumb for displaying their gliders at the York gala. Tremendous interest was shown in the club and judging from the inquiries we may attract many new members.

Our congratulations to David Bell and Michael Hey on going solo.

S.R.L.

RATTLESDEN (Rattlesden Airfield)

The poor June and July weather has meant that achievements have been minimal. However congratulations to Trevor Butcher for gaining both legs of his Bronze (for the second time), Mick Irish for his B and John Manley for going solo.

Our hangar now stands complete with our club aircraft parked neatly inside. As anticipated our launch rate has increased accordingly as the time consuming rigging and de-rigging fades into a "fond" memory.

Permission for aerotowing has been granted for a probationary period of one year and we feel confident full permission will be granted at the end of it.

We are looking forward to our September flying week for which we have hired a tug.

R.W.

SCOTTISH GLIDING UNION (Portmoak)

A major re-organisation took place at our AGM in July. Most of the Directors had served for four years and, feeling it was time they had the chance of some flying again, announced their retirement. The new Board consists of Ian Fleming (Chairman), John Hamilton (Treasurer), Simon Mackintosh (Secretary), Arthur Greene, Ken George, David Hunter, Malcolm Shaw and David Walker Jnr. Good luck to them and our thanks to the retiring Board for their hard work. Andrew Wood's successor as CFI is Graham Smith.

Our new retrieve winch system will consist of two main and two retrieve winches. Of these, one main and both retrieve winches are on site and look good. The main winch has already done a number of successful launches and the others are well into ground tests. It is hoped within the month to begin full system tests.

The disappointing weather has affected us as it has most sites and the spate of good cross-countries earlier in the season has fallen off somewhat but some good flights have been achieved.

R.H.

SOUTH WALES (Usk)

We held an open day on July 6 to start Usk carnival week and included a balloon race, powered hang gliders, vintage motor cycles and radio controlled models. We are indebted to the members who worked so hard to make it a success.

Mains water has at last arrived on our site to make life more bearable. Our task week at the end of July was tremendous fun and enabled Ken Balkombe, a visiting Kent pilot, to get his Silver distance. Our thanks to Earl Duffin, competition director, and the many helpers including Brenda Shattock, Phil and Ross Gould and Huw Morgan, and congratulations to Philip Edwards on going solo and Mark Howell on completing his Silver C with a duration.

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The Usk Carnival Queen aided by CFI Peter France.

Steve Field (Astir) altered a reconstruction of history by being the only glider pilot to take part in a Roundhead campaign, arriving adjacent to the battlefield despite heavy cannon fire (he claims to have been shot down).

Earl Duffin soared his Cumulus, affectionnately known as Tadpole, for the first time in many years.

P.A.C.

STAFFORDSHIRE (Morridge)

Our finances are in such good shape we have purchased a four-wheel drive diesel lorry prime mover, separate diesel engine and gear box to form the basis of a main winch, all secondhand for a total of £650. We also plan to buy a fluid flywheel for taking-up slack without tears, a jib and a simple cam pay-on system.

Our overworked K-13 is to have a respray this autumn and we will be paying back part of the outstanding loans to our founder members who helped us purchase our site in 1973.

Recent achievements include Bronze legs for Barry Rowding, Ken Lane (second) and Jim Clarke. Peter Chadwick has completed his Bronze C and David Thorpe, John Davies, Stephen Bailey and John Hind have converted to the K-8. John Graham, our Treasurer, had to fine himself £5 for exceeding the limit of 40min in the club K-8 with a flight of an hour for the second time this year.

The club cross-country course was a washout, which at least saved a lot of form filling for the Air Traffic Census.

The 100 Club is flourishing, with Sid, our pub landlord, winning the monthly £10 first prize for the third time this year!

P.F.

STRATFORD ON AVON (Long Marston)

What looked like turning into a moderately successful season has now materialised as a very good one for Stratford. Five Silver Cs were completed by Pete Kenealy, Tim Barton, Tom Smith, Richard Newton and Paul Sainsbury, who proudly started gliding in 1937 prior to active service in the Fleet Air Arm and reckons he may hold the record for taking the longest time to complete!

There were Silver distances by Tony Edlin, Lyndon Thorne and Ray Hopkins plus a number of Bronze legs too numerous to mention and first solos by John Leonard and Barry Kerby. Congratulations to all concerned.

John Blakemore has his assistant rating, Mike Coffee and Alan Wright are now full Cats. Martyn Davies heads the cross-country ladder.

Jim Tyler has resigned as CFI and Gary Print has taken over. Our grateful thanks to Jim and best wishes to Gary.

The courses were very successful in spite of poor weather and the emphasis on air experience evenings has paid dividends for the club funds and as an experiment for three months, aerotows are being subsidised from the revenue.

Unfortunately several weekends have been interrupted with drag racing at Long Marston but we are grateful for the launching facility kindly offered by Ralph Jones at Bickmarsh on these occasions.

Sadly we lost one of our keenest members, Alan Marchant, who joined us from a holiday course last year, and died in June. Our sympathy goes out to Wendy and the children who sustained Alan so wonderfully during his long illness.

H.G.W.

SURREY & HANTS (Lasham Airfield)

Weeks of sunless wet windy cold weather put a virtual stop to serious cross-country flying after the first week of June. Not till the third week of July did the fleet venture away from Lasham again with any real results. Even then a certain amount of desperation was evident in a flight of 8hrs 10min to cover 400km in an Astir!

The first Sport Vega has proved very popular and to finance the second one our venerable K-6 (No. 313) is up for sale. The general fleet policy is to eventually have Sport Vegas as first solo gliders as the training fleet

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advances to glass-fibre two-seater flying before solo.

Eyes are being cast toward high performance of Ventus or LS-4 type as suitable improvements for the top end of the fleet but that is a way off at present, what we need is some weather to fly what we have now! Large boxes of matches are being issued to all farmers with cut cornfields. We are hoping the Portmoak trip will alleviate the gloom.

C.L.

SWINDON (South Marston)

We look set to exceed the 1979 cross-country kilometres by a fair margin in spite of some indifferent weekend weather recently, though it is disappointing not having had any Silver distance flights so far this year. Henry Devonshire organised the task week, the largest task being a 212km quadrilateral completed by Colin McKewen (K-6CR).

The British Team Squad representatives arrived with some high powered machinery for the Competition Kitty weekend and the Saturday night barbecue proved that they can dance as well as fly. On the one flying day most people landed at about the same spot so there was no real winner (see report in the next issue).

John Devey has gone solo and Steve Parsonage and helpers are fitting out a trailer for the Skylark 4.

J.M.B.

TRENT VALLEY
(Kirton-Lindsey Airfield)

The generally short lived weekend soaring conditions this summer have restricted flights by our pundits, whereas our Silver distance claims have reached a peak of ten with three Silver Cs completed. Vernon Spencer finished his in style at Portmoak with two climbs to Gold height during his five hours. To cope with this increase in soaring, we have bought a K-6CR to supplement the K-8 and Pirat. The privately owned T-21 has been flown 50km to the Strubby, Wolds and Four Counties GCs.

Two 16 year-olds have gone solo, Simon Swannack on his birthday and Paul Marchant a week after his, chickenpox causing the delay. Both are now making good progress in the K-8.

We have won the Northern League from the Doncaster, Wolds and Yorkshire GCs after a competition in which the weather allowed us only five flying days out of ten with only one pilot completing a task.

The third flying week is at the end of August. The second enjoyed good weather while for the first the field was shared with the Army who used our gliders as a tracking exercise for the Rapier missiles. Fortunately nobody pressed the red button!

J.R.S.

ULSTER (Bellarena)

With our 50th anniversary season developing into a meteorological nightmare there are items of good news. Delayed by bureaucracy for almost two seasons, erection of our hangar at last began on August 8. Orchestrated by Loudon Blair on the theodolite, with Joe Irwin on the mechanical digger and assorted players on the spades and spanners, the foundations were dug and poured, the steelwork delivered and the main frames assembled less than 48hrs after the first sod was turned. A crane was ordered to be on site on August 15 to hoist everthing into place; by the time this appears we should have a 64ft x 40ft roof over our heads.

The other good-news item concerns not just us, but possibly you. After UGC approaches ferry operators Townsend Thoresen have come up with a very competitive car/glider trailer return offer in either direction on the Larne — Cairnryan route. It is now no longer hugely more expensive to cross the Irish Sea with an aircraft than the English Channel and the North Sea. So we now look forward to taking aircraft to fly more in Britain while, hopefully, all you over there may consider coming west to soar Ulster, or Ireland at large. There'll be the fabled *mille failte* if you do, and no longer will you pay more than if you travel to the continent. Details from either Townsend Thoresen, or our Secretary on 0232 654366.

Less welcome news was the decision of junior government Minister Lord Elton virtually to abolish the Sports Council for NI, to whose dedicated staff — now to be fired — we owe a lot. Along with more than 100 other sports organisations we have registered a strong protest and have sought BGA support (p254). As I write, there is no sign that Lord Elton is reconsidering this deplorable decision.

R.R.R.

WELLAND SOARING GROUP (Careby)

Bad weather has curtailed many of our flying days, nevertheless our new members haven't been deterred by the rain. Work is progressing on the new winch under the direction of Ray Clarke. Other equipment news includes the acquisition of a club caravan and a Specht basic trainer.

The flying week ended with a celebration to mark our 25th anniversary, giving past and present members an opportunity to meet. Our thanks to CFI, Roy Taylor, for a most enjoyable evening.

R.J.H.

WOLDS (Pocklington)

The uncooperative weather seems to have upset nearly all the task weeks; competitions and Northern League weekends; if there was a National Ladder for table tennis, pontoon and swingball, Wolds would be at the top!

We have some successes to report though. Bob Parker managed five hours and Silver height on a club flying week and Tim Caswell went solo a week after his 16th birthday, the weather having ruled out the day itself.

Jon Hart from Sutton Bank won our Competition Kitty weekend, which was enjoyed by everyone (see p221), and we were pleased to have visitors from the Northumbria GC on a recent task week, won by Alan Hunter.

We are having tug problems, our Condor having been recalled with crankshaft corrosion trouble, and the ensuing problems over who pays for what looks like lasting to the end of the soaring season. If other clubs are



Philip Hogarth, of Woodspring GC, going solo on his 16th birthday.

experiencing the same difficulties with 0240 engines and have a satisfactory answer, we would be pleased to hear from them. Les Cooper is trying to figure out ways and means of building a new twin-drum winch to replace our two rather elderly single-drum ones.

Our evening visits will soon be drawing to a close and we thank the organiser, Steve Bennett, for all his hard work again this year.

H.N.

WOODSPRING (Weston-Super-Mare)

Our soaring season started in grand style with Bill Burgess climbing to 7000ft (alas without barograph) in thermal and wave over the airfield. Silver Cs have been completed by Angelos Yorkas, Rolf Scharning, Tony Judge, John Horrill and Barry Goodyer. Sue Marshall flew her Oly 463 to Sherborne for her Silver distance, becoming the first lady member to do so from Weston — well done Sue. Silver heights were achieved by John Bridge and Jack Nelson. Bronze legs too numerous to mention have also been attained.

Ken Wiseman ran a very successful series of Bronze C lectures in May which were very much appreciated.

We had a stand at RAF Locking's Flowerdown Fair in June, which resulted in several new members and a sellout of British Team T-shirts, badges and ties.

Our longest serving *ab-initio* Philip Hogarth, son of the CFI, went solo on Friday, June 13, his 16th birthday, after a very long wait and some 460 launches in his logbook.

We welcome Roy Gallop to our ranks of assistant instructors. Garry Humphries and Angelos Yorkas will be attending instructors' courses in October. Angelos has taken over the thankless task of Airfield Treasurer from Roy. We thank Roy for his two years of collecting the cash.

C.B.H.

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WYCOMBE AIR PARK (Booker)

Just to put the record straight, last issue's photograph of Booker (p199) was taken by Geoff Brown, one of our first 1980 pupils to go solo and a photographic pundit.

We only had four contest days at our Regionals and local men took the top spots, as you might expect.

It is sad to report two fatalities this summer — Dave Hawkins and Rick Walton — our deepest sympathy goes to their wives. Dave especially will be sadly missed by us as he was a very active club member.

On a brighter note, Fred Dolby went solo recently after 37 launches with no previous experience. As he is 64 this is no mean achievement. Also Eric Rigby did all three Silver C legs during a flight to Oakington on August 10.

We now have a brand new ASW-20F to replace the PIK and another Super Cub tug (G-CUBB) — not quite brand new!

E.W.

YORKSHIRE (Sutton Bank)

Courses have been booming and we have been solidly booked until the end of September with only one or two places in October. Despite the poor weather we have done quite a bit of training but it has been a very poor season for cross-countries and wave.

Fortunately for the International Vintage Rally which we hosted, see report on p214, we were blessed with 6½ flying days out of eight and launch rates ran as high as over 170 in one day.

Phil Lazenby takes the prize for the hard luck story of the year. Flying his nicely preserved Oly 465 during the Rally, he landed in a field next to one full of cows. He returned from the telephone to find they had invaded his field and almost completely eaten away his trailing edges and large parts of the fuselage. His philosophical attitude was quite remarkable.

E.S.

SERVICE NEWS

ANGLIA (RAF Wattisham)

The last two months have seen a lot of hard work with the second winch running for the first time since last year. There have been several badge flights with Silver Cs for Jack Webb and "Mouse" Ackroyd; a duration for John Hicks; Bronze legs for Bam Bam and Bob Muteham, who both recently re-soloed, and first solos for Mick Hammond and Steve Brian in the K-4.

Mike Boyden, CFI, came a creditable fifth in the Booker Regionals. The lack of instructors is still a problem with our CFI as the only full Cat, although hopefully there will soon be several home-grown assistant Cats, Jack Webb being the first.

Finally, after an early finish one Saturday our CFI convinced us he's a pyromaniac by pulling down a tree and starting a bonfire. Sausage, mash and beans were enjoyed by all.

S.P.

BICESTER (RAFGSA Centre)

Some of our best achievements were in late July with the longest flight of the year being a 400km triangle by Ralph Dixon. During the same week Dave Caunt (Kestrel) and Bob Brownlow (Std Libelle) flew Gold distance/Diamond goal triangles *via* Melton Mowbray and Newmarket and three others made creditable attempts. Two completed Silver Cs with distance flights, two claimed Silver heights and eight durations. One of the Silver C pilots was Peter John who started a Joint Service gliding course without a full Bronze and in the week did about 20hrs flying and gained all the Silver legs. The other was Derek Durling who returned from seeing the farmer after landing to find young cattle had meanwhile been put in the field to graze and taken a liking to the K-8 tailplane.

Some 20 local hopefuls entered the Bicester round of Competition Kitty, to be reported in the next issue. Pilots and friends also enjoyed giant steaks grilled by Whitsun Bush at the Saturday evening barbecue.

Congratulations to Bruce Barnfather on going solo at the age of 16.

J.W.



CLEVELANDS/HAMBLETONS (RAF Dishforth)

Members of both clubs have recently achieved badge flights, all in thermal conditions. Our wave seems to have deserted us for the time being.

Congratulations to our new instructors, Brian Thompson, Kev Morton and Eric Roberts. While Brian was on his course at Bicester he completed his Silver C with a duration.

Ann Thompson flew 70km on a difficult day for Silver distance; Eric Roberts has his five hours; Jo Allan gained a Bronze leg, duration and Silver height in one flight and John Shreeve flew to the Doncaster area.

Annually we tow our two-seaters to RAF Leeming to encourage Servicemen to fly and this year included RAF Linton-on-Ouse. Both evenings were a great success. We look forward to August Bank holiday when we hold a task weekend, disco and buffet.

We welcome Leigh Hood to the club on his return from Germany to RAF Catterick.

J.A.S.

FOUR COUNTIES (RAF Syerston)

Our barbecue on July 5, Competition Kitty weekend, was a success. The weather wasn't fantastic but the two days were possible and won by John Delafield. The bus winch is well underway.

Our 25th anniversary is next year and we would be grateful if all past members would contact Steve Hart at 20 High Street, Easton-on-the-Hill, Stamford, Lincs, so that he may notify them of celebration arrangements.

G.P.S.

FULMAR (RAF Kinloss)

Unfortunately the weather forced us to stop flying early on the longest day but the superb barbecue more than made up for this.

The arrival of the syndicate Falke (G-BARZ) has considerably enhanced our facilities and proved very popular. Tony Garrod, Tony Duignan, Malcolm Taylor and Colin Slade have gone solo and a Joint Service gliding course at Bicester gave Steve Partridge and Dick Dawe durations and Farida Shroff a Bronze leg. Dave Stewart has completed his Bronze C.

John Harner has rejoined us from St Mawgan and Nick Murphy and Steve Dennis from Bicester. Our best wishes on leaving go with two of our longest serving members — "Coypu", our mascot, has joined the RAF and Peter (Rock) Spevack has left it.

C.J.

HUMBER (RAF Lindholme)

We have two new instructors, Derek Wilson and John Houghton, and have lost one with

Keith Sleigh joining the RAF. He will only be visiting us when on leave.

Trina Jennings and Steve Wilson have completed their Bronze Cs. Trevor Marshall converted to the K-8 and completed his second Bronze leg shortly afterwards.

Our annual dinner-dance is in November and we have a party to celebrate four birthdays at the end of August. We haven't done too badly with hours and launches and should see something for our efforts at the end of the year.

Two members are in the Northern Regionals.

K.M.G.

KESTREL (RAF Odiham)

Congratulations to Robin Horder and David Watt on going solo. We have recently acquired an immaculate K-13, bringing the club two-seater tally to three though Bob Bicher's K-4 extends that as well as the private owner fleet. Congratulations also to Bob and Warwick Creighton on their recent PPL conversions.

The depressing weekend weather has meant only 2490km cross-country from Odiham in the past two months, the longest flight being a 200km by Dave Macarthey with Pete Richie coming second with 152km, both in the syndicate Mosquito. However Martin Eldridge did manage 175km in the Astir from Lasham.

On June 15 Martin was first against the British Team Squad in Competition Kitty at Lasham (see p220) and Andy Ginever came second with Dave Macarthey third. Well done the Kestrel team. John Cockfield has turned "pro" for the summer, running courses at Saltby.

R.D.

PEGASUS (RAF Gütersloh)

First news of our expedition to Sisteron in France. There were Gold heights for A. Balchelor and Al Eddie. The remainder thoroughly enjoyed their wave flights even if they didn't quite get badges.

The RAF Germany Gliding Association Comps at Detmold came next and J. Edyvean (K-7) was second in the Club Class and our K-7 (202) won the trophy for the best prepared glider. Tony Evans and the K-8 became very familiar with Lemgo.

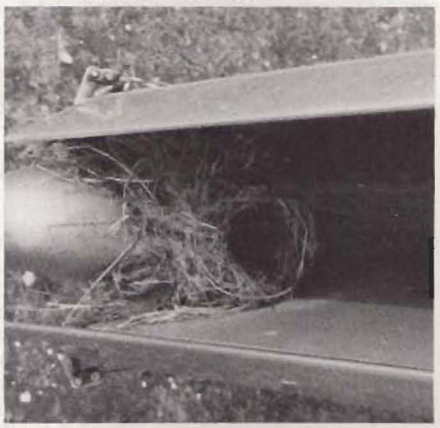
Our concrete floor in the hangar has been completed, thanks to Pete Carr and his crew, and now he is starting to convert the clubhouse. The longest day, with 220 launches, was very successful with our German friends from Oerlinghausen arriving on the Friday night and staying until Sunday. Everyone enjoyed the barbecue in the hangar and our thanks to Alan Harris for placing a Falke at our disposal..

We say goodbye to Mark Johnson, who was our youngest solo pilot at 16, and Chris Dobbs. Latest to go solo are Norma Millington, Dick Pennock, Pete Vernan and John McGivern, who also acquired two Bronze legs. Bill Gordon achieved Silver distance and two Bronze legs.

We are looking forward to our ridge expedition to Vennebeck in October.

B.P.

PHOENIX (RAF Brüggen)



A new use for the Blanik! Photo: Dave Hourston.

The last two months have been somewhat hectic with an expedition to Sisteron in France and the RAF Germany Gliding Association Comps at Detmold.

Sisteron was an extremely enjoyable and profitable expedition for the the club. Members flew over 200hrs and covered more than 1000km in thermals, wave and ridge lift. Ossie Constable, Rick Paradie and Dick Murray gained Gold heights with Silver heights for Kev Olver and Geoff Cowling. George Barber, John Nelson, Geoff Cowling, Kev Olver and Derek Ballard achieved durations.

Brüggen hasn't done badly for thermals with many days giving 8 to 10kts with Silver heights and Bronze Cs for Dave Hourston, Colin Jones, John Morris and Clive Smyth. Gabby Drücker also gained Silver height, whilst Geoff Cowling managed Silver distance. Innes Griggs has gone solo.

There were only four contest days during the two weeks of the Detmold Comps.

G.A.B.

TWO RIVERS (RAF Laarbruch)

We must have blinked for the summer has almost gone and we are already planning our winter/spring expeditions. Phil Gunn and Dave Ratcliffe have gone solo and Frank Aspinall coaxed a duration flight out of a thermic, but very unreliable, day. George Lee "dropped in" whilst returning from Paderborn recently, and his presence in the back seat of the Twin was appreciated.

Our mini-camp, over the August Bank holiday will be our next flying extravaganza — will the sun shine?

We have lost another two members in Frank Aspinall and Trev Buckley who have both served the club as Field Treasurers. Thanks guys.

J.R.N.

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General information from The Secretary, 55 Moorfield Road, Duxford

Course details from R. Haddon, 54 Brampton Road, Cambridge

WREKIN (RAF Cosford)

Our thanks to the Fenland GC for the loan of their T-21 for our *ab-initio* course. The course went well with Bev Toal, Pete Rayment and Ian Crawley going solo. Earlier in July "Taff" Agius, Keith Tegg and Paul Little went solo, Paul's having the most spectacular appeal when he tried to write-off the windsock and T-21. Bob Jones and Percy Dalton converted to the K-18 and Mick Greenway managed his Silver distance in his K-8.

Rod Witter did very well on his expedition to Portmoak, reaching Diamond height in the PIK-20E. We wish Rhod Evans and Les Cadugan the best of luck on their instructors' course in September.

Our home-built shower is finished, thanks to much hard work by certain members, and there are now moves to start work on a bunkhouse for visiting pilots.

J.L.R.

WYVERN (RAF Upavon)

It has been a frustrating period with airfield restrictions or poor weather hindering good flying. "Stormy" Fairweather (very appropriate) and Bill Crawford are now solo and Steve Moss, Merv Kelly, Adrian Matyear and Angie Pears have gained durations. Colin Hornbuckle has crossed the 50km gap to Odiham; with the tug on the ground waiting for him he didn't even have time to collect the Inter Club Plate.

Congratulations also to Don Archer on joining the back seat criticisers and to Graeme Sharpe and Andy Harkins on gaining full Cat ratings.

From a flying viewpoint the pre Inter-Services task week was a disaster. The only soaring achieved was by the bus and bar profits. The saving grace was a series of excellent talks and lectures throughout the week by John Williamson. The longest day flying added just over 200 launches to an otherwise sorry total to date.

Our long-promised winch is still beyond the horizon and our thanks to Kestrel for loaning us a winch when our own expired during an *ab-initio* course.

Barry Perks has bought an Oly 463 and Sue and John Hawkins a K-6E. Our CFI, Howard Jarvis, has been giving an aerobatic display at most of the local open days and each one has subsequently resulted in new faces in the front seat of a K-13. The club flourishes even if the flying does not.

J.R.H.

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YOUR LETTERS

A THREAT TO SPORTS FUNDING

Dear Editor,

Alone of the UK's four home countries, Northern Ireland is to be denied the services of a professionally staffed Sports Council. If junior minister Lord Elton gets his way the Sports Council for Northern Ireland will be reduced to a merely advisory body of appointed laymen, have no executive powers or grant-aid functions and its entire dedicated and qualified staff will be fired. Its secretarial functions will be provided entirely by the provincial Department of Education and it will become a toothless ministerial poodle.

Such aid as will remain for sport here will be dispensed by civil servants in the Department of Education and by district councils. Sport — all sports — will have lost an effective and sympathetic prop, a big commercial fund raiser and a powerful lobby with government and government departments.

"So what?" you might ask. The answer is that you might not be as unaffected as you think. The English, Scottish and Welsh Sports Councils have all reacted with concern to the Elton plan and there are good reasons for fearing it might be the writing on the wall for them too. If the Civil Service, under pressure to reduce its numbers, succeeds in this ploy of clawing back functions for itself to protect jobs at the expense of the SCNI's professionals, it will be sorely tempted to try the same stunt throughout the UK.

The Ulster Gliding Club has been served extremely well by the SCNI and from what we read in S&G, we know a number of mainland gliding clubs have every reason to be grateful to their regional Sports Councils too. Minority sports such as ours have a vested interest in seeing that the government's sports aid is channelled through sport-orientated and committed professionals, many with enviable sporting records of their own, rather than disbursed by faceless bureaucrats.

Can we please ask members of the British gliding movement, individually and in their clubs, at every opportunity and at every political pressure point, to express their strong opposition to the planned emasculation of the SCNI?

If you bump into your MP, bend his or her ear about it. Line them up to oppose the Elton plan.

BOB RODWELL, **Secretary, Ulster GC.**

SAVE SOULS AND SHIPS

Dear Editor,

I find in the June issue of S&G no fewer than three references to the field-selection checklist apparently in use in Britain. We are not lucky enough to have a nationalised training programme in this country, but I was gratified to note that your checklist is quite similar to the one we teach in our club:

Size
Orientation with wind
Slope
Surface
Obstructions to final approach
Streets (*ie* crew accessibility)

The last item is of low priority, whilst the first five are of equally high priority (since their influences are interdependent). In the order given, their initials form a memory aid which seems appropriate because, after all, our first concern in off-field landings is to save our souls, and the second is to save our ships.

RICHARD SHEPPE, **Cambridge, Mass, USA.**

WEAK LINKS (TOW ROPES)

Dear Editor,

In response to Ted Warner's letter on the above subject in the last issue, p202, may I correct the record. It is not the BGA Executive Committee who require the strength of launching equipment to be limited to any specific figure. Nor are weak links necessary if the strength of such rope as may be selected is naturally limited to the figure required.

(1) JAR 22 (Joint Airworthiness Requirements — European Community — Part 22 — Gliders). Para JAR 22.581 "Aerotowing" states: "Qnom is the rated ultimate strength of the towing cable (or weak link if employed). For the purpose of these requirements it must be assumed to be not less than 1.3 times the sailplane maximum weight and not less than 500 da N."

(2) BCAR's Chapter K4-10 "Light Aeroplanes" states: "The strength of the towing cable/or any weak link which may be interposed in the cable shall be established and shall be stated in the (Tug) Flight Manual; however the strength of the cable or weak link shall not be less than 4450N (1000lb)."

(3) BCAR Section E (Gliders) states: "Tow rope strength — The maximum nominal breaking strength of the tow rope shall be selected by the Applicant (Designer) Note: It is recommended that this value should be not less than 1000lb." (BCAR Section E is now superseded by JAR 22.)

(4) OSTIV states: "Qnom should not be less than 500kg (1100lb)."

(5) FAA (USA) (Federal Aviation Authority) states: "The towline strength should not be less than 80% of the glider operating weight. If the towline strength exceeds two times the operating weight of the glider, install two weak links."





(6) Therefore Ted, it is hardly fair to require the BGA Executive Committee to test tow ropes by jumping off cliff-tops, with or without weak links, unless of course you have an operational requirement to dispose of any particular member! (Lionel Alexander — watch out?)
R. B. STRATTON, *Chief Technical Officer.*

PS. Weak links in winch/autotow cables are essential and we have knowledge of a recent incident to prove it!

COMPETITION ENTERPRISE MIGHT ANSWER

Dear Editor,

I'm afraid that Mike Fairman (last issue, p203) may not care for all the "reaction" he has asked for, because he seems to be talking rubbish. If he really wants to play a game of rounders gliding round a circuit of "approved safe landing areas", I can only suggest that he organises one for himself and any like-minded chaps he can find.

On the other hand if he and his crew are looking for a lot of fun at a gliding competition, I suggest that they try themselves out against the nicest bunch of gliding types they are ever likely to meet (both pilots and crew) who take their "aerial toboggans" and the very latest of glass slippers to the unique BGA Competition Enterprise.
IAN PATTERSON, **Sidmouth, Devon.**

PS. I'm not sure whether Tony Smallwood would refer to his Gull I as an "aerial toboggan".

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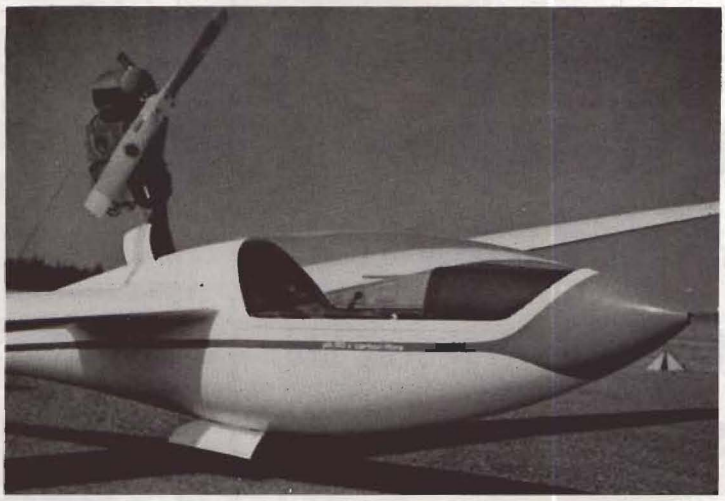
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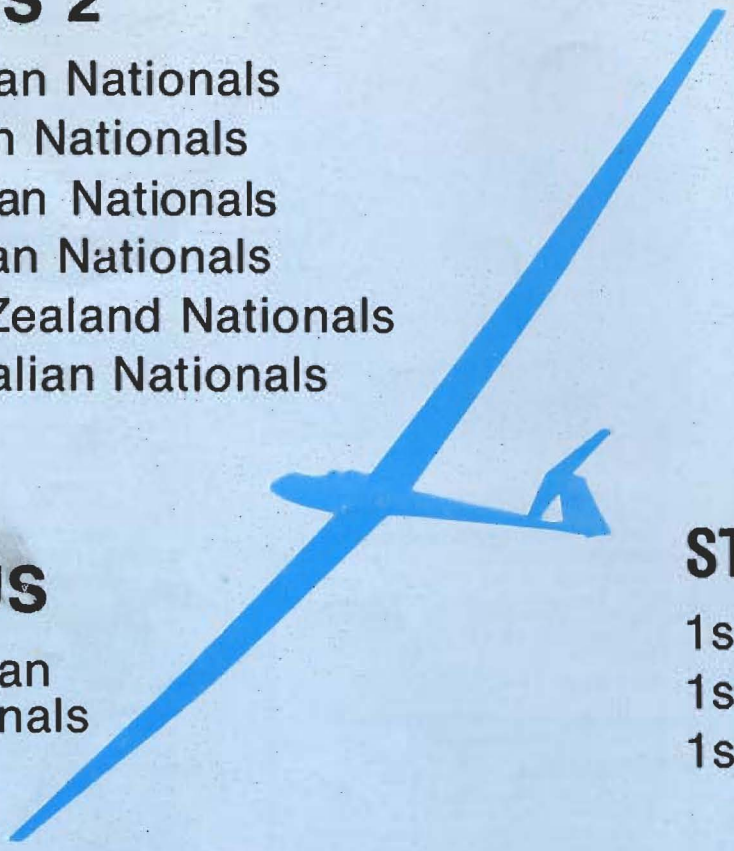
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