

THE OFFICIAL MAGAZINE OF THE BHGA

Wings!

JUNE 1980





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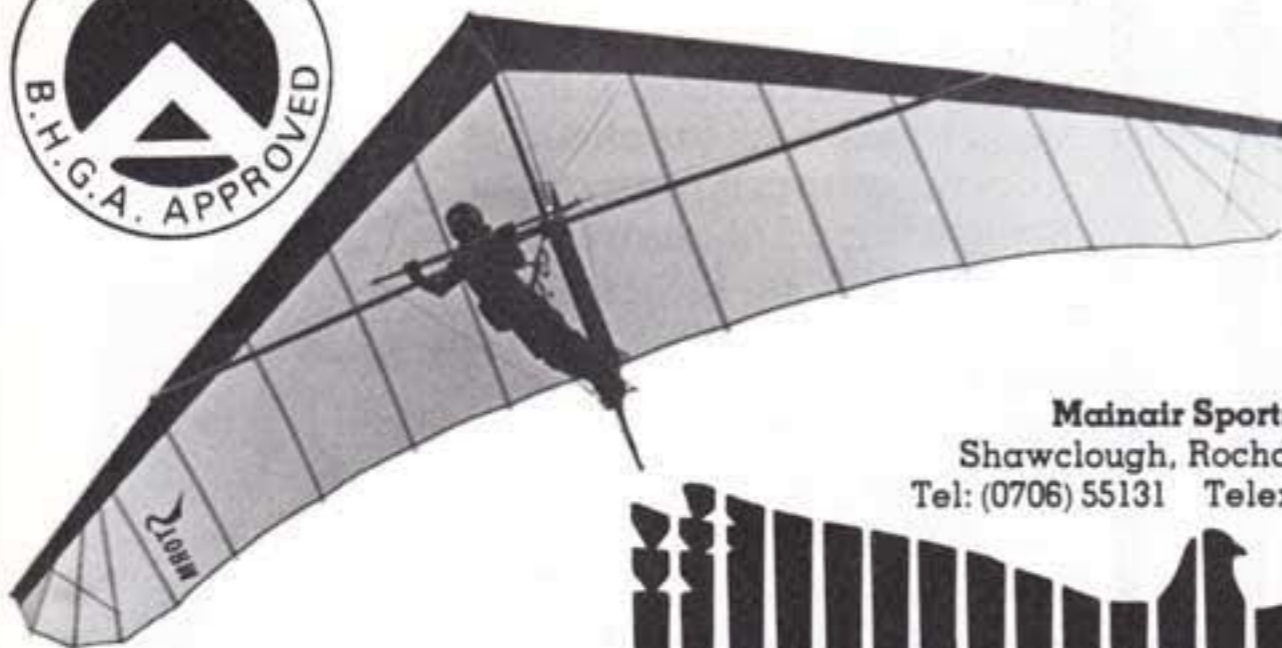
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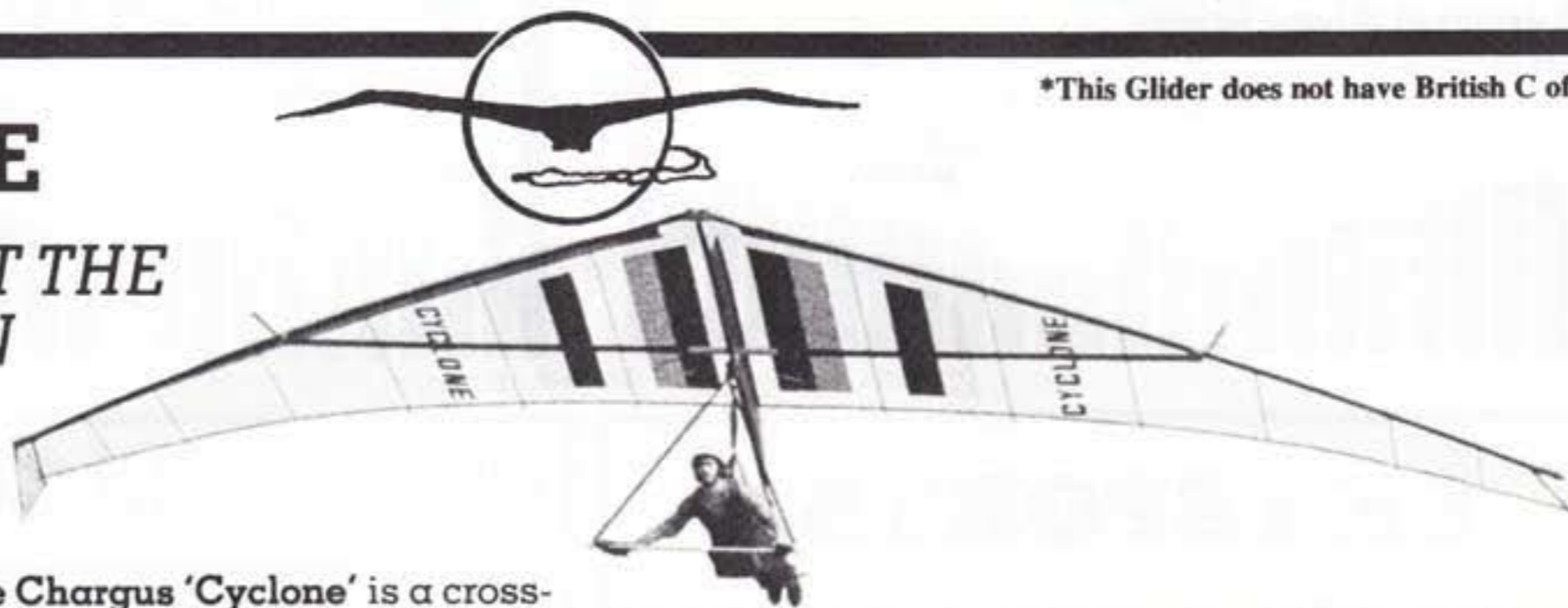
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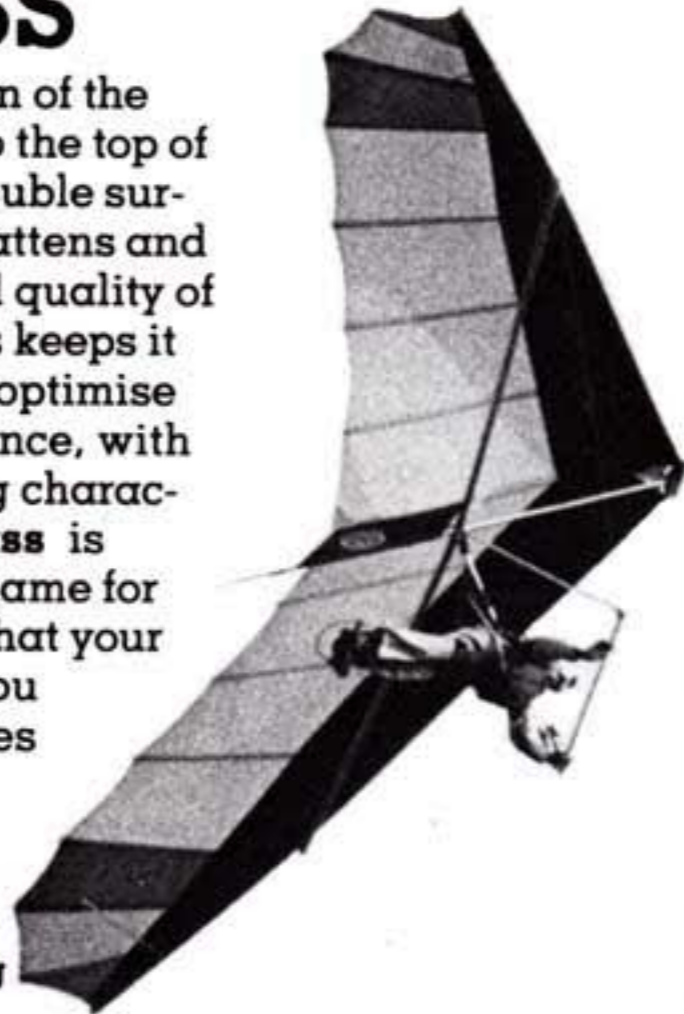
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SOUTH DOWN SAILWINGS

THE SIGMA

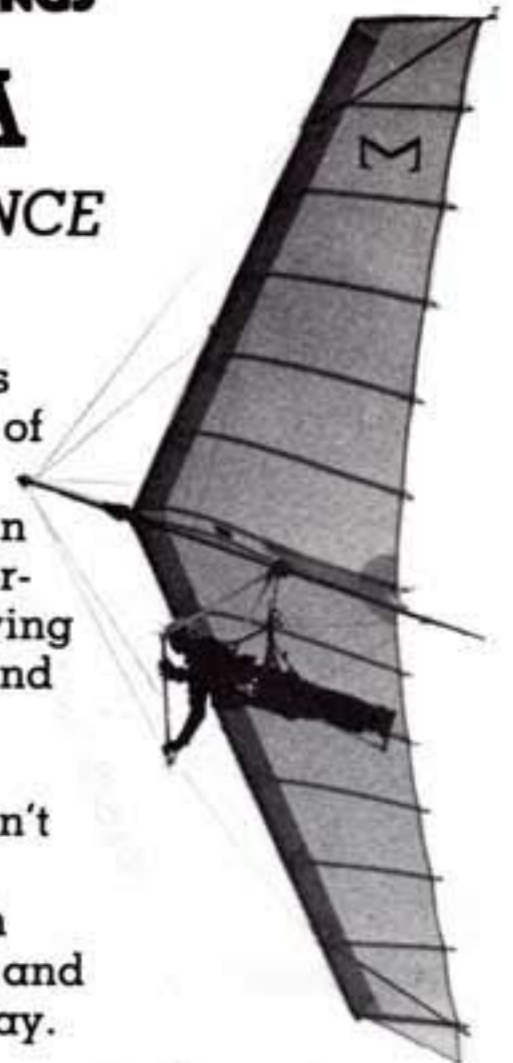
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Printed in Great Britain by Blackburn Print Ltd. Hove, East Sussex.

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Cover: Jim Taggart, who normally flies a Cyclone, flying a Gryphon over France — *photo by J.B. McMenemy*

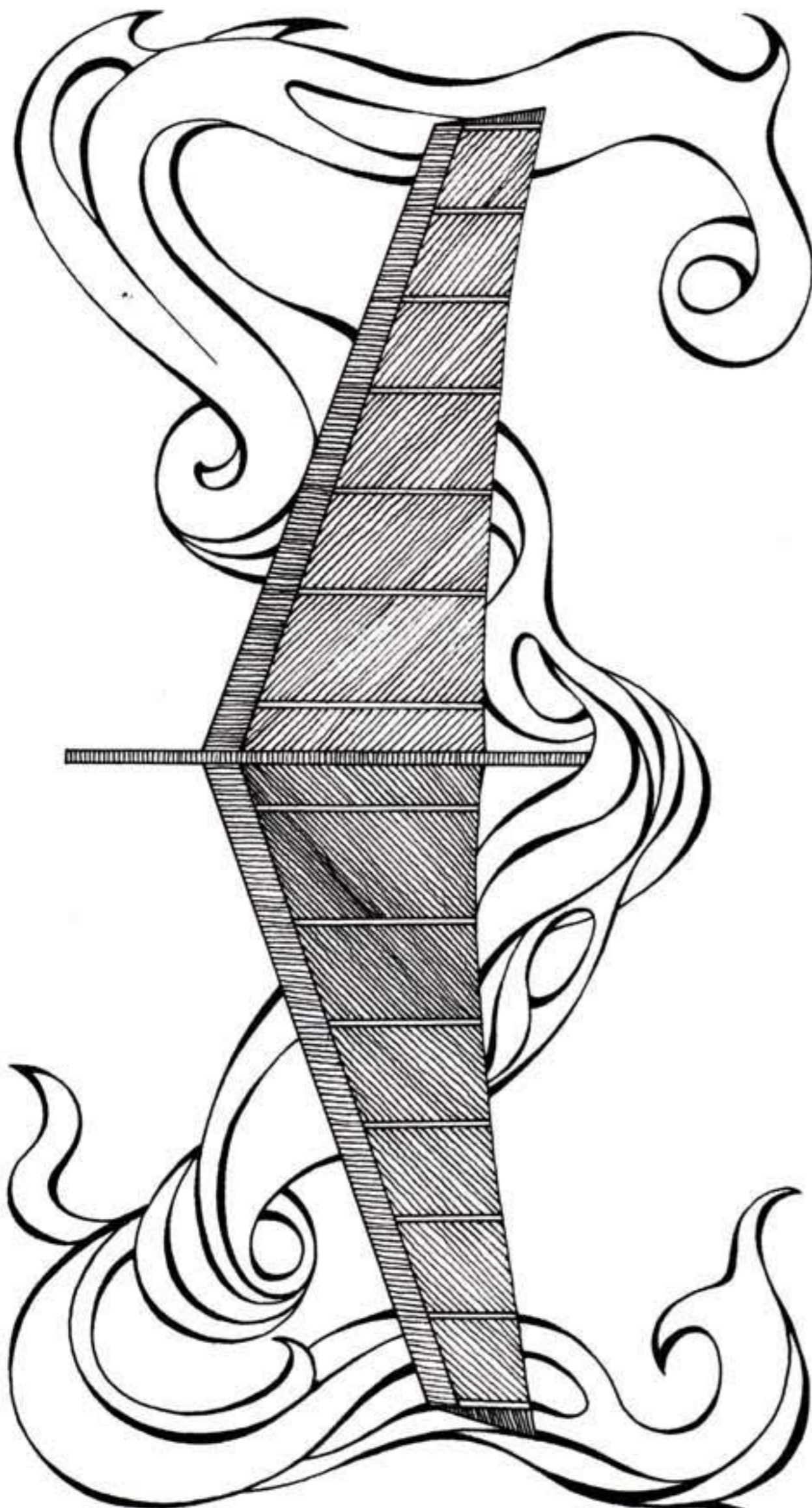
WINGS! may be obtained regularly by joining the BHGA or on a subscription. For full details and information about the sport send a s.a.e. to BHGA, 167A Cheddon Road, Taunton, Somerset. Membership of BHGA includes Public Liability Insurance cover.

If members or subscribers change address or copies of *Wings!* do not arrive please contact the Membership Secretary at the Taunton Office. In all correspondence give your full name, address and membership number (if applicable).

If you, your club or any local hang gliding activity gets written up in a local paper, national paper or magazine please send a copy to the Taunton Office for the BHGA press cuttings collection. This applies to the UK only.



Wings! is published by the British Hang Gliding Association. The views expressed in it are not necessarily those of the BHGA Council, its Officers, Members or the Editor. Contributions are welcome. Articles should be typewritten if possible; photographs and cartoons should be accompanied by the appropriate captions and any material which is to be returned should be accompanied by a stamped and addressed envelope. The Editor reserves the right to edit contributions where necessary. *Wings!* may be obtained, either by joining the BHGA, or on subscription from The BHGA, 167a Cheddon Road, Taunton, Somerset at a cost of £7 per annum. All enquiries other than to members of the magazine staff should be sent to the Taunton address.



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EDITORIAL (Guest)

How much longer do we have to wait before the CAA/BHGA test vehicle is available for use in obtaining Certificates of Airworthiness, or for research into vital areas of hang glider behaviour?

Since late last year we have been delaying our application for approvals for our "Silhouette" and "Cutlass" in the expectation of being able to use the vehicle to provide the data on which meaningful *C of A*'s could be issued. Somehow it is always *nearly* ready for use, but never seems to actually be available.

Static load tests, and test flights by experienced pilots, provide insufficient evidence of the airworthiness of a hang glider upon which to issue a *C of A*.

They do not show how a glider will behave outside the very narrow limits which it is fair to ask a test pilot to operate.

Such tests are, in any case, done by us during development. A *C of A* obtained by the present method tells us nothing which we do not already know, and it is of little value—except as a selling point to the manufacturer concerned. It will carry no weight at all on the continent.

British manufacturers used to be leaders in Europe and could still be, but we now have to send our gliders at very great inconvenience and expense to Germany, to put them on the German test vehicle so that the Germans can tell us if they are safe or not. There is now a long waiting time for the use of this vehicle so we cannot even rely on that.

We have had our Silhouette on the German test vehicle and it has passed its test, but will that carry any weight in Britain? The answer is no. We still have to apply for a BHGA *C of A*. More Expense! Then when the BHGA test vehicle does finally become available, will we find that we really need to do it all again in order to get a "real" *C of A*? More expense again!

Hang gliders already cost too much for the average flier. They will cost a great deal more when the export markets have gone and output falls to uneconomic levels.

It is vital that British manufacturers get the use of this vehicle quickly, so that they can, with least expense and delay, keep up the momentum of their glider design. The alternative is to slip behind, lose export markets in the main areas, which, once lost, will be hard to regain. The home market will not support by itself the existing manufacturers.

I really believe that the BHGA vehicle is the key to safety in the coming year and whether or not there will be a viable British manufacturing industry in a couple of years time.

One hears rumours that it is delayed because of politics, or because it is not up to the job. Frankly I cannot believe that with the German and American vehicles to guide us, we have produced something which is not up to the job. Imperfect, maybe, limited, maybe. Useless never.

So what is the score? When do we get to use it? Without wanting to belittle the efforts of those who work hard and as well as they are allowed to at the present time on airworthiness, may I ask, when will "BHGA approved" really mean something?

L. Gabriels
Skyhook Sailwings Ltd.

SEXISTS UNITE

In July 1979 Elaine Chandler formed the 1st American Womens Hang Gliding Team. She chose four top female pilots.

Page Pfeiffer: Page has been flying for 5 years and currently holds *all* the FAI Official Womens World Records in Hang Gliding, including more than 50 miles in Owens Valley.

Elaine Chandler: captain, flying for 5 years, a US HGA Certified

Instructor and Observer, teaching for 2½ years. Recently became the first woman to fly a hang glider in Mexico.

Franci Freeman: Franci has been flying for 5 years and does very well in competitions.

Kris Hartinian: Kris is our newest member and has been flying for 4 years. She recently accompanied Rich Grigsby and Joe Greblo to Taiwan, becoming the first woman to fly a glider in that country.



1st American Womens Hang Gliding Team — left to right: Page Pfeiffer, Elaine Chandler, Kris Hartinian and Franci Freeman.

APRIL 500 CLUB

1st G.T. Jones	£49.60
2nd W.A. Curtis	£24.80
3rd R.B. Russell	£12.40
4th M. Lingard	£7.44
5th J.G. Roberts	£6.20
6th W.C. Cowell	£6.20
7th Bill Nunn	£4.96
8th J. Sempick	£4.96
9th R. Turnbull	£3.72
10th J. Hayward	£3.72

Prize money of £124.00, and a like amount went into BHGA Funds. Thanks.
Percy Moss
BHGA Treasurer

SAILPLANE SPONSORS

Our sport's brother-in-law, conventional gliding, has really pulled off a sponsorship coup, with £25,000 in cash, plus another £25,000 support, going to the British Gliding team, and their national championships. The product being promoted is ARCTIC LITE, a lager beer recently launched in England and Wales. An initial £3,000 will be spent "alerting the public to the fact that gliders are capable of . . . carrying out spectacular flights", with cash prizes for free distance, out and return and speed around a 300km. triangle. Nice one, BGA.

MEMBERSHIP FIGURES

There's been a real tail-off in the number of enquiries to BHGA Office, but those that do enquire seem more likely to get through to membership status.

April	1977	1978	1979	1980
New	164	116	127	186
Renewed	111	154	186	183
Did not renew	124	121	84	130
Total				
Mem'ship	3308	3345	3605	4072

The total membership figure is 62 higher than in March, but Chris Corston reports that next month's figures could be disappointing, because of the increase in the subscription rate. A bad point is that more people failed to renew in April this year than have ever done before.

INCIDENT

On March 22nd, Chris Papps, chairman of the Bristol University HGC, tip-stalled and nosed in halfway down Spencers S/SW bowl at Mere. His kite was a write-off, and Chris broke his right leg at the top. He needed a large plate, 8 screws and an operation to set the bone. He was lucky to be alive.

Warning — There was a club coach announcement to all pilots in his parent club newsletter (*Avon Magazine, March*) which read: "During the thermal season be alert for some frightening lift and sink, especially on south-facing ridges; flying close to the hill in thermic conditions can be dangerous."

Chris got caught in the trap. He lived. You might not be so lucky.

Colin Lark
BHGA Council
Training Committee Chairman

MIKE HIBBIT

After more than a year working as layout artist on *Wings*, Mike has parted company with the magazine. It's not personal, because it's obvious without him there will be big changes, and it's only when he isn't there one realises how much he did. But when news copy went from the editor, to Mike, then to Blackburn Print in Brighton, back to Mike in Reading for setting into a page, and then we all went down to Brighton to put it together, the system wasn't working. Whatever changes occur in *Wings* over the next few months, they'll be gradual, and start from a base laid out by Mike Hibbit.

The work on the changeover, done on the "old boys rule" as so much has to be done until we get things on a professional basis, is being handled by the London designers Butcher and Gomez.

HOLDOVERS

The first *Glider Which* report has been done, but there are problems getting it into an easily tabulated form. It's been held over for a month while we work on it.

There was intended to be another in the series on Migration, with information supplied by the Royal Society for the Protection of Birds, on thermal corridors through Europe . . . again, it's not quite complete.

Upcoming is one of the best articles I've read in hang gliding, by Rod Bird, on a glossary of terms we use. Bill Lehan is working on cartoons for it.

BETTINA GRAY

Wings has used some of Bettina's photographs, without crediting her. This is an apology, Bettina, and may you never draw a sober breath next time we meet . . . in reparation. In the January issue, the Milton photograph on page 6 was Bettina's; on page 5 in the March issue, the photograph of Sean Dever; and on page 6, in the April issue, the Bob Calvert picture.

ULSTER

Anyone interested in flying in the Ulster XC in July, either weekend, should contact David Dick, 1A Istmus Street, Belfast BT6 9AS. He's got details of travel and accommodation.

RHOSSILI

BHGA Council is no longer paying £300 a year for Rhossili. As things stand, the South West Wales HGC must find £450 to pay for Rhossili by 1980. This figure has been arrived at by the National Trust based on the number of fliers using Rhossili in 1979, the vast majority of whom were visitors. The SWWHGC now wants £5 a year visiting membership from all those pilots using Rhossili who are not members of a Welsh Federation Club. Further details: Tony Fletcher, 27 Portia Terrace, Mount Pleasant, Swansea. Telephone 49825 (home) or 42751 (work).

TAUNTON HOLIDAYS

This is a reminder that Janet Hayes is on holiday during the first 2 weeks in June. Joyce Williams will also be away in June after Janet returns. We will be short staffed for the whole month so please avoid unnecessary phone calls to the Taunton office during June. Please be patient and do not ring to enquire about items such as Membership Renewal and Pilot Rating System entry delays during this period. Additional time spent on the phone will only add to the delay. Everything should be back to normal by mid July.

Chris Corston

CUTLASS RECOVERED

The big search for a Skyhook Cutlass, stolen from a car top on April 13th, ended on Saturday, May 10th, when three punters were arrested by police in the Malverns. **Len Gabriels**, who has had three of his gliders stolen this year and feels put out (remember SAFARI STREAK?), says the recovery was made by a group of experienced pilots on the Malverns, including one of his agents, Arthur Trapp, who were grounded by high winds. They were chewing the fat when they noticed three obvious beginners walking a kite down the hill, fully rigged, looking as if they were ready to fly. The glider had a seated harness and was certainly not suitable for beginners. A second look confirmed it was the missing Cutlass — which had been front page lead in the local papers in the Peak District when it originally went missing. The pilots surrounded the three punters, called the police, and while waiting discovered that they fitted wooden dowels in the wings instead of battens, because the original thief couldn't get the battens out of his victim's car! One story told to the police by the punters, who are apparently being charged with theft, is that the Cutlass was "sold to them by a man in a pub."

DARTMOOR COMMONS VICTORY!

After the BHGA had obtained amendments to the Bill that would ensure that hang gliding could continue on agreed sites, the Bill went to a Second Reading Debate in the Commons on the 24th April. The Bill was defeated by a majority of 63-19.

Had amendments not been made in our favour prior to the debate we would have written to all MPs with the intention of obtaining their support against. We are now in the favourable position where there is no possibility of by-laws being introduced to prohibit or regulate hang gliding on privately owned land, but we have also, as an Association, been seen to have been capable of gaining recognition for the right for our sport to exist. Hector Monro MP Sports Minister had the following to say in the debate:-

"I am sure that the hang gliders, campers and the caravanners, who are also particularly concerned, have, with good will on all sides, come to agreed amendments which will be put forward by the promoters at the Committee stage, should that be reached. As I have already indicated, I hope that there will be an opportunity to do just that. The amendments will ensure that hang gliding continues on agreed sites, and will exclude from any by-laws that could be made under clause 10 any possibility of preventing camping and caravanning on enclosed land with the owners' and occupiers consent."

THE FIRST ARMY AND JOINT SERVICE HANG GLIDING CHAMPIONSHIPS 1980

1. The first Army and Joint Service Hang Gliding Championship will be held in UK over the period 17-19 October, 1980.

2. It will be open to all members of HM Forces and will have three classes for those with BHGA Student, Pilot One and Pilot Two Ratings.

3. On receipt of the DM 16 (£4) entry fee, the Secretary BRIFORGE will send the entrant the Entry Forms and subsequent information about the Championship.

4. Entries should be sent to:

The Secretary BRIFORGE
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BFPO 35

Cheques should be crossed and made payable to: 'Competition Acct. BRIFORGE'

JAMES PAYNE ACCIDENT REPORTS

Further to the Preliminary Reports (No.6/79, p.16; No.7/79, p.14) on his fatal accident whilst flying a Vulture-lite Emu at Devils Dyke on 16th June, 1979:

John Hunter's Report concludes that:-

(a) The Pilot (a heavy man) had borrowed the new glider, which he knew to be suspect.

(b) He probably got out of control in steady flight. The glider probably tucked after a series of stalls. The shock caused a swage to open out the kingpost pulley guard and force the wire off the pulley. The leading edges deflected and the bowsprit broke towards the control frame.

His Recommendation is, in effect, "Ground suspect gliders".

Flight tests of the repaired glider are planned.

Mike Collis
Chairman
Accident Prevention Committee

TRAINING NOTICE

Task and test papers should be printed now for Pilot Ones. Secretaries of BHGA Clubs will have been notified, and this is a reminder that all those wishing to get the P.1's through their club must have read and understood the Student and Pilot handbooks, before attempting the test paper. If you fail you will have to wait 4 months to re-apply.

Colin Lark
BHGA Training Committee
Chairman

CARL FORD

Once a League pilot, Carl Ford dropped out last year and went to the Middle East. While towing on his hang glider in April, there was a lock-out about 15 metres high and Carl crashed in, breaking his neck. He was flown back to the spine hospital, Stoke Mandeville, where he's said to have some feeling in his arms. I don't know what his chances are, but I hope he gets better. Anyone in hospital, particularly a hang glider pilot, welcomes visitors.

SAILPLANE VIEWPOINT

From the April/May issue of Sailplane & Gliding . . . "During 1979 five clubs suffered substantial interference from nearby hang gliding operations. The National Air Traffic Service (NATS) were reluctant to invoke the provisions of the law relating to overlapping aerodrome traffic zones and they encouraged the BGA and hang gliding clubs concerned to reach operating agreements. We are quite satisfied that an unacceptable risk of collision with hang gliders exists at some of these sites. Negotiations with the BHGA and with the NATS are being conducted urgently and we hope the matter will soon be resolved."

DREADFUL PUN

Does anyone know a worse hang gliding pun than Ian Butcher? His combines three in one sentence, when talking about Pandy . . . A SITE FOR SOAR AYES.

CENTRAL FIGHTING FUND

Council acknowledges donations to the Fund from the following:-

John Mulliner, Richard Kenward, Isle of Wight Club, Sky Surfing Club, K. Gay, R. Richings, E. Brooks, P. Goulstone, R. Mosley, Avon Club, Gerald Williams, J.T. Moss, S. Vallance, J. Bolton, T. Haskett, P. Goodyear, S. Carroll, Suffolk Coastal Floaters, Welsh Federation of Clubs, Stuart Prosser, Aberdeen H.G.C., M. Lampert, R. Turnbull, J. Houghton, R. McNeil, D. and A. Bowtell.

It has been discovered that some individual contributors to the Fund, who sent donations when renewing membership, have not had their donations acknowledged in *Wings!* To complete the list would require time, that we can't spare, to be spent on checking through the master accounts book for the '79 early '80 period. Will any contributor who has not been publicly thanked and would like to be mentioned please drop a note to the Secretary.

TEAM SELECTIONS

KOSSEN

Kossen, European Championship, June 21-29. Team: Class 1 — Robert Bailey, Bob Calvert, Graham Hobson, Keith Reynolds, Bob England, Graham Slater; Class 2 — Johnny Carr, Lester Cruse. Manager: Roy Hill. Deputy Manager: John Fack.

Of the 8 pilots sent out, 6 would fly in the competition, 5 in any one class. Final selection, either 5 + 1, or 4 + 2, would be made by the managers. All the pilots would fly hang gliders which will conform to the regulations for air worthiness, "either of the country of entry or of origin", though, as reported at the last Council meeting, 7 of the squad of 8 will be on foreign machines.

LACHENS XC

Lachens XC, South of France, June 9-15. This competition, won by "The Black Death" last year, is seen as an embryo European Bishop. It's also a chance to "blood" promising pilots further down the League, and subject them to the peculiar pressures of flying for their country. Committee proposes sending a team there "on the cheap", out of its existing proposed budget given that some other overseas competitions proposed for this year are now not worth going to. Committee proposes the following team of 7 for Lachens: Bob Harrison (captain), Peter Harvey, Geof Ball, Mark Silvester, Sandy Fairgrieve, John Bridge, and Jeremy Fack. In all, 60 pilots are expected to fly Lachens, and Mike de Glanville has provisionally booked in an official British team. There will be other Brits out there, flying individually, including Jo Binns, Bob Martin, Jan Ketelaar, as well as top European and American and Australian pilots. The official British team will be expected to beat all-comers.

BIRDMAN SPORTS — special announcement from Ken Messenger May 22nd, 1980

"Glider production has been suspended for a short period with a view to reducing stock levels of both gliders and spares. For the time being, therefore, sales will be from stock. During this period all glider prices will be subject to a special discount until stocks are reduced to a normal level. Whereupon there will be a price increase of approximately 10 per cent to bring us into line with other manufacturers."

BRIGHT IGNORANT BLISS

Pilots plagued by nightmares of a 450mph collision with a low-flying military jet will draw little comfort from soothing RAF noises at a public meeting in Yorkshire.

The meeting at Richmond in Swaledale was organised by the local council to give Ministry of Defence top brass the chance to allay mounting concern at noisy "hedge-hopping missions in the northern Dales.

After long arguments — now part of local low-flying folklore — as to whether aircraft really do stick to their 250ft. ground clearance regulations, the safety of hang glider pilots was raised.

Ruth Annison, of Askrigg, Wensleydale, wondered whether any measures were taken to avoid the hang gliders she often saw over Hawes where she worked.

She was quite indifferent to the sport herself, she said, but at least it was "pollution free and quiet."

Group Capt. John Nevill — in charge of RAF low flying policy — told her that while major hang gliding events were allowed for: "We don't give specific avoidance to individual small hang gliding sites."

But he added: "You can take some comfort from the fact that hang gliders are very brightly coloured."

So if a contour-hugging Jaguar comes over a hill brow at 733ft. per second and spots, say, three "brightly coloured" gliders 733ft. ahead? . . . Where does he choose to go in that

split second? And where does his wake turbulence go?

Also alarming was a blissfully ignorant assertion by Group Capt. John Curry — station commander at the very busy RAF Leeming training school in the Vale of York. He insisted that hang gliders began their flights with a ground clearance of around 250ft. and "apart from when they meet occasional upcurrents" could only descend after take-off.

Hang gliders at Semerwater — his example — were therefore in quite separate airspace from his Jet Provosts which, of course, never flew below 250ft.

One smart Alec quipped from the floor that people who "play bowls on the motorway" should accept the consequences.

Attending the meeting in my professional journalistic capacity I unfortunately couldn't interject to point out that tank drivers don't practice on bowling greens either. The implicit question mark over the principal of free access to uncontrolled airspace stood unchallenged.

Has anyone suffered any close encounters of the 700ft. per second kind?

Little surprise, then, that few hang glider pilots will run the risk of being caught around 250ft. as weekdays in the Dales.

Stan Abbott
Dales HGC

I RESIGNED

Roy Hill — After nearly 4 years as chief marshal, and competitions committee member, Roy Hill — now BHGA chairman — has resigned from the job as competition boss and committee member. The League wouldn't have begun, nor gone the way it has, nor had its success, without Roy's work and commitment. Like many pilots, I retain a vivid picture of him freezing half to death on an open hill for hours, logging off self-absorbed pilots, making things happen. The occasional relief when he would throw away the book, rig up and set off XC himself was one of the only valves we provided, along with the satisfaction of leading teams twice into Europe. He'll still be there at Leagues, because Andrew is a League pilot, and as BHGA chairman he retains an ex officio place on all BHGA Committees. Nevertheless, it's sad that, as he says, "it's time to turn another page".

NOT ON

Competitions Programme — It's not worth going to Guatemala this year for a number of reasons, among which are that Keith Nicholas is no longer organiser. It's also not worth going to the Canadian Swansea XC, as it clashes with Bishop. On Grouse Mountain, and mindful of the other calls on an extremely limited competitions fund, committee feel only 4 British team members be sent, though other places in our gift — four in all — could go to deserving British fliers who are going to be paying their own way. One such pilot is John Fennell, who may be able to help the official team with accommodation costs. Derek Evans estimates we are still £10,000 short of what we need for this year's programme.



LUCKY MAN

Over the Easter weekend Steve Young, from Coventry, was involved in the Mercian Club trip to North Wales. On the first day he flew at Conway, and after reading many articles on the subject of flying over water, he braced the carabiner to the harness with elastic bands to prevent it from turning in turbulence. He also flew with the screw gate open. The usual pre-flight check, and then a harness check (prone), was done immediately prior to take off.

As he stood up and took the glider onto his shoulders, he felt something press into his neck, but did not pay much attention to it "as it felt like wrinkled clothing". He took off and had a pleasant but scratchy half-hour flight, landing on the beach in front of the caravan site. On coming to unclip the harness he discovered the carabiner in the position shown in the photograph.

HASTINGS CLIFFS

First flown August 79 at invitation of Hastings council. Peter Harris did everything to secure this site.

Takes southerly direction, smack on, produces excellent lift, and there are six miles of cliffs to fly. They need flying with caution when the tide is in, as there are huge boulders to the east of take off area.

Bottom landing can safely be made on beach in front of take off.

Take Off has to be perfect, not much margin for error. You need two people assisting you in any wind speed over 10 knots (hopefully take off area will be made larger in the near future).

Top Landings are quite hazardous. Behind the take off there is evil rotor, as I have found out, the only safe place

He says "I know many people will say why didn't I notice that something was wrong when the glider was flying way off centre, with the hang point effectively moved 4in. to the right. The explanation is that this flight was the first time I had tried in-flight photography."

By coincidence the carabiner had jammed in such a way that it appeared that he was compensating for the camera and bracket on weight shift.

Why didn't the wire man notice the carabiner? This was because Steve preferred using the loose straps technique on take off, and therefore the carabiner would have been hidden from the wire man's view.

"I have compared my hang point with other gliders and many with a fixed hang point are subject to this sort of problem. I realise the risk involved with flying over water with the screw gate done up but I personally prefer that to the possibility of a 900 foot fall into the sea."

to land is to the east of take off by the tennis courts. The whole top landing area is on a downward slope. Can be compared with Seaford Cliffs.

Access to site. You can drive to the top provided you have obtained the key from Peter Harris, (0424-432042), or you can walk to the top after parking your car in the Rocknor car park on the beach. Then walk up the 240 steps near lift.

Conclusion — nice site to fly, by experienced pilots.

Eddie Horsefield

NEW YEAR RAFFLE

The Council wish to thank Hiway and Mainair for trade discounts on the hang glider and items supplied against vouchers.

Frocester near Stroud

Brothers-in-Law III

by Colin Lark
Avon HGC Chairman

Colin Lark, intent on take-off on his Superscorp, providing the brothers don't kick up.



Photo: Mark Junak.

Do all aviators share the same feeling for freedom of flight? Do you regard the airspace at your local site as private property?

This seems to be the case within some flying groups, who will go through anything to keep a particular chunk of air space to themselves. I wonder how many pilots in the British Gliding Association know that there is very little difference between hang gliding and conventional gliding?

It's a bit of a pain when you have to turn blue in the face with argument to try and convince your "brothers" that hang glider pilots are not a bunch of maniacs throwing themselves off hills and mountains.

Having just said all that, it does seem we are slowly getting through to them, that our standards, techniques, training, rating, qualifications and flying skills are very little different to their own.

Down here in Gloucestershire we have a 4½ mile ridge system, flyable from North to just south of West. For the last 4 years we have been using the NNW part of the ridge, known as Selsley Common, just outside the 1½ mile radius of the Bristol and Gloucester Gliding Club. The only other part of these ridges, with T/O and landing areas, is the Coaley Peak picnic site facing due West. Our next nearest Westerly site is 60 miles away in Tredegar, South Wales. With petrol costing what it does, overcrowding at Tredegar, and the fact that Coaley is only 1½ miles from my door, it seemed reasonable to

get permission to make Coaley into an official club site. It's come to be known as Frocester, after the nearest village.

FIRST AGREEMENT

On February 6th of this year, after chatting up the local landowners, we got verbal permission to fly from the Council, and the Gliding Club. The Council agreed to install a gate in the wire fence that separated the T/O and landing areas. We also got permission to run the First 1980 League competition on Frocester, if the wind was westerly. The following weekend there was an Avon Club fly-in on the site, and on Saturday about 20 pilots flew, with as many as 18 in the air at any one time. It was really enjoyable, and our brothers seemed to enjoy it too, with one or two flying occasionally at the same level.

The Sunday was much the same, though at the end of the day some of us went along to the Gliding Club for a chat. Most of the Avon Club committee were there and it was a good opportunity to talk to our "opposite numbers" and to draw up a few rules and regulations. A couple of their committee members were a bit hostile at first, though that seemed to fade away. We talked about flight areas used by sailplane tugs, landing approaches and thermalling. Apart from a few details, things worked out fine, with no major objections to our intended flight paths. Brian Milton discussed possible tasks for the future League, and we all retired to the bar for a great time.

I finally staggered home just after 11 o'clock with thoughts about other hang gliding clubs who had problems of air space, and how lucky we were. They were certainly a friendly bunch of guys!

FIRST BOOT IN

Three days go by. Then Roy Bennett, Avon HGC sites officer, telephones to say he's just received a letter from the Council banning all hang gliding on Council land. Apparently, while I was dreaming silly dreams, the Gliding Club had got in touch with the Council on Monday morning and said that under Rule 34 (the old rule) they wouldn't give us permission to fly on these ridges. Hang gliding, they told the Council, and later inferred to the press, was too dangerous. Gliding and hang gliding can't mix, it's not safe, and we must be banned.

I was soon on the telephone to the Council. They were adamant that there should be no access unless we produced a written agreement from the gliding club. I went straight there, feeling pretty angry, and found the club's manager who was embarrassed. Four days ago, I said, we had an agreement, so what's going on?

He said he was carrying out the club committee's instructions. I was told to get in touch with the chairman, and a heated conversation took place over the telephone. I was told that the thermals were very strong along the ridge, and hang gliders might get thrown out of control into the path of a conventional glider.

They were, he told me, other dangers, a list as long as your arm. The conversation got nowhere. I asked for another meeting between my club and his. No point, he said, so no meeting. Another heated exchange of words. Finally he agreed to have a few words with his club and see if something could be arranged.

SECOND BOOT IN

The following Saturday at the picnic area I was approached by two gliding club officials, armed with rule 34.

"Are you familiar with this rule?" they asked.

"Er —" I replied.

"Here's a copy then. Read it. If you fly from here you are breaking the law. You would be taking off in our air traffic control zone, within 1½ nautical miles of our airfield, and that's not allowed.

Not being familiar with Rule 34 I had no answer, except that it would be impossible to keep local fliers, and even cowboys, away. If, however, the site was club controlled, we could all fly together with safety.

PUBLIC DANGER

I said I'd write a letter with our proposals and a request for a meeting, to get the matter sorted out once and for all. I went home with my head down. But not for long. A phone call to Paul Bridges, who wrote in April *Wings*, proved of great value. Paul read out all the rules relating to the new Rule 34. It clearly states that permission is not required for take-

off or landing, or entering an ATZ. If there are overlapping ATZs between two air disciplines, they must be settled by *agreement* (not, as had been our experience, by Gliding Clubs imperiously telling us to sod off.)

The following day I was rung up by a policeman to say that the gliding club had lodged a complaint that hang gliding was causing a *danger to the general public*, and a meeting was being held in the gliding club the following day to sort it out. As it happens, while the police, the local council, and others had been invited, the gliding club hadn't thought fit to invite us . . . the alleged danger! But the police thought it only fair to warn us of the meeting, to give me a chance to voice my opinions.

I didn't feel confident enough on my own to represent hang gliding to its best advantage, so I contacted various BHGA Council members. The BHGA Development Officer, Barry Blore, came with me, along with the Avon Club secretary. Also present were two people from the local Council, the directors of the Gliding Club, an independent solicitor, police and various others. The meeting went on for nearly 3 hours. One result is the police learned enough not to want to get involved.

One interesting factor was the interest the local press began taking in our "death risk" sport, with the material for articles supplied by the local gliding club. These are just the sort of tactics that ordinary glider pilots must find so endearing and honourable about their club leaders!

SUMMIT MEETING

A second meeting was arranged, this time attended by BHGA Chairman Roy Hill, Barry Blore, and most of the Avon HGC committee. Bill Scull was there to represent the BGA, along with the committee of the gliding club. It was a summit. A few hours were spent covering old ground, and our proposal for flying areas. Things went right back to square one, the same old argument . . . collisions, thermals too strong for hang gliders . . . I couldn't take it any more, especially as the the gliding club chairman coolly announced there could be no decision taken at the meeting.

Following a rather explosive relief to my blood pressure, the meeting was adjourned for 10 minutes to cool the air. The meeting went on without me in a private room, and after half an hour I was invited back in to hear about an agreement.

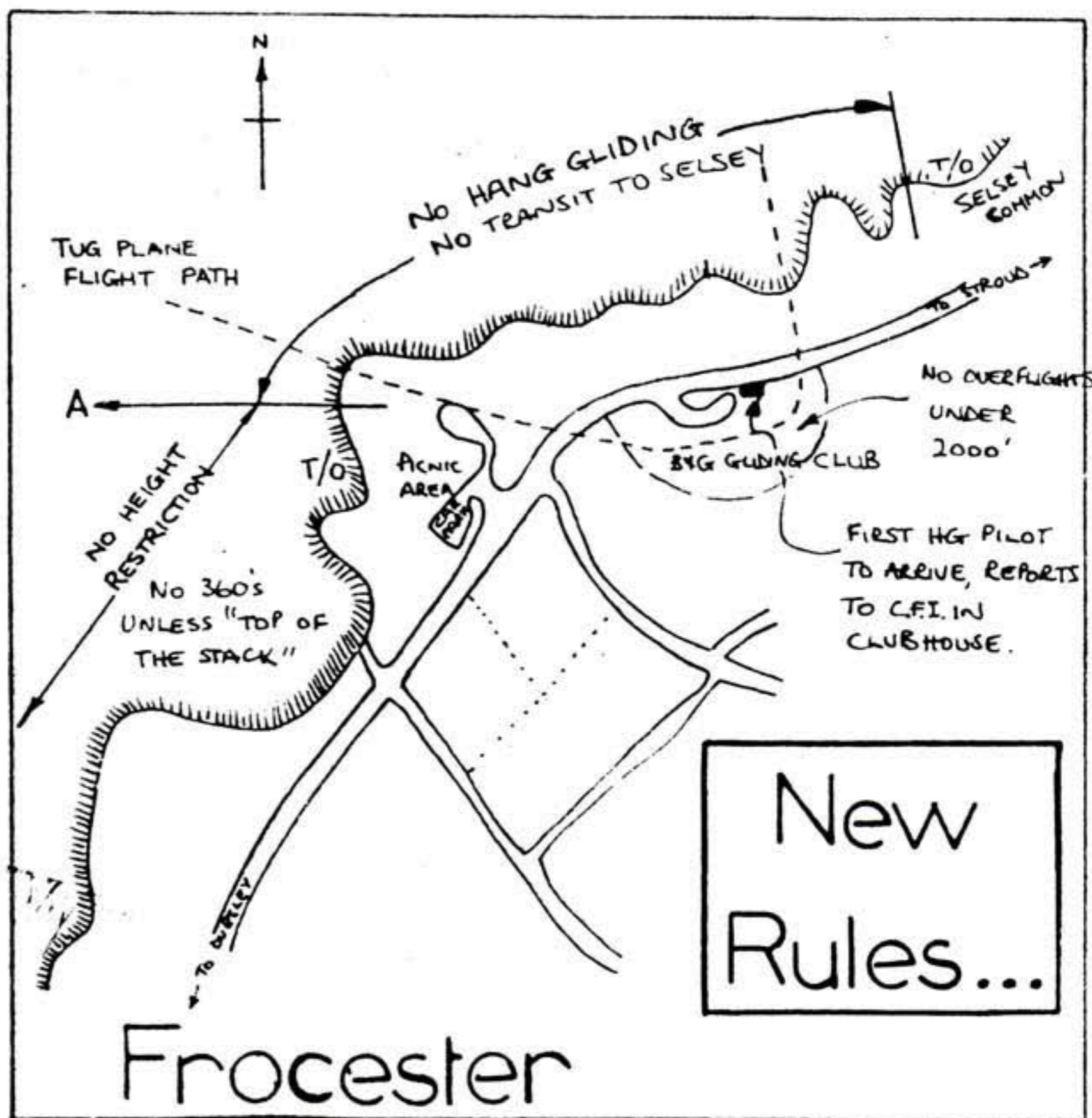
We didn't get all we wanted, obviously, but at least there was now an agreement. It was 50% in the right direction. We got the important flying part of the ridge, with a few safety restrictions. But we had also to give up any right — under the agreement — to fly the NW bowls in front of the airfield. Having the written agreement, meant the local council would give us permission to use the picnic area.

EDUCATION

It's a crying shame they couldn't have come to an agreement in writing at our first meeting. It would have saved a great deal of hassle and expense. After all, they must have known we weren't going to go away. Hang gliding is now an established aviation sport. We have as much right to air space as they do. If they were educated to the possibilities of hang gliding, so they understood that we, too, go through tests in air law and flying rules, as they do . . . maybe we wouldn't have all this trouble. Maybe.

I must thank Barry Blore and Roy Hill for their very valuable help, and Paul Bridges for his advice and support. I apologise to Wendy who patiently sat for hours in Roy's car in bitterly cold conditions, while we tried to sort this out.

Footnote: We haven't had any Westerlies since we signed the agreement. Marvellous, isn't it. Still, we've kept in close contact with the gliding club and — let's hope — the coming of a Westerly doesn't start the trouble all over again.



The terms of a provisional Agreement between the AVON HANG GLIDING CLUB and the BRISTOL & GLOUCESTER GLIDING CLUB . . .

relating to the joint use of the Frocester Hill area for the purpose of conventional gliding and hang gliding are as follows. This Agreement is to take effect from 12th April, 1980 until 1st October, 1980, and is to be reviewed on 1st August, 1980.

The BRISTOL & GLOUCESTERSHIRE GLIDING CLUB agrees to the joint use of the Frocester Hill area on the following conditions:-

1. Hang Gliders shall not fly to the north of the agreed existing take-off point. In particular, no Hang Glider shall transit between the existing take-off point, to any point on the North ridge of the hill face escarpment in a northerly or easterly direction.
2. Under no circumstances shall a hang glider fly over the airfield below the traffic zone height of 2,000 feet.
3. No height limit, when hill soaring, is imposed, on the assumption that separation will be achieved by the performance difference between the respective aircraft types.
4. No Hang Glider will conduct 360 degree turns whilst ridge soaring until such time as they are above the general level of ridge traffic, unless adequate separation exists laterally and is maintained.

5. The obligation for the enforcement of this Agreement and the rules therein shall be the responsibility of the Avon Hang Gliding Club who shall also be responsible for obtaining the necessary permissions from the respective land owners.

6. At the start of each day's flying the Avon Hang Gliding Club will liaise with the Instructor in charge of the Bristol & Gloucestershire Gliding Club operations or the Manager/Deputy C.F.I. indicating the intent and scope of their intended operations within the terms of this Agreement.

7. An overall limit of 10 (Ten) Hang Gliders to fly at any one time is agreed without reservation.

N.B. Guidelines on the transition between Hill and Thermal lift will form an amendment to this Agreement when further experience of joint operation has been achieved.

Colin Lark

Reasons to be fearful

Rod Bird

REASONS TO BE FEARFUL is a compilation of three short articles which have appeared in 'Soar Point', the magazine of the Mercian HGC.

Rod Bird is the Mercian club coach. He took up hang gliding in 1976, but describes himself as a slow learner. Until recently he flew a Vortex, but has just put his wife's maternity grant on something new.

Part One: On a clear day you can see 30% of forever
One of the first sensations you get when you take up hang gliding is one of supreme visibility. Up and over the hill you can see, along it and over it, behind it and in front of it, see your mates in the carpark, the kites on top, see everything.

It's a terrific feeling, and exactly the sort of thrill we go flying for, but it's very misleading. During flight your field of vision is actually much less than it was before you took off. Then you could see from horizon to horizon, and turn yourself freely in any direction.

Once clipped in your glider though, it's a different story. Vision upwards is obscured by the sail, and while forward, downward, and sideways vision is good — especially in prone, worst in supine — the pilot has little in the way of mobility, and is unable to look behind him. Ironically, at the time when he is delighted by an apparent ability to see everything, the pilot can only see in about 30% of the possible directions.

In other words, he CAN'T see 70% of what's happening around him.

Or, if you are flying with ten other kites, you will on average see just three.

And of the three you can see, just one can see you.

Or — and this is the one to think about — of the seven kites you can't see **ON AVERAGE FOUR OF THEM CAN'T SEE YOU**.

It's worth getting to grips with that statistic.

What makes this even more worrying is the fact that your kite may well be moving in one of the directions which is obscured from you. For instance, in strong wind you spend much of the time going straight up or straight down, and so does every other kite in the air.

All mid-air collisions, past, present and future, are caused in whole or in part by people not seeing each other. Nobody knowingly flies into another craft.

So what can you do about it? Only one thing really, and that's **LOOK**. Look around you. Make a mental note of the other gliders in the air. Look behind you, to each side, and as far behind as you can. Don't fix your eyes on your shadow, but watch the shadows of others to help gain an idea of who's where. Develop the habit of regularly 'quartering' your field of vision — systematically surveying what sky you can see. Remember that any craft above you or behind you didn't get there by magic, it will have passed through your sight at some stage. Pay attention to the take-off area. Remain aware of the danger, understand why it is greatest in strong winds and good lift, and fly your aircraft with that danger in mind.

And if the sky looks crowded, then either get out of it or don't get in it in the first place.

Part Two: How to fly 20mph too slow without realising it

When a mass of air meets an obstruction, like a mountain, at an angle, the flow changes direction quite significantly in places. To start with, at the top of a ridge the observed wind direction is more 'on the hill' than you'd expect, especially if it's a big hill. This happens because the air, as it's funnelled over the top

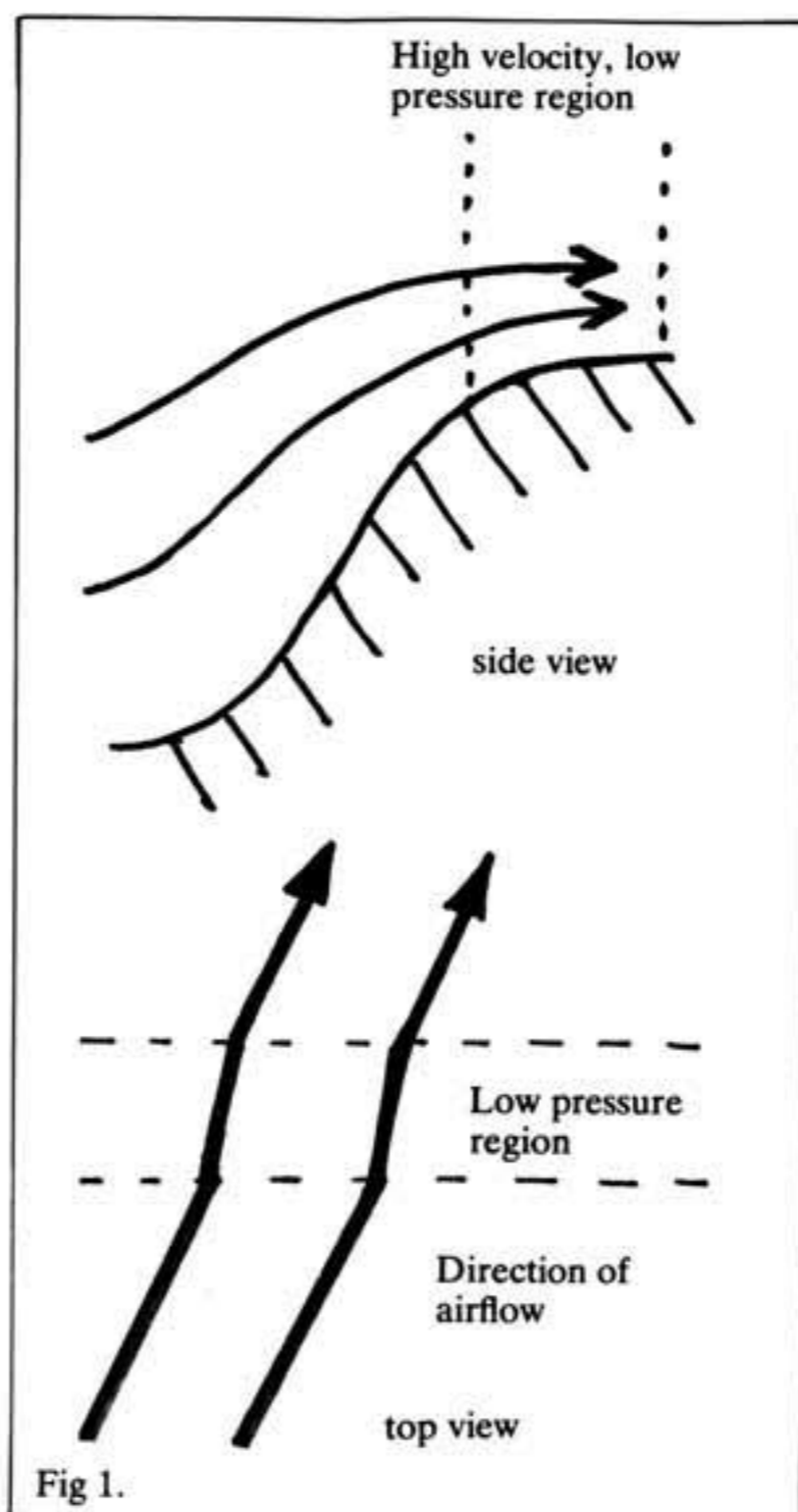


Fig 1.

of the ridge, speeds up; its pressure is consequently reduced (the "Venturi effect") and the region of reduced pressure 'pulls' in the airflow, thus straightening it. This same effect occurs above the aerofoil section of a wing, and is partly responsible for the tip vortices created behind the wing's edges.

Halfway up the hill, though, the airflow is more 'along' the hill than is the main wind direction. Often, on a summer's evening at Hay Bluff, you'll see bits of thistledown floating almost directly along the side of the hill — even as the last few kites are still soaring on top. In simple terms it's easier (that is, it requires less energy) for the air to divert itself around the hill, than it would lift itself up and over. This phenomenon is more noticeable in a light breeze than in a strong wind, as the breeze has less energy.

So here are two ways in which the wind direction might vary from what you'd expect. Individually their respective effects should be easily catered for in a safe pilots 'margin for error', but considered together it's not difficult to see how nature apparently tries her best to bend even the most diligent flyers A-frame. Or neck.

Let's say you plonk off the top of Hay, with your venti reading 12-15 and 10-15° off to the right. Nothing unusual about this. You turn right, and scratch along the hill, slowing your airspeed to 'min-sink', which is typically about 2mph above stalling speed. Remember that away from the hilltop, particularly as you get lower, the wind direction might become almost entirely along the hill. On this beat you're heading into this cross-slope wind, so if your airspeed is 20mph, and there's a 12mph wind on the ground, the hill will be going past you at 20-12 = 8mph. Flying close to the hill, you can't help being conscious of your groundspeed.

Now turn and head back. Probably, you'll have gained a little airspeed in the turn, and will want to fly min sink again. It's here that you can be easily fooled, by subconsciously adjusting your flying speed to give the same groundspeed as before. Now, with the wind going the same way as you, to maintain a safe airspeed of 20mph, your groundspeed must be 20 + 12, ie. 32mph. This, incredibly, is four times as fast as on the previous beat, yet the conditions you observed before take-off seemed harmless enough.

If you do stall on this beat you will clout the hill much harder than going the other way, and in any stall near the ground wind shear will lessen your chances of pulling out before meeting the hill.

This is almost certainly a major contributory factor to many recent serious accidents — "stalled on take-off", "stalled at 30ft.", etc.

Fly on airspeed, never groundspeed, and remember that a small divergence in the observed wind direction at the top of a hill may disguise a much more fundamental discrepancy elsewhere.

Part Three: All accidents finish on the ground: most of them start there too.

Although a flyer may fall victim to some unexpected hazards whilst in the air, many more accidents have their origins in misjudgement, negligence, or over-enthusiasm before the flight even started.

Why is this? Under what conditions could you, a sensible, experienced, and level-headed pilot, make this sort of mistake? Mostly, of course, it turns on what sort of person you are, and how dearly you value your own life. But there are other factors. For instance, after two or three months when the weather has been poor, the urge to leave the ground may be stronger than normal, and your enthusiasm to get airborne might cause you to miss something. Or perhaps some other flyers are standing around you, attempting to goad you into being 'wind dummy' — and thereby distracting you. Or you're trying to impress somebody. . . a female probably. Or. . . Well, I think I've made the point: don't get complacent. Don't think "I'm OK because I check my kite thoroughly every time I fly" because the "I'm OK" bit will give you a sense of security you have no right to, and sooner or later your unquestioning belief in yourself as a safe pilot will make you careless.

As an aid to pre-flight discipline, try **CHIPS**: C is for **CONDITIONS**; assess them critically. Are you experienced enough, on that glider, in that harness, under those conditions? Are you sure you're not overstepping your ability, maybe to impress someone, or prove something? Or maybe because you haven't asked yourself the question? Is your judgement on the wind an unbiased one? By way of illustration, you might turn up at Edge Hill one day in a 30kt. wind, find nobody else there, and go home, thinking "no chance, what a blow-out". Another day you might go there in identical conditions, find six kites soaring, and eagerly begin to rig up. But a 30kt. wind would still be a 30kt. wind if the Angel Gabriel was doing 360's over the main road, and if 30kts. is too strong for you that's that. Be objective about it.

H is for **HARNESSES**: Check that it's OK, immediately before you take off. Have you put it on properly, and are you clipped in? Tony Fuell was seriously injured because he'd missed his legstraps, and countless other pilots, including the author, have taken off with their arms through the wrong holes, etc. At best, it's nothing to be proud of, at worst it could kill you.

I: **INSPECT** your craft thoroughly before you fly it. For some unaccountable reason it seems that people spend less time "pre-fighting" their kites these days than they did in the past. Sod the fashions — do it and do it properly. If you don't know how to PFC your machine, don't fly it until your club Safety Officer, or another experienced pilot who is familiar with that make and model, has shown you how. It might surprise you — a proper PFC isn't something you do in 30 seconds.

P: **PLAN** your flight. This is very important in the early part of your flight. A basic plan, something along the lines of "I'll fly along to the left-hand end of this ridge, turn and fly back to the take-off point, then if I haven't gained any height I'll head for the field with the sheep in" is far better than taking off, thinking "I'll see what it's like".

The main advantage of having this sort of structure in your mind during the early stages is that if something untoward happens, say you stall, or get turned or something, your reactions are sorted out for you, whereas if you don't know where you're going next you waste valuable fractions of a second making up your mind. Also it lessens the chances of you 'freezing' if things start going wrong.

S is for **SKY**: is it free from other gliders? From underneath you can't tell, so ask your wireperson (Ugh!). If there are other gliders about, avoid the temptation to go rocketing off into the first slot you see. You're better off watching the action for a few minutes, and trying to see if there's any form to the flying. Is the bloke on the red kite likely to do a 360 whenever he gets a bit of height? It could be useful to know.

And if you don't know the rules of the air, ask someone before flying on the same site as me. Please.

Moral: Discipline before take-off helps, by keeping you alive longer. CHIPS RULE, OK?

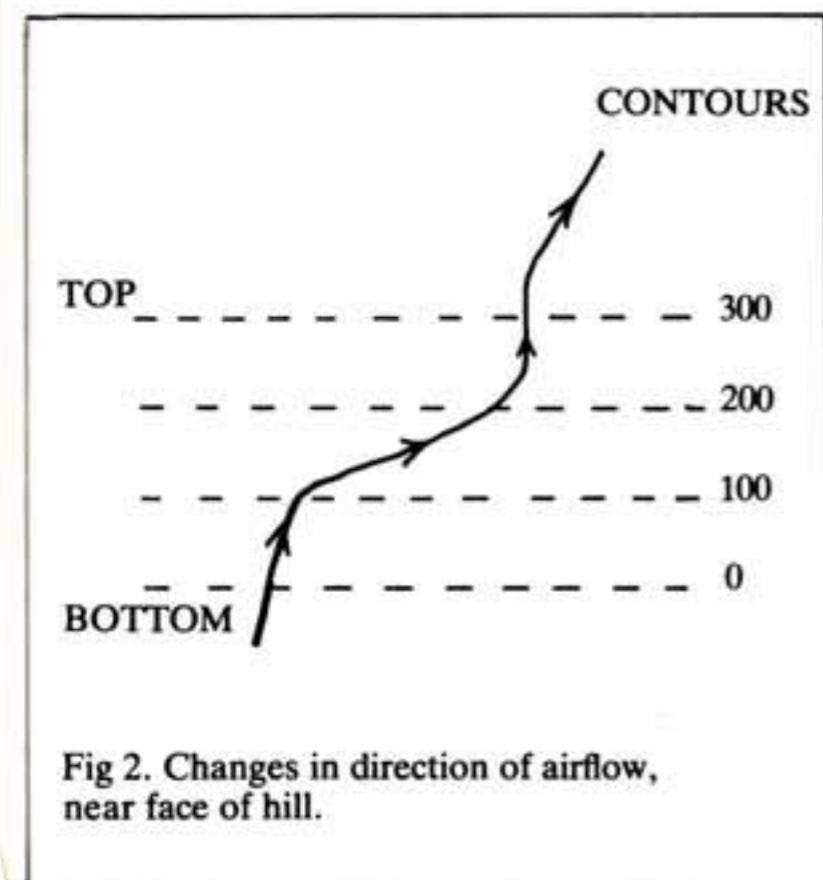


Fig 2. Changes in direction of airflow, near face of hill.

Fly Army

The Story of the Army Hang Gliding Association (AHGA)

In the early days of Hang Gliding Servicemen were well in evidence. From the British Army of the Rhine (BAOR) Captain Charles Blount represented the UK in the first European Championships. In 1976, the BRIFORGE (British Forces Germany) Hang Gliding Club was formed by SSgt. Dave Roberts, RE, and WO2 Terry Murphy, AAC, later to be led by Captain Jim Taggart, REME. Organised, but unrecognised, hang gliding had started in the services.

Jim realised that if hang gliding was to have any future in the Army it must be recognised. Recognition would give the sport the full use of Army facilities, authorise championships, help on insurance in event of injury, but above all give the sport the stamp of respectability to allow soldiers to participate whilst on duty. To this end he prepared a case for recognition.

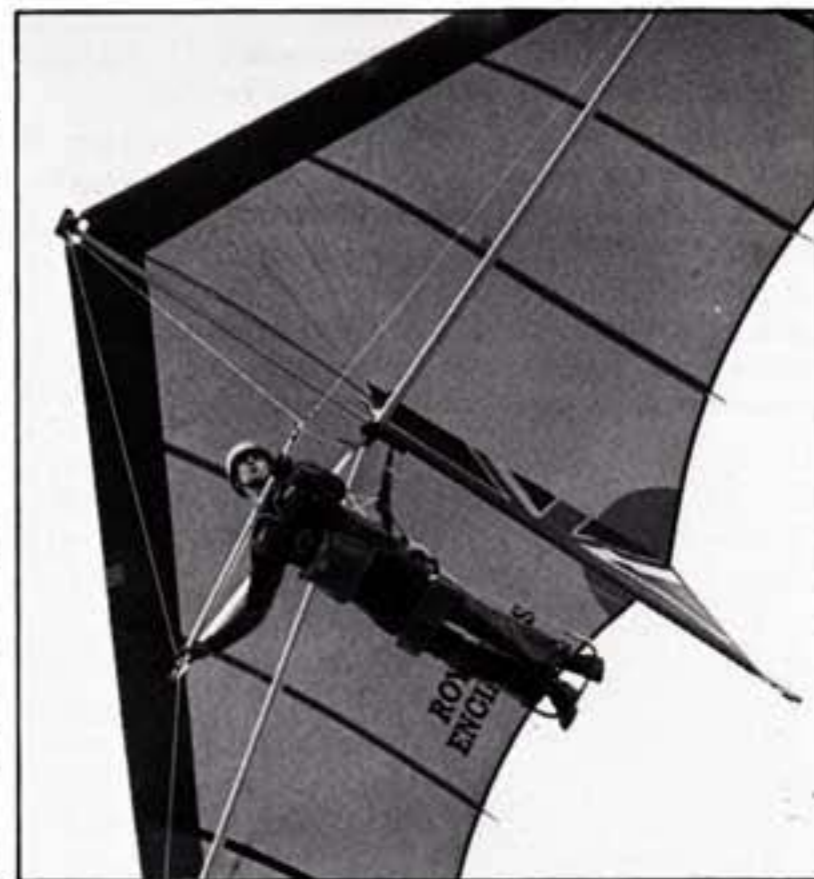
Meanwhile Major Rod Macdonald, RE, schooled by Jim Bowyer of the Gerry Breen Hang Gliding School, was convinced that hang gliding offered more opportunities for all ranks to partake than his main sport to date, free-fall parachuting.

He prepared a case to present to the Royal Engineers Sports Board for official recognition within the Royal Engineers, based on Jim Taggart succeeding with Army recognition. Rod was lucky. He asked for and received backing from a dynamic senior officer, Brigadier (now Major General) Mike Matthews. Mike Matthews was an ex-Royal Engineer and parachutist and was enthused by the idea of hang gliding within the Royal Engineers. The Royal Engineers Sports Board agreed to the proposal and allocated money for two demonstration gliders to publicise and encourage the sport throughout the Corps. The Royal Engineers Club, so formed, was recognised by the BHGA as a member club.

PROBLEMS

Unfortunately Jim Taggart's case for recognition Army-wide foundered at the last minute as no Army Hang Gliding body in UK existed to organise, encourage and control the sport Army-wide. This caused immediate concern, as the Royal Engineers Club was already 'official'. At this stage, the Headquarters Engineer in Chief stepped in, and offered Rod Macdonald, and the RE Club, as the Army Hang Gliding Association, (AHGA). Mike Matthews agreed to be President of the AHGA, and — as luck would have it — was promoted into the post of Director of Personnel Services (Army), an influential location, even for sport. The Army Sports Board agreed to this submission, and Category A status was awarded to hang gliding.

It did not stop there. Rod, again strongly backed by Mike Matthews, was keen to keep up the momentum and start a proper Hang Gliding Centre in Wales to be a focus for the sport in the Army. Once more Rod was lucky. The Deputy Commander, Wales, was an ex-Royal Engineer, ex-parachutist and an old friend of Mike Matthews. Brigadier John Hooper, OBE, agreed to support the formation of a Centre in Wales with accommodation, storage and office space, provided the AHGA could obtain an officer to run it full time. No mean task in the days of manning shortages and cuts.



Rod Macdonald flying a Royal Engineers Super Scorpion belonging to Junior Leaders Regiment RE over Mill Hill

photo by Mark Hastings

ONE MAN ONLY

As far as Rod was concerned only one man should run the Centre. It had to be Jim Taggart. Mike Matthews agreed and wrote directly to the Director General of Electrical and Mechanical Engineering requesting Jim's release. Major General P.H. Lee granted the request, for a trial period of one year. The Centre is due to open in March, 1981 in Brecon.

It is intended that the strength of the AHGA will be based on Unit Clubs. It is hoped that in UK they will form affiliations with local civilian clubs and schools, sharing and contributing to local facilities and instructors. The AGHA will hope to contribute to hang gliding in UK by gradually opening and logging flying sites on MOD land, and starting negotiations at the highest possible level to open more National Trust for hang gliding.

AHGA Unit clubs will benefit directly from advice and help and the enhanced status of the sport within the Army. They will be able to buy gliders and equipment through the AHGA.

At last we are official. It is now up to unit clubs and Jim Taggart's Centre to ensure a bright future for hang gliding in the Army.

AHGA Information

UK — Until December, 1980 contact Maj. R. Macdonald, RE, Stanmore Mil 3058. After March, 1981, contact Capt. J. Taggart, REME, AHGA Centre, Brecon, c/o HQ Wales. Equipment Sales UK contact Maj. R. Macdonald, RE.

BAOR — Until February, 1981, contact Capt. J. Taggart, REME, EME 16 Sig. Regt. Herford BAOR BFPO 35, Herford Mil 3010. Equipment Sales BAOR contact Capt. D. Taylor, 2 Armd. Div. Engr. Regt., Osnabruck BFPO 36, Osnabruck Mil 7167.

The Dratted Angleterre

A YOUNG SOCIALIST Leader, 24 year old Miss Josie Aitman, succeeded in a motion at a recent conference in Wales in resolving to put all sports under workers' control. Among other items, Miss Aitman made a special plea that "more working people should be given a chance to participate in such upper class sports as water skiing, motor racing and hang gliding . . ."

The Honourable Johnny Carr stepped from his gleaming green 4½ litre 1929 Bentley, the one with the Rose 2 super-charger, and carefully sniffed the air.

"It's soarable," he drawled, adjusting his monocle, "but you can just detect the peasants up-wind."

Behind him, the 6th Baronet Slater of Brighton fiddled with his cravat and bared his teeth nicely at all six of the private schoolgirls who were drooling at him over the spare tyre. One by one, they slithered to the floor in a faint.

"Slatters, dear boy!" young Alan, Viscount Weeks called from the far side of the car park, where he was resisting the cringing efforts of three working class louts trying to help him pull his boots on, "Slatters, dear boy, a hundred sovereigns says I get higher than you today, what!"

The Honourable Carr, whisking an imaginary fleck of dust from his immaculate doeskin breeches, beckoned to a pair of tall raggedy types who were forelock-tugging furiously at him.

"You Facks again, is it" he said sharply. "Well, jump to it smartly — I hope you've cleaned your hands — and if there're any problems with the

battens this time you'll be soundly horsewhipped!"

The Facks — for it was they — murmured "yessurr" and carefully carried the Hon. Carr's Slycone to a patch of bare hill in front of the fluttering terraces of the Dyke, while the Hon. Carr neighed a greeting to his friends.

"What ho! Birtles, my boy," he brayed, at the languid figure of Sir Michael Twistledon Maher — known as "Birtles" — and at Keith, Count Reynolds, who were idly flicking stones at a furtive darting figure racing around a half-rigged kite in front of them.

"It's only sporting," said Birtles, "to make that upstart Baker move a little faster with his rigging."

Keith, Count Reynolds, a man of few words, grunted in agreement and heaved another rock at the hapless Baker, who was, nevertheless, persevering in his efforts to rig the Maher kite.

"You're not thinking of allowing one of *them* to fly today?" the Hon. Carr was struck with horror as the thought occurred to him.

"He's been here two weeks now," said Birtles, whose attention had wandered to the 6th Baronet Slater having his boots polished by 18 girls, while another four were rigging his glider. He was writing names in small print into that evening's diary programme.

"Lucky blighter," muttered Birtles blackly, "even if they *are* all ladies' maids."

The Hon. Carr was frowning over the problem.

"It's not *done*, you know," he said.



"It's all this juggling that's wearing me out," he drawled.

"It's infra dig, non-U, sort of "nonk's paddock", if you know what I mean."

The last phrase was said with a curling lip.

Suddenly, Keith, Count Reynolds spoke.

"Times are changing," he said gruffly. "What! Bally socialists driving the country to ruin in a bucket. Move over a bit, give the worker a chance."

"A chance is one thing," snapped the Hon. Carr, "but this is another. I tell you, Ren, I don't like it one bit! Things go on this way and soon they'll be *buying their own kites*."

"Never!" said Sir Michael with a chuckle, "Never." He turned back to see his kite rigged. "Always fancied using them as wind-dummies though."

He was just about to nod to an eager-looking Baker when an unkempt figure scuttled across the grass, seized the rigged glider, and as Sir Michael leapt to his feet — spilling the pink gin and knocking over his 12-bore — the figure clipped in and started running.

"It's that dratted Angleterre again," roared Sir Michael, his face going beetroot red with fury, while the Hon. Carr began intoning "told you the country was going to ruin." Even the 6th Baronet Slater looked up for a moment from deciding whether he could fit another in between 8.37 and 8.52 that evening.

Little half-suppressed cheers could be heard from the direction of the Fack brothers, and the faint strains of The International, but this was almost immediately drowned by the thunder of the Maher 12-bore letting off at the now-distant figure of Angleterre. Maher's glider lurched slowly into a circle, circled again, growing smaller

and smaller in the sky.

"Don't know what the country's coming to," said the Honourable Johnny Carr.

"That's my third damned glider," bellowed Sir Michael Twistledon Maher. "It's all the fault of that damned filly Josie Aitman. Should be horsewhipped!"

"Do you think he's going to want to join the club?" Alan, Viscount Weeks asked anxiously, coming up at a trot. "Those Facks are up to something," snarled the Honourable Carr, who was now being nearly deafened by the strains of the International. The Facks had rigged the Hon. Carr's kite, and with a shout of delight and a last quick chorus of "WORKERS OF THE WORLD ARISE", they arose. B.M.



Sir Michael Twistledon Maher flying peacefully a few minutes before the dreaded Angleterre struck a blow for the dictatorship of the proletariat. ("One 360 doesn't make a revolution.").

"Don't know what the country's coming to," said the Hon. John Carr.



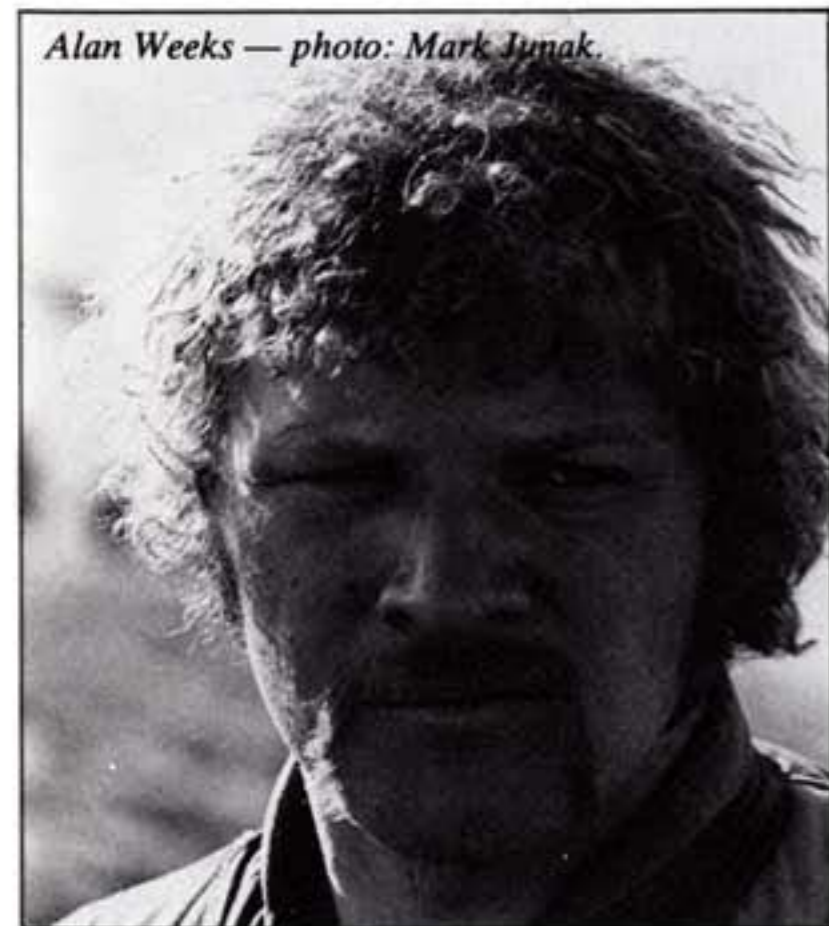
... ICARUS ALLSORTS ...

... two Kirkes are in the news. **Maurice Kirke**, who flew a Stampe Aircraft at Mere back at the Clubman's do — was it 1978? — is now said to be sampling Her Majesty's hospitality for a period not unadjacent to 6 months for partaking of the demon drink and flying ... and **David Kirke** (no relation) has forsaken his long elastic ropes for Pterodactyls, and made an interesting attempt to fly to Paris. Along with others, including the American Trans-America ace Jack McCornack, David set off from Croydon, once an airport in South London, bound for Paris. But he had a bit of trouble, landed in a field, fixed it, and while setting off again had a serious discussion with a tree, which he lost. When last heard of he was hanging upsidedown, unhurt, pondering the pains and joys of being Obergruppenfuhrer of the Dangerous Sports Club ...

... funny what **Punters** will think of us, isn't it? A plummy upper-class voice walking the Downs at Firle Beacon, in Sussex, was heard to remark to a companion as they passed a group of hang gliders, "I suppose you have to be rich to take up the sport in the first place" ... and at Dover, after a pilot had taken off, executed multiple 360s, wingovers, figure 8's, and landed soft as a feather at a punter's feet, the punter asked, "can you steer those things then?" ... Another punter watched a pilot fly down from a 650ft. cliff and land in front of him, "Are you going to fly," he asked, "back up again?" ...

... former BHGA treasurer **Derek Evans** seen standing next to sky pilot, Rev. **John Pike**, after Mr. Pike made 3,000ft. over Firle ("Nearer my God to Thee?") Derek was apparently heard murmuring "I'm with him too, Lord, I'm with him too" ...

... if you've never seen **Johnny Carr** turn into a complete fireworks display, all on his own, try him with the question, "did you know Alan Weeks made 3½ grand over Firle in his Fledge 2?" ... then duck. ...



Alan Weeks — photo: Mark Junak.

... the Canadians have a new whisky on the market, and the flash-looking advert shows this really butch bottle, with glinting sunlight on one chunky corner, and a backdrop of beautiful hills. Across the bottle is a hang glider, unfortunately with a seated pilot, the effect is very pleasing. The point of the story? Oh, well, it's the name the Canadians chose for the whisky whose slogan is "Follow the Canadian Superstar" ... the whisky is called **Lord Calvert** ...

... US Competition supremo **Keith Nichols** paid a flying one-armed visit to the UK on his way back from flying in a championship in South Africa. Took in the 3rd League competition, in the Lake District, with his arm in a sling. First American competition pilot, in 3½ years, to take a peek at the British League, about which so much is written and so little is known. Keith's injury story is hair-raising. He was lying 2nd to **Steve Moyes** with one flight to go, clipped in on top, and as he started his take-off run, the pip-pin holding the control bar together either broke or came out. Keith went off holding the side-bars together and flew down for four or five minutes, keeping the Electra Flyer Spirit in shape by sheer strength. "Of course, I was still flying the task," said Keith, "and all I had to do was make a safe landing in the target area for 2nd place". But he got a bit tired near the end, flew over the target with the side bars getting wider and wider apart, tried a 180 which happened sooooo sloooooowllly. ... and he found himself heading towards a tree. A couple of feet higher and he'd have missed it and scored his points. A couple of feet lower and he'd have landed in it. As it was he hit and fell out head first for a bad arm break, no flying for months, a lost place in this year's Bishop XC. ... but a pretty good story to tell if you can find the right question to get him to tell it. ...

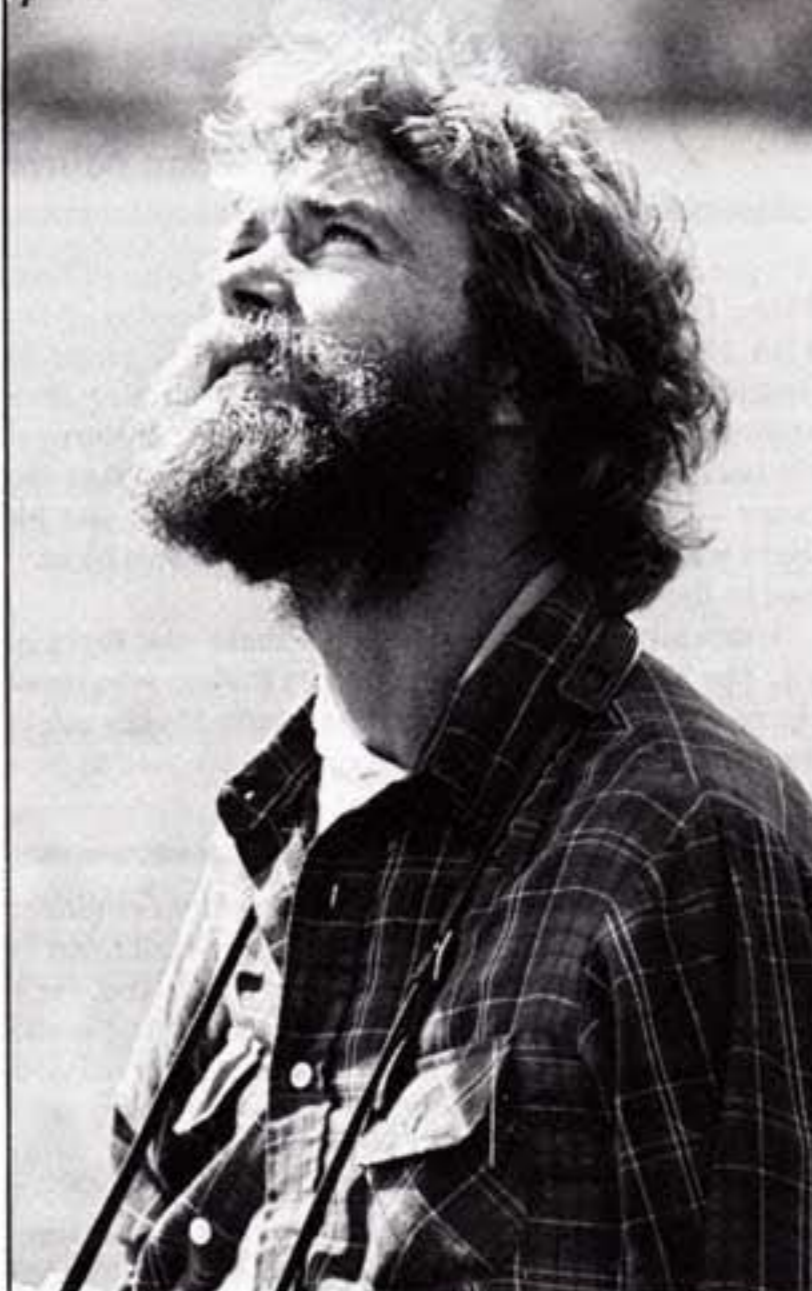
... **Barry Puckey** is innocent, OK? ... New lobby group on South Downs say it's all the fault of **Bob Wiseley** in the first place, because of the peculiar way he prone-launches pilots. Whenever the wind blows down the hill, determined little groups of pilots are seen button-holing establishment SHGC members and growling BPIIOK at them. Secret Wings! correspondents known to be hiding in the third bush left of the take-off site, in a peculiar place known as **nonk's paddock**. ... wherever that is. ...

... another US flying supremo, in fact two of them, passed through the UK earlier in the year. **Hugh Dundee** is one of the USHGA's Board of Directors, and his wife **Lauren Emerson** has just landed the job of gingering up former **Groundskimmer** Magazine, now called *Hang Gliding*. It's thought the mag may be too pretty, with too little news, and Lauren has landed the job of deciding what should be done. Editor for the past 20 plus months is **Gil Dodgen**, who can't be overjoyed at the latest changes. ... it's said that everyone knows at least three people capable of doing the \$20,000 a year job. ... watch this space. ...

... **Mainair Sports**, sometimes known as Aladdin's Cave, and run by soopertycoon **John Hudson** and his merry right-hand man **Bob Harrison**, is going into the sponsorship business. Before your eyes light up and you alert your bank manager to provide a wheelbarrow, John's talking about a couple of pilots flying kites with a big Mainair logo, which he'll sell at a massive discount. It's the sort of deal a hot young pilot, without funds, should snap at, to get him the latest flying machinery to take him into the League, say. Contact John by letter saying why you're the best bet...

... **Paul Baker**, who runs the High School at Wellesbourne Airfield, is nursing a badly bruised face after picking an argument with Pandy on Monday, May 5th. Flying a Fledge 2 the same way he often flies his Super Scorpion, he came in for a top landing — in an area where pilots had been rotored down all day — with a series of steep side-slips. On third wing-up he was pushed around into a stone wall and wrecked his glider and nearly himself. Hope he's getting better now for his powered meet at Wellesbourne June 7/8. Smile, Paul, you're on Candid Camera. ...

Keith Nichols, USHGA Competition Chairman
photo: Mark Junak.



... 20 year old **Judy Leden**, 2nd year nursing student from Cardiff University, has chosen a tough way to make the money for her first kite. If all her plans work out she's due for 12 hours a day slogging in a Shetland Oil Company canteen — 7 days a week — for 10 weeks, doing what the American call "Slings Hash" for enough to buy a car and kite. Judy made 2,500 feet twice in one day on Pandy, flying dual with **Sandy Fairgrieve** — one of the British team to Lachens XC — but they didn't go for it and claim a realistic dual XC record. Now she says if you see a determined looking lady with plaits approaching you, it's her, see? Looking for an XC. Fifteen miles will do ...

... one of the most famous names in hang gliding, **Ken Messenger**, is said on the best authority to have given his staff a months notice. The original staff of *Birdman* went off to form their own company, *Solar*, last year. Now it looks like the man whose exploits brought hundreds into hang gliding has hung up his harness ...

... everyone's favourite American lady, and I do mean lady, **Bettina Gray**, made it to the 4th League competition in the Dales. Aside from her lovely photographs, Bettina has her own eccentric lifestyle to endear her to anybody. She regularly stays at the Ritz while she's here, calls the same hire firm and tools around London in a chauffeur-driven Daimler, and an invitation to high tea is just not to be missed. The 1979 American Cup team, on behalf of the League and the BHGA, gave her an antique solid silver card case last Christmas (just in case you're wondering about her thankyou letter in April Wings!). If you get the chance to play host to Bettina, who's staying on a few days after the League, she's really into beautiful gardens, if you know any locally. Lucky **Judith** and **Louise Evans** will be out in California later in the Summer to stay at Rancho Santa Fe. ... what a nice name for a pad. ...

68.8 miles... Peter Hargreave the new

... Peter beats Bailey in the same air!

by Brian Milton

It's got to be the best birthday present in hang gliding. Peter Hargreave, 29 years old on Saturday, May 17th, flew against some of the best XC pilots in Britain. He not only beat them, but flew further than anyone else has ever done on a hang glider in Europe. He became the first in Europe to beat the 100km distance — twice the distance of a Delta C — and his flight was probably the longest distance flown by anyone in the world this year so far.

Ironically, Peter nearly didn't make the flight at all. The Yorkshire captain, Robert Bailey, who chose the team, said right up to the last minute that he might have too many people. Peter might have had to be a reserve. As it happened he was not.

Peter's into a trendy job, a development engineer working with microchips in Aycliffe, a small town in County Durham, just to the West of Cleveland. He's been flying hang gliders for 2½ years, having made his first flights in August, 1977 at Mike Adams' School in Wales, instructed by Alan Hetherington.

He was at the first 1980 League competition, without enough XC for automatic League entry, and out of luck in the actual competition to get in, drawing next-to-last place. He had, again ironically, wanted to get into the League to get XC experience flying with top XC pilots so that he could have a go at the British record!

The kite he was flying was the same kite, the big Birdman Cherokee, that Robert Bailey used when he left Kettlewell a year ago to go East and get back his British Distance record with a 50-mile flight. Peter had put his deposit on Robert's glider 3 days before the original big flight, and has been flying it ever since.

He notched up his record on only his fourth XC flight, following flights this year of 11 and 18 miles

The Flight

... Peter got to the West coast at Morecambe with Bailey, who was flying an Atlas, both at 7,000ft. There was no way to go on to the West, and to make distance they had to go north along the coast — crosswind — and then West into the bulge of the Lake District. The two pilots conferred over Morecambe. Bailey suggested Hargreave go first, "because the Atlas is faster" (cunning old fox). As Peter began to lose height, Bailey pulled on and went away from him.

Peter began circling in any lift he could find. He reached Coniston Lake, still losing it slowly, and watching Robert climb away from him. Down from 7,000 to 1,400ft. ASL and he began to concentrate on where to land. Past Windermere, and in two minds about whether to cross Coniston Lake.

"I felt I was fighting for just another 100 yards", said Peter. "I could see the peaks towering above me, and Robert circling in the distance at cloud-base."

(Bailey said later he thought Peter had gone down. He went on to the coast and landed 9.2 miles beyond his own European record of 50 miles, and felt well-pleased with himself. In fact, it wasn't until the following day that news filtered through of Peter's flight).

Far Right: John Hudson — missed Roses Competition to work, but May 18th, the following day, flew 55kms and reached 9,000 feet over Lake District.

Right: Peter Hargreave on the big Cherokee — photo: Alan Gilliland, Evening Dispatch, Darlington.

Insert: Peter Hargreave — photo: Alan Gilliland Evening Dispatch, Darlington

Then Peter got a small hard thermal, difficult to stay in, in which he had to work like hell just to maintain height. He was pleased just to do that, covering distance as long as he was in the air. In half an hour of flying, he gained height, drifting with the thermal up the slopes of the mountain. He got to the top just south of a peak called *The Old Man*.

The thermal blossomed into an 800/1,000 fpm blob, all the way around, and the needle of the altimeter started going around like the second hand on a watch. Peter climbed from 2,000ft. to 7,100.

In the distance, he could see a faint outline, the Isle of Man. By this time, about 6.30pm, clouds were disappearing in the sky, and though the island looked close, Peter only thought half-heartedly about trying to get to it.

"I flew under the second-last cloud in the sky, popping back and forth when I wanted lift, about 500ft. below it", he said.

"Stayed there for half an hour until I reached the coast at Ravensglass. When the cloud decayed I took the long glide north along the coast to St. Bee's Head. I noticed, incidentally, that the smoke at Calder Hall was blowing in the opposite direction, but it was very light."

Calder Hall is an atomic power station with restricted air space up to 2,500ft. Peter passed over the top at 5,000ft. He flew to just beyond St. Bee's, up to the head, and landed on a cliff top beyond a caravan site.

"I did exercises on the glide down", said Peter later, "to get the blood moving in my legs again. Felt very tired. The landing was perfect, one step only, a stand-up . . . then my knees gave way and I fell in a heap."

He unclipped and staggered around looking for witnesses to his landing. Just over the top of a small hillock he saw a man, his wife and their young daughter. They thought he was a drunk by the meandering way he made towards them. He asked them if they'd seen a hang glider land. The man said he had, just for a few seconds, but his wife didn't really believe him. None of them, at first, believed Peter was the pilot.

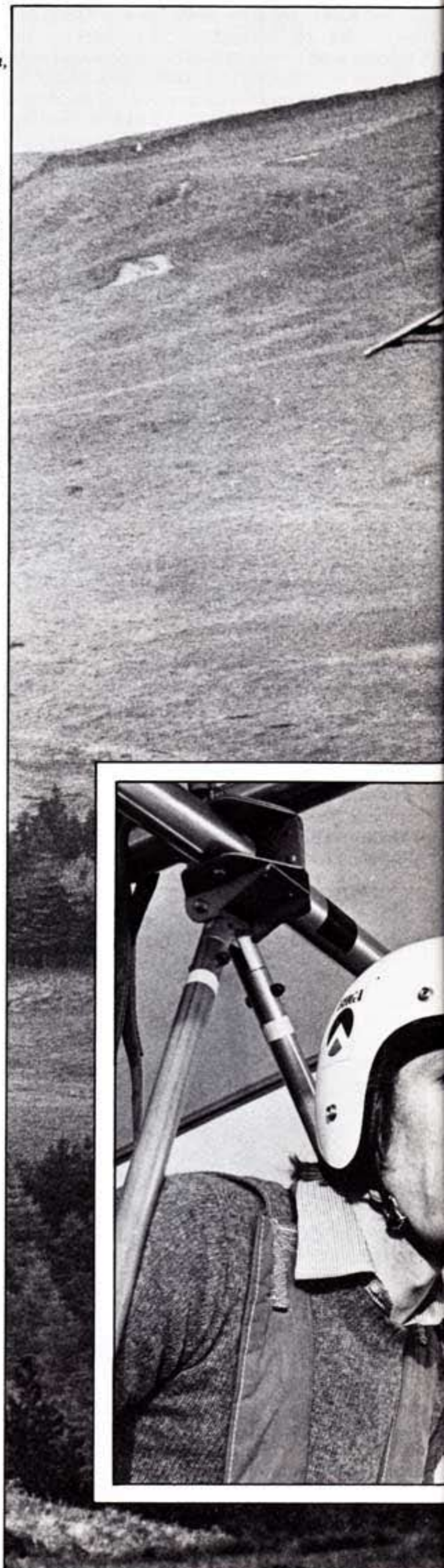
Then they took him to their caravan and gave him a cup of tea, carried his kite down, and later they fed him. Peter told them all about the competition. Then he phoned his mother and said he was alive and he believed he'd broken the record. (He should have been at a christening that day and it was only because Bailey honoured him with a place for Yorkshire that he'd gone flying!)

That night, he set off to hitch back, and he was so high on adrenalin that he didn't sleep at all. He says he must have walked 30 miles, and he didn't care. Twice he was stopped by police in the darkness, and each time they thought he was a little mad. But they didn't quite arrest him! One copper muttered to himself as he drove away. *Seventeen hours* after landing at St. Bee's he got to his car.

He spent an hour watching people fly, then drove off to pick up his kite. On the way he stopped once for an hour's sleep. After retrieval, he drove home and went to bed at 11pm. When he woke up he was too shattered to go to work . . . but he phoned me just in time to throw away a pile of *Wings!* copy and get his account in!

What a brilliant flight!

I just hope he makes the League next time.



European Record Holder*

*To be ratified



by John Hudson

From a misunderstanding, I was told that the competition was off on Saturday — when, on Friday night, I was told it was on I was very brassed off.

Although Sunday was the club competition and I felt strong pressure to attend and support it, the knowledge of a 60 mile flight was just too much and I just had to go out for XC. Bob Calvert was also feeling very down after his 6 mile disaster on Saturday.

John Stirk and Dave Harrison were also keen, and after a false start we changed sites to Dodd Fell, 2,000ft. ASL.

It was a long walk and Bob Calvert, being fittest, was launching as John and I arrived. After launching, John and I worked a 5 up to 3,500 ATO. We were rescued about 8 miles downwind by a useful ridge and spent 20 minutes ridge soaring before another 5 up cleared us from the mountainous area and over the flat valley floor. It was a fairly easy ride then, but we were separated and on our own. I was drifting down wind very slowly — 10 miles in 1 hour and suddenly came to a dead stop. The sea breeze had started, opposing the South-Easterly wind — this convergence seemed to lift up the cumulus and I topped out 6,975ft. above take off. No matter how hard I tapped the bottom bar, I just could not get the needle past 7,000ft! It was then hard work as I forced myself up wind to what looked like the sea breeze front (line of cumulus) only to realise that the front was drifting towards me and as I circled in lift I began drifting back the way I came. That wasn't on so I pulled through it and gently lost altitude on a 6 mile final glide. I could not go off to the side since the front was not defined by that time owing to the terrain below: a coast line with a huge bay and the 'hump' of Barrow and the surrounding mountains.

I landed for a flight of exactly 55km., a flight time of 3½ hours and a gain of 6,975ft. to just under 9,000ft. Fortunately, I was crossing red one airway almost at 90° in VMC so it was O.K. It was good!

John Stirk, in the meantime, worked extremely well to gain altitude from about 200ft. above the floor deep in a valley. I should think that his overall gain was a British record since he went to 8,300ft. above Morecambe, a seaside resort. Shortage of drift and eventual sink as the front moved inwards gave him 8,000ft. in which to "burn off 8 grand doing hoolies, multiple 360s and spiral dives just for the pure hell of it!" He landed on the playing fields of Morecambe High School and was turned on by the nubile, bikini-clad schoolgirls who ran to him on landing. Lucky sod! I only had a caravanning couple and a few sheep.

Bob Calvert, in the meantime, was still going as I landed and he spent 1½ hours over Windermere, following the front as it drifted to and fro. His flight time was about 5 hours and he made 54 miles. Every time he gets the record, someone has just beaten him. I do feel for him.

Anyway, retrieve of all three took about 250 miles of driving (John and Bob were almost 70 miles apart!), took about 8 hours and I got home at 4am red-eyed, tired out but very happy. The reasons for the good conditions were the very high cloud base, the amazing weather and the grim determination to beat the circumstances that, at least in Bob Calvert's or my case, screwed us up the day before.

THE 1980 ROSES COMPETITION

There's always been competition between Yorkshire and Lancashire. To anybody outside the north country, they all sound the same, but to each other one gathers there are differences. Back in the old days, when kings used to kill each other, there were the Wars of the Roses — Lancashire the red rose, Yorkshire the white. Robert Bailey, from Leeds (in Yorkshire) and Bob Calvert (from Blackburn in Lancashire), are considered two of the best, if not *the* two best, cross country pilots in the country. The irony of the Roses Competition, when it finally occurred, is how the anticipated confrontation didn't happen, and how the favourite was beaten by a dark horse.

XC HISTORY

I remember reading in a 1976 *Wings!* how Bob Calvert made a 6 mile flight, and opened up undreamed possibilities. Gerry Breen made one of the early XCs, as did Mark Southall, flights of 11 and 12 miles. But the first to catch the imagination was that by Bristol's Nigel Milnes, 22 miles on a Phoenix 6B in the Spring of 1977, all of it on thermal from Castle Morton.

Later that summer, Bob Calvert did 17 miles at the 3rd League, off Llandinum, but Nigel's record remained untouched for more than a year. At the 1978 League Final, Calvert and Bailey slugged it out over 30 miles and landed within 3 fields of each other. Because Bailey was down first, he took the record. Geoff Snape had done 27½ miles that day to hold the record just half an hour.

1979, three Bristolians, Bob England, Jeremy Fack and Nigel Miles again, took the record away from Bailey by flying 34 miles off Pandy, all together reaching an unprecedented height of 6,700ft. Bailey came back again a month later, and whacked out 50 miles in a big Birdman Cherokee. That record stood until the middle of May this year.

In League competitions, when the XC aces have roughly the same conditions, it's always been a toss-up between three pilots — Calvert, Bailey and Graham Hobson, who's won a few in his time. . . . (where was Hobson when Lancashire was flying against Yorkshire?). Despite brilliant flying by Bob Calvert at this year's third League, when he seemed in another world, it was still Bailey who won when the distances were finally measured.

So the Bailey Challenge was a good one. There was nothing pre-ordained about the result.

"You pick your best 8", he said to Bob Calvert, "and I'll pick mine. Add the mileages together at the end of the day to find the winner."

THE DAY

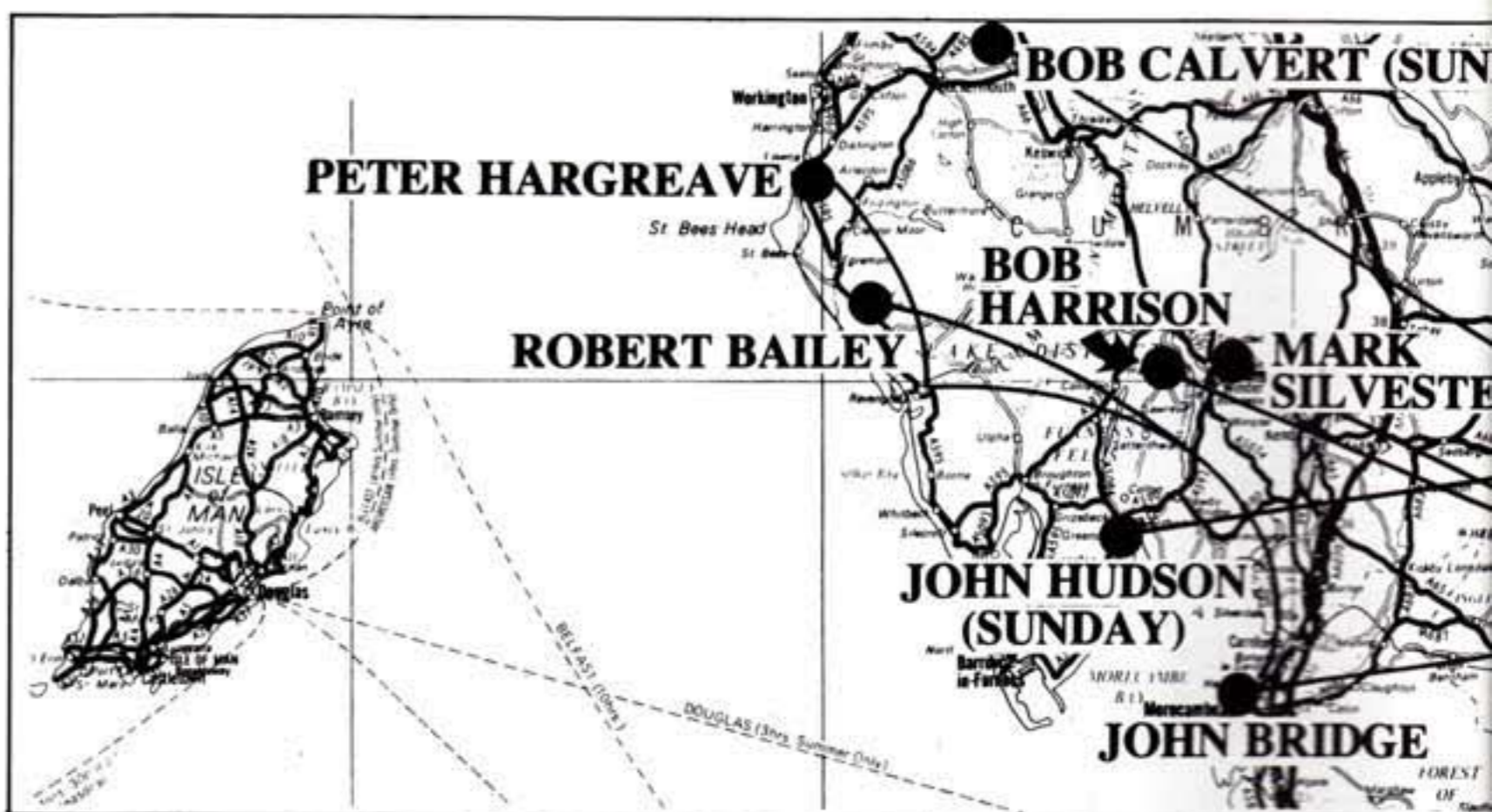
The original competition had been blown out, but that big high pressure over the North Sea produced some peachy Easterlies. That weekend, May 17th, looked good for a competition. It had to be a one-day, otherwise it would clash with the Pennine Club competition. The captains asked for phone calls at 8 o'clock in the morning, and chose Kettlewell, where Robert Bailey had set out with a southwest wind last year to make 50 miles to the East coast. This time, the West coast of England was the target.

YORKSHIRE TEAM

Robert Bailey, Jim Brown, Peter Anstey, John Bowman, Peter Hargreave, Trevor Birkbeck, Bob Harrison, Mark Silvester.

LANCASHIRE TEAM

Bob Calvert, Dick Brown, John Bridge, Geoff Snape, Ian Rawson, John Hudson, Hughie McGovern, John North.



They had a leisurely walk up the hill at 10 o'clock but when they got to the top the wind was blowing a hooley, very turbulent. Trevor Birkbeck, the man with a strong cork, went off as wind dummy and landed at the bottom, thoroughly frightened. Conditions were gusty, ENE, from 12-34mph.

They sun-bathed for an hour while Trevor, poor chap, struggled back up again. Then the wind settled down to 18-22, with occasional lapses to 10mph. Both sides huddled together for a tactics meeting.

This is Bob Harrison's account. . . "Bob Calvert and John Bridge took off. It was bumpy, and they stayed around the take-off area. Yorkshire tactics said go to the end of the ridge, 5 miles away, and that's where I went, taking off next. The ridge that end was about a thousand feet higher than take-off, though the Lancashire team didn't realise this. Everyone who went to that end of the ridge eventually got away and made a decent distance."

Bob Harrison left on his own, later saying he was flying "in front of the lift". In his Cyclone, which was badly tuned, he went up to 7-7,500ft. at times, always trying to track to the right so as to avoid coming down at the coast at Morecambe. He managed to make it, thoroughly tired out, to the middle of the Lake District, landing at 6pm at Bouth, between Coniston and Windermere, after 3½ hours in the air. He got back home on his thumb, leaving his kite behind, and missed Sunday's flying because he had to drive out to pick it up. . . "big error", he said, "I'm going to make sure I have two gliders available."

Commenting on the flying, Bob said that they only "went for it" because it was a competition. If it had been a normal flying day, the conditions were not promising-looking, and they wouldn't have gone.

Mark Silvester's story is ironic. He had been worried about the turbulent conditions, and was going to go home. But the Yorkshire captain, Robert Bailey, persuaded him to "at least fly down" and register a distance. Mark took off, and "down" in his case was 39 miles away from where he took off, on Lake Windermere.

Both Bob Harrison and Mark Silvester are members of the British team going to Lachens XC in June. A third member, John Bridge, flying for Lancashire, made that side's biggest distance, 33 miles, a good omen for the South of France. John landed at the golf course at Morecambe.

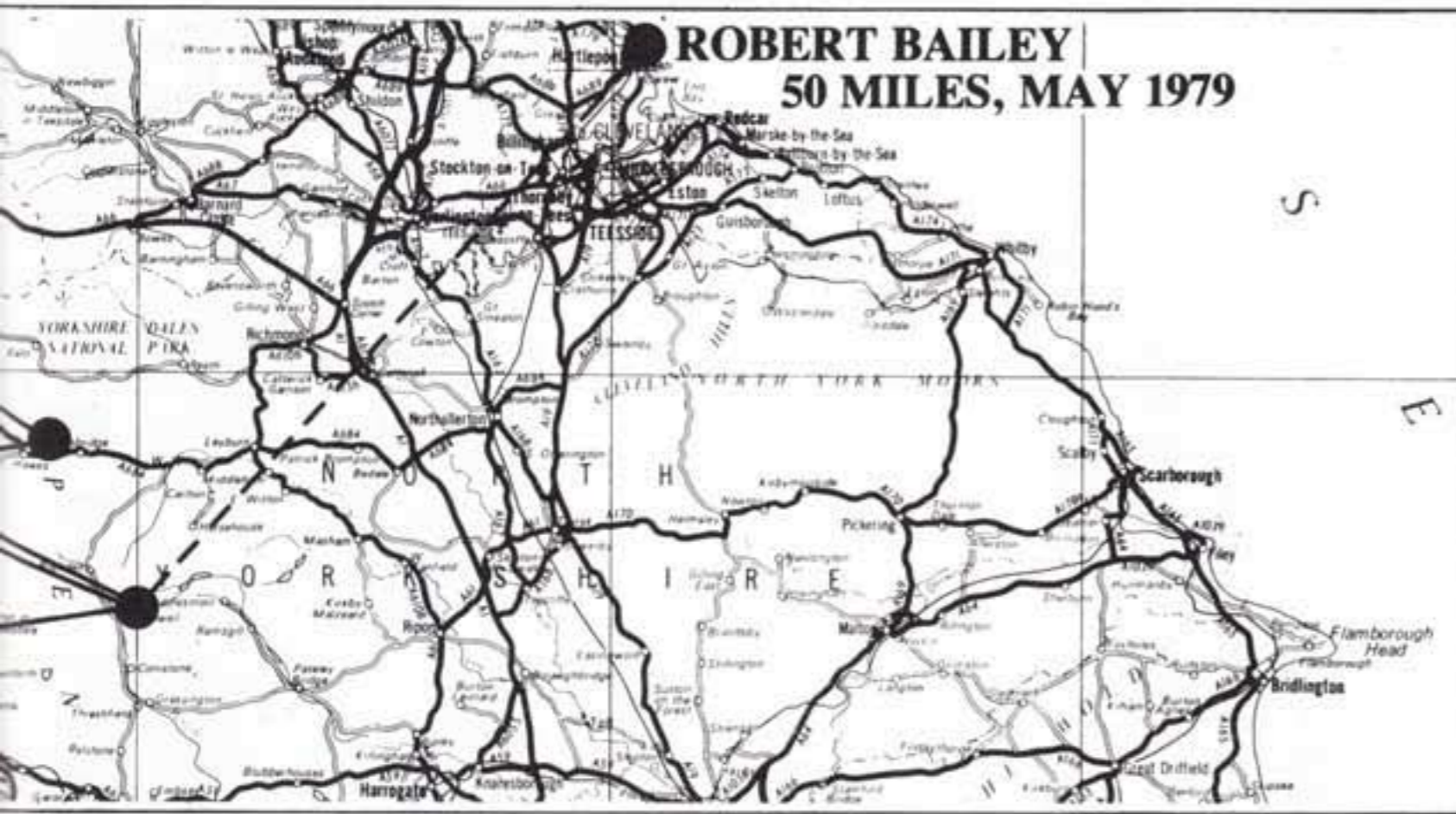


Robert Bailey, Yorkshire Team Captain — Roses Competition as British, European Distance record holder after flight

Right: Bob Harrison — British Lachens XC. Did 41. . . . Wrote "Calvert . . . for Photo: Mark Junak.

Far Right: John Bridge — Lancashire Roses, with 33 miles. British Lachens XC. Photo: Mark Junak.

Five Delta 'C's in one day



Until this extraordinary day — 5 Delta C distances were flown on Saturday, and 2 more the following day — the longest flight in Britain this year was made hundreds of miles south. On Friday, May 16th, Jo Binns made 38 miles off Pandy in an Easterly wind. That would have been the subject of a major article if the Roses competition hadn't happened. Commiserations, Jo!

Lancashire, meanwhile, were getting duffed. Trevor Birkbeck was having the worst sort of luck, but the rest of the Yorkshire team did respectable distances. For Lancashire, Bob Calvert had a day he'd probably rather forget. His big flight was the sort of distance he wouldn't even mention doing on other days. Dick Brown and John North got half-going at 10 miles apiece, but the rest were out of luck at the start, or couldn't make it.

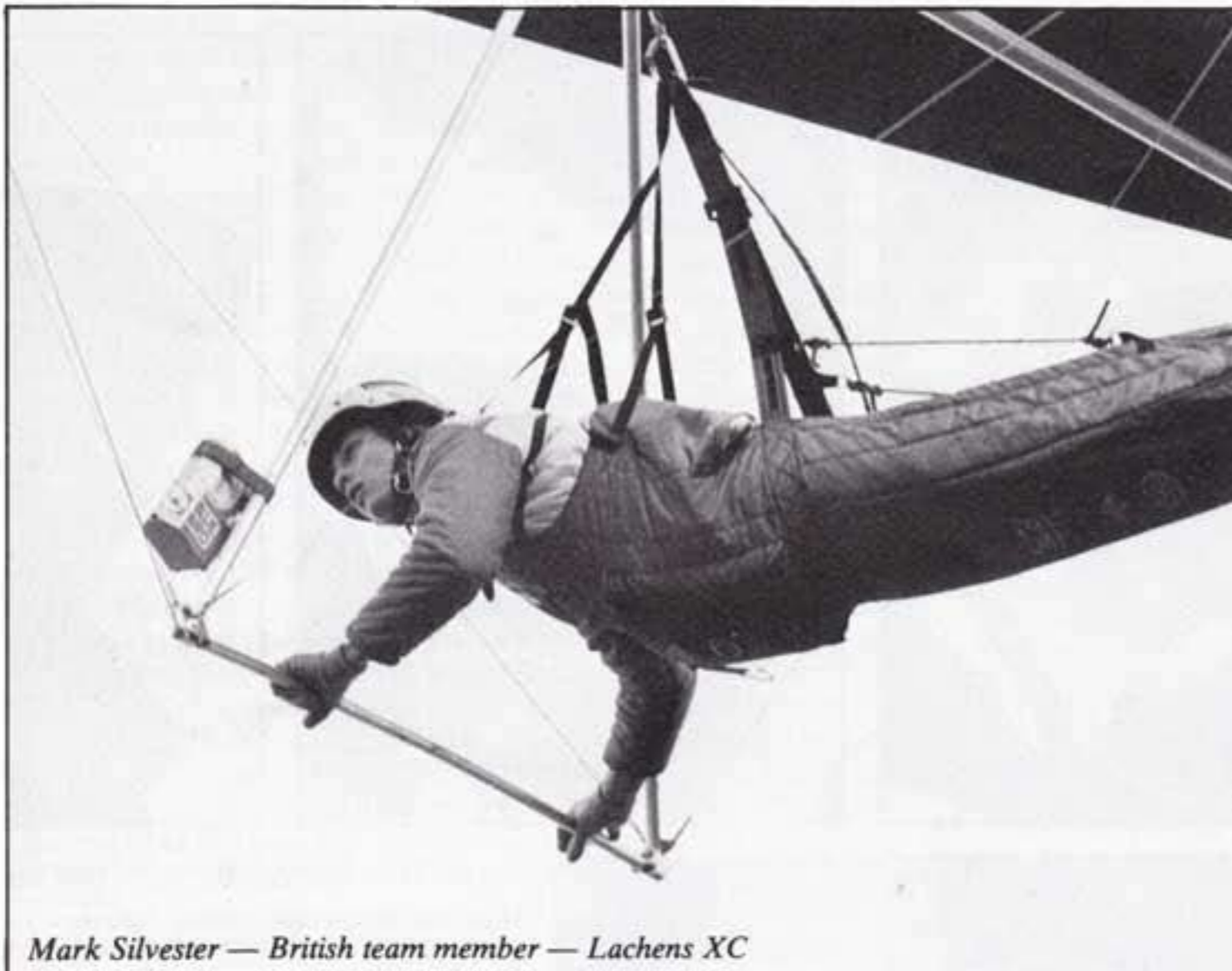
John Hudson and Bob Calvert made up for it the following day. Taking off from Dodd Fell, opposite Weather Fell in the Dales, where there have been three League competitions, they set off for the west coast. John Stirke went with them. John Hudson made 5ks better than the 50 km Delta C distance, landing near Ulveston, while Calvert landed 10 miles to the NW of Keswick, for a distance somewhere in the middle 40s, miles, that is, not kms. John and Bob both reached heights of 9,000 on the flight, and once they travelled along the convergence set up by the wind and the sea breeze.

There was no prize in the Roses competition. Just the title, 'Cock o' the North'.

A re-match is scheduled for August for Lancashire's revenge.

There is some speculation, though, of a match against the West Country (the Facks, Bob England, Nigel Milnes, Sandy Fairgrieve, etc.), or even, Yorkshire versus the Rest of the Country.

Maybe there *is* a difference between Lancashire and Yorkshire?



Mark Silvester — British team member — Lachens XC



YORKSHIRE

Robert Bailey	59.2m
Jim Brown	7.5m
Peter Anstey	7.0m
John Bowman	11.5m
Peter Hargreave	68.8m
Trevor Birkbeck	1.8m
Bob Harrison	41.6m
Mark Silvester	39.0m
Total	236.4m

LANCASHIRE

Bob Calvert	6.5m
Dick Brown	10m
John Bridge	33m
Geof Snape	0m
Ian Rawson	0m
John Hudson	0m
Hughie McGovern	0m
John North	10m
Total	56.0m

THE LEAGUE



Top left: Trevor Birbeck, Organiser 3rd League

Middle top: Robert Bailey, Winner, 3rd League, current league leader. He's wondering about his approach to the target.

Top right: Keith Cockroft finally woke up. Photo: Bettina Gray.

Middle left centre: Bob Calvert and Graham Hobson discuss tactics after briefing. Photo: Mark Junak.

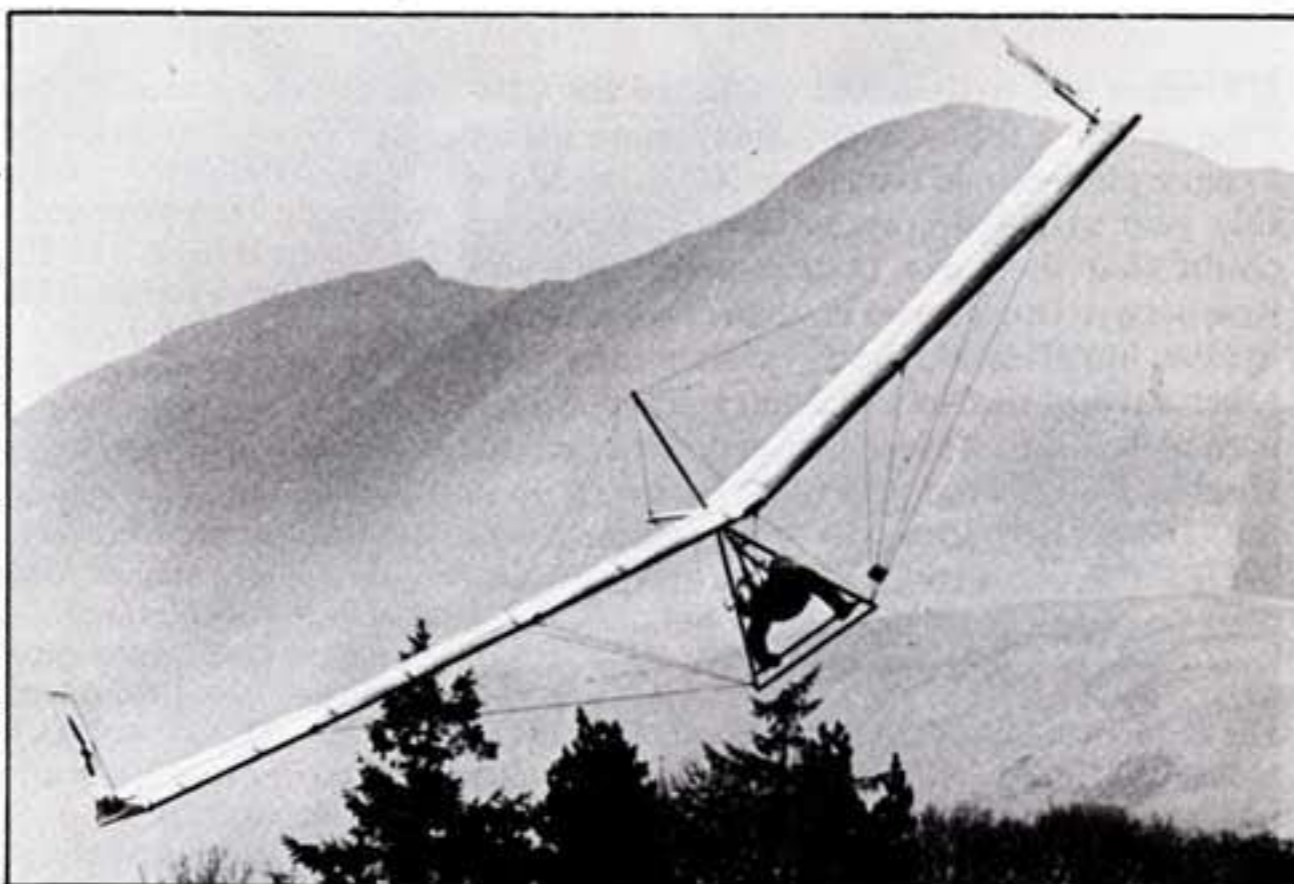
Middle right centre: Peter Harvey beat all but Bailey in XC task, 23.5 miles. British Team Member, Lachens XC. Photo: Mark Junak.

Middle right: Jeremy Fack: British Team Member, Lachens XC. Photo: Mark Junak.

Bottom centre: Geof Ball, British Team Member, Lachens XC. Photo: Mark Junak.

Bottom left: 1978 League Champion Keith Reynolds, a bit worse for wear, but best Southern pilot distance in 3rd League — 16 miles. British Team Member, European Championships. Photo: Mark Junak.

Trevor Birkbeck's Competition — Lake District



Lester Cruse on approach, first use of Fledge in the League. Photo: Mark Junak.

Trevor Birkbeck organised the 3rd League competition April 25/27 in the Lake District. We got four tasks in, including a brilliant cross country in which only 9 pilots went for it. It wasn't for want of trying.

The League positions went through a drastic change. Normally, Graham Hobson does well on XCs, and gains League places, but this time he was toppled from his leading place down to 3rd. Those two North country men, Robert Bailey and Bob Calvert, who had been expecting to make up their scores when the XCs started, were right . . . with a vengeance.

The first two tasks, in strange weather conditions off a hill looking over Keswick — Latrigg — saw some excellent individual competitions. There was a tremendous fight between Jeremy Fack and Robert Bailey, which Bailey won, only to then have another struggle in the second task against Sandy Fairgrieve who took Bailey to the cleaners. Sandy, with bad luck, broke a small wire on landing and was therefore disqualified . . . Lucky Bailey. There were numerous stories like this.

The real cruncher was the cross country, on the second day, from Wolf Crag, a rugged cliff-like hill facing north with the most positive thermal generators I've ever seen in front. The wind was light, and any lift had to be from thermals. If you lost it, you went down.

Bob Calvert dominated the early part of the day, flying around in his Atlas as if it was under power, thousands of feet higher than anyone else, disappearing into the distance and then coming back later from a different upwind direction. Any thermal was pounced on by fifteen pilots, while the rest of us chickens sat on the ground and made imaginative excuses.

There were, it was decided, just two usable thermals, good enough to get pilots over a 2,000 foot mountain and the 5-mile badlands beyond, out into roads and villages and people again. Calvert, Bailey, Cockroft and — I think — Peter Harvey went on one of them. Johnny Carr went with them too, on his Fledge, but decided he didn't like it and came back. He's done that once before, leaving Calvert on an XC, and that time he made 10 miles to Calvert's 20. Johnny never got another chance, and loud were his lamentations (and still are his lamentations). Hobson also went on the first thermal.

Another thermal saw the departure of Bob England, Keith Reynolds, Geoff Ball, Sandy Fairgrieve . . . Mick Maher and Graham Slater went up with this one but didn't think it was the one for them and so came back.

They weren't happy either about never getting another one.

There were brave and funny tales that day. Ron Freeman, bionic man, went to the bottom of the hill 5 times while trying to hook thermals. He also landed on the side of the hill 6 times. Each time he turned straight around and walked straight to the top. Lester Cruse brooded over "a grands worth of machinery, and I've got to risk it here!" and in the end was forced to the bottom. Mick Maher relieved his feelings at the end of the day by tying his parachute to his kite bag and hurling it out for testing.

When all the dust settled, the 8 pilots at the top of the League were the same 8 the competitions committee had chosen to represent Britain in the European Championships in Kossen. Choosing two reserves from that lot is going to be difficult. Robert Bailey went up 10 places to take the League leadership by just 2 points from last year's champion, Bob Calvert. You can imagine how interesting it's going to be for the rest of the League year. They have both opened up a bigish lead over the rest, 48 points alone ahead of Graham Hobson.

The biggest ever League jump has been made by Peter Harvey who suddenly seemed to come good. He was placed second in Trevor's competition, and wandered around in a sort of daze. Bob England, who had been praying for an XC, jumped from 23rd place to 6th, and Keith Reynolds no longer — for the moment — had to take on the top ten to struggle up the League. Now he's there he'll be facing pilots in 10th place or worse, under the 1-on-5 seeding competition system.

Keith Cockroft, whose League ambition seems to be to get to 38th place — if we cut anyone on 39th place or worst — suddenly woke up at the 3rd League and flew 19 miles XC. He's always had a reputation as a top pilot, but was so laid-back we'd forgotten of late just why he had such a reputation. Bodes well for his retirement from the BHGA and a visit to the USA this summer.

The way things are going, there's a lot more edge in the competition this year. Thanks to the Sports Council, we have a good base for overseas competition funding, but winning is more important that it ever was, and that pressure will have to be handed off with a bit of caution. Let's see what the fourth League brings, on the same ground as 7 Silver C distance flights were made in one weekend.

One thing the League will try and do is recapture the distance record again. It feels a bit naked not to have it with a League pilots. Should be fun trying.

Brian Milton

NATIONAL HANG GLIDING LEAGUE. Position after 3 Competitions, 10 Tasks, dropping just one task result.

Trevor Birkbeck's Competition, Lake District, April 25/27, 1980. 4 tasks including XC.

Pos.	Name	Glider	1	2	3	4	5	6	7	8	9	10	Total Was
1	R. Bailey	Atlas	80	80	48	57	91	59	94	80	177	65	783 (10)
2	B. Calvert	Atlas	85	89	64	65	66	72	97	85	158	56	781 (8)
3	G. Hobson	Atlas	100	80	84	66	93	72	83	60	93	62	733 (1)
4	L. Cruse	Fledge	100	77	80	58	64	87	66	95	0	85	712 (5)
5	K. Reynolds	Sigma	95	73	0	87	49	62	67	65	138	59	695 (11)
6	Bob England	Atlas	60	44	48	62	64	82	70	90	144	74	694 (23)
7=	J. Carr	Fledge	70	73	80	93	95	56	45	82	10	82	676 (4)
7=	G. Slater	Storm	95	64	48	78	82	95	80	80	0	54	676 (3)
9	B. Martin	Cyclone	60	91	100	62	90	80	45	73	0	71	672 (2)
10	P. Harvey	Cyclone	64	47	72	67	16	0	75	90	168	65	664 (36)
11	G. Ball	Hi-Lander	75	66	48	59	64	68	56	82	129	58	657 (16)
12	J. Binns	Cyclone	75	59	80	82	80	79	52	79	0	61	647 (6)
13	M. Silvester	Cutlas	85	61	84	82	50	57	66	66	18	68	619 (9)
14	T. Birkbeck	Cherokee	70	63	48	71	96	51	80	35	0	65	579 (14)
15	S. Fairgrieve	Cyclone	75	66	48	0	80	48	65	0	128	62	572 (22)
16	J. Bridge	Atlas	60	100	32	77	83	62	30	50	0	71	565 (7)
17	J. Fennell	Atlas	75	33	60	39	55	64	89	90	0	55	560 (29)
18	C. Johnson	Vulcan	30	64	48	88	80	48	50	80	0	68	556 (17)
19	Jeremy Fack	Atlas	70	66	64	42	62	56	60	60	0	71	551 (21)
20	M. Southall	Storm	45	73	48	46	69	89	35	80	0	59	544 (19)
21	J. Hudson	S/Scorp	30	53	84	57	48	64	50	76	0	62	524 (25)
22	B. Harrison	Storm	70	57	80	75	64	64	50	32	0	0	492 (13)
23	R. Ware	Sigma	30	74	80	50	74	73	45	60	0	0	486 (14)
24=	T. Beresford	Cherokee	45	16	100	60	44	24	80	50	0	66	480 (32)
24=	A. Hill	Lazor	75	41	64	55	34	4	80	80	0	47	480 (35)
26	G. Baird	Atlas	75	50	80	43	0	48	80	52	0	50	478 (27)
27	R. Brown	Storm	30	73	16	49	79	69	35	47	0	71	469 (31)
28	T. Hughes	Cherokee	49	65	60	80	96	56	35	0	0	37	468 (12)
29	R. Freeman	XC 185	72	60	24	63	48	83	35	20	0	56	461 (18)
30	D. Garrison	S/Scorpion	50	66	68	46	56	56	65	50	0	0	457 (27)
31	R. Richards	S/Scorpion	49	35	60	64	26	0	77	50	0	81	442 (41)
32	M. Maher	Sigma	55	53	64	46	45	48	80	50	0	0	441 (36)
33	A. Weeks	Comanche	65	53	0	53	58	32	50	54	0	72	437 (38)
34	R. Black	Cherokee	60	59	60	50	0	75	20	35	0	68	427 (26)
35=	A. Doubtfire	Cherokee	45	48	48	78	0	53	52	35	0	67	426 (33)
35=	G. Leason	Storm	55	44	48	42	32	59	57	65	0	24	426 (40)
37	M. Atkinson	Storm	75	0	80	34	64	72	0	50	0	47	422 (19)
38	J. North	Atlas	60	78	32	62	48	64	45	30	0	0	419 (24)
39	G. Snape	Gryphon	15	77	32	45	64	32	0	49	0	68	382 (39)
40	D. Jones	Storm	56	32	43	53	16	0	65	50	0	57	377 (43)
41	K. Cockroft	Vulcan	45	41	16	—	—	—	15	155	61	333 (48)	
42	R. Wates	Cherokee	60	67	32	73	32	56	—	—	—	—	320 (30)
43	B. Milton	Storm	15	62	36	44	0	48	20	48	0	44	317 (43)
44	C. Lark	S/Scorpion	75	47	45	47	0	56	0	35	0	0	305 (34)
45	B. Edmeades	Storm	40	30	0	46	16	32	60	50	0	0	274 (46)
46	D. Thomas	Storm	35	52	80	—	—	—	0	45	0	51	263 (45)
47	J. Sharpe	Cyclone	0	34	48	60	16	72	—	—	—	—	230 (42)
48	P. Day	Mny '78	15	—	—	44	87	—	15	15	0	45	221 (47)
49													

Richard Iddon. Not flown so far because of injured leg
50 John Fack. Not flown so far because of injured arm.

Lake District Flying

by Hughie McGovern

If Hughie had written and published the following article a little earlier, many more than 9 League pilots would have gone XC in the 3rd of this year's League competitions. There's no doubt that the Lake District creates its own weather system, clagged in when other areas are flyable, but often startlingly brilliant to fly when other parts of the North Country are blown out with high winds. A week before the 3rd League, Hughie, Bob Calvert and Geoff Ball went up to the Lake District to fly the extraordinary WOLF CRAG, near Keswick, with its frightening no-man's land behind the ridge that discouraged cross country flight.

The redoubtable Mr. Birkbeck lists this as a Mickey Mouse site in his run-down of sites for the Lakes League, and compared with Carrock and Skiddaw, it is a little insignificant. But it is by no means a lowly site, being approximately 1,500ft. asl, and vertical rock face for half its length. A quick consultation with D. Weeks at the bottom of the site confirms perfect flying conditions, 15mph on top, and endless cumulus everywhere.

Bob and Geoff consult and this now-famous double act are convinced that a big one is on today. With the wind from the north, no matter how far they get they're heading home to the south.

The Calvert's away and climbing, Geoff needs a hand to get the tall 'A' frame up his Vulcan on the steep side of the hill. (We've only walked up half way) and I wire him off to chase Bob. I rig at a more leisurely pace and chat with Tony Rathbone as I assemble my prototype 'Hi-Lander', the one with NAVY and U.S. FLEET AIR ARM emblem on the sail.

Bob's hooked something — or should I say something's hooked him — as the hand of Big 'G' beckons him skywards at a rapid rate. I launch and proceed to emulate a brick, "not a good advert for flexiform" I muse, as I investigate the deep, dark lower regions of the crag. I figure it's not the ideal place to scrape looking for lift and I reckon like a nonk that I've launched into the big sink behind Calvert's big up.

I hack it for twenty minutes as a few others join me low down. Then I get a little 'up' and urge the Hi-Lander high enough to top land. A couple have gone down and Bob and Geoff have landed. The assembled company speculate that the meter in my brand-new Colver has been wired the wrong way round and I've been 360'ing in sink. Dave Weeks jokes about my lead boots and I generally take some stick, but, being thick-skinned, I take it and inwardly weep!

Tony Rathbone is full of words of wisdom, like 'Think up', so I slide off again, this time to observe the tops of everybody else's sails as I latch into a 7-up which wafts me to 800ft. The Colver seems sluggish compared with my Altitecknic, and Bob and Geoff later confirm this.

I get bottomed in sink, and as I clamber back up a huge cloud approaches, to be greeted by Jo Binns on his Sly-Clone.

Geoff plays the Good Samaritan and comes down to help me up. I can see he's regretting doing so as Jo skies out so he needs no urging when I offer him the Hi-Lander to fly while I get my breath back. He chases Jo and soon they are specks below the expanding cumulus.

Meanwhile, I join Bob C. on the ground (I'll just give you that again, **Bob C. on the ground**), while others sky out. Bob reckons he doesn't like the look of it. Jo and Geoff continue to diminish in size as the cloud beckons. Jo pulls out around 2½ grand but Geoff keeps on screwing the Hi-Lander until by now

he's 2 miles plus back from the ridge. I prepare to fly his Vulcan down to the car to go find him, but wait, he's hesitating . . . he's turning back . . . he's dropping like a stone and it's speculation whether he can make it back. The Hi-Lander wins through and Geoff lands a couple of hundred yards back from the edge to talk of 3½ grand over take off.

Why did he turn back? Well, apparently the horrific prospect downwind daunted even the fearless Ball. The huge craggy mountains interspersed with lakes and trees and inhospitable landing areas could make an aborted XC very hazardous. Bob C. says he didn't go for similar reasons. (*He didn't say that a week and 19 miles later!* — Ed.). So nobody goes XC today in spite of the superb conditions, and everybody enjoying themselves.

It's a fact that what goes up inevitably comes down and the areas of sink behind the big ups kept everybody on their toes, with even Bob C. working hard on one or two occasions just to stay airborne. Nevertheless, an excellent day's flying in beautiful surroundings, with the evening bringing the usual smooth

conditions to help us unwind.

It was good practice for the League Pilots as the Lakes League was the following weekend. Geoff and Bob agreed that had we been on our own patch they wouldn't have hesitated to go XC but the Lakes need special consideration before going overland as an outlanding could be dangerous.

Incidentally, there was no evidence of wave in the Lakes that day, and the wind, even at height, was never strong. Yet 100 miles south, back home, it was fairly strong all day and the few who did fly said it was rough, with wave. We have often found this a peculiarity of the Lake District when it is windy elsewhere. The Lakes' sites provide flyable conditions when nowhere else is flyable.

As a footnote, let me say that if this report encourages you to sample the delights (and hazards) of Lakeland flying, please do the Lakes Club the courtesy of phoning before heading off up there, because — like other areas — they have sensitive sites that require a diplomatic approach to keep them open. Dave Weeks is the man to contact.





THE DELTA SILVER PROFICIENCY BADGE

We have a Silver. The **FIRST** in the UK and the second in **EUROPE**. Great stuff. You will remember that last July I said that the first 50 Delta Silvers would be issued by the F.A.I. from **PARIS**, and that No.1 had gone but No.2 and the rest were there to be won.

Well, to be formal, it now gives me great pleasure to announce that **DELTA SILVER BADGE No.2** has been awarded to Jo Binns.

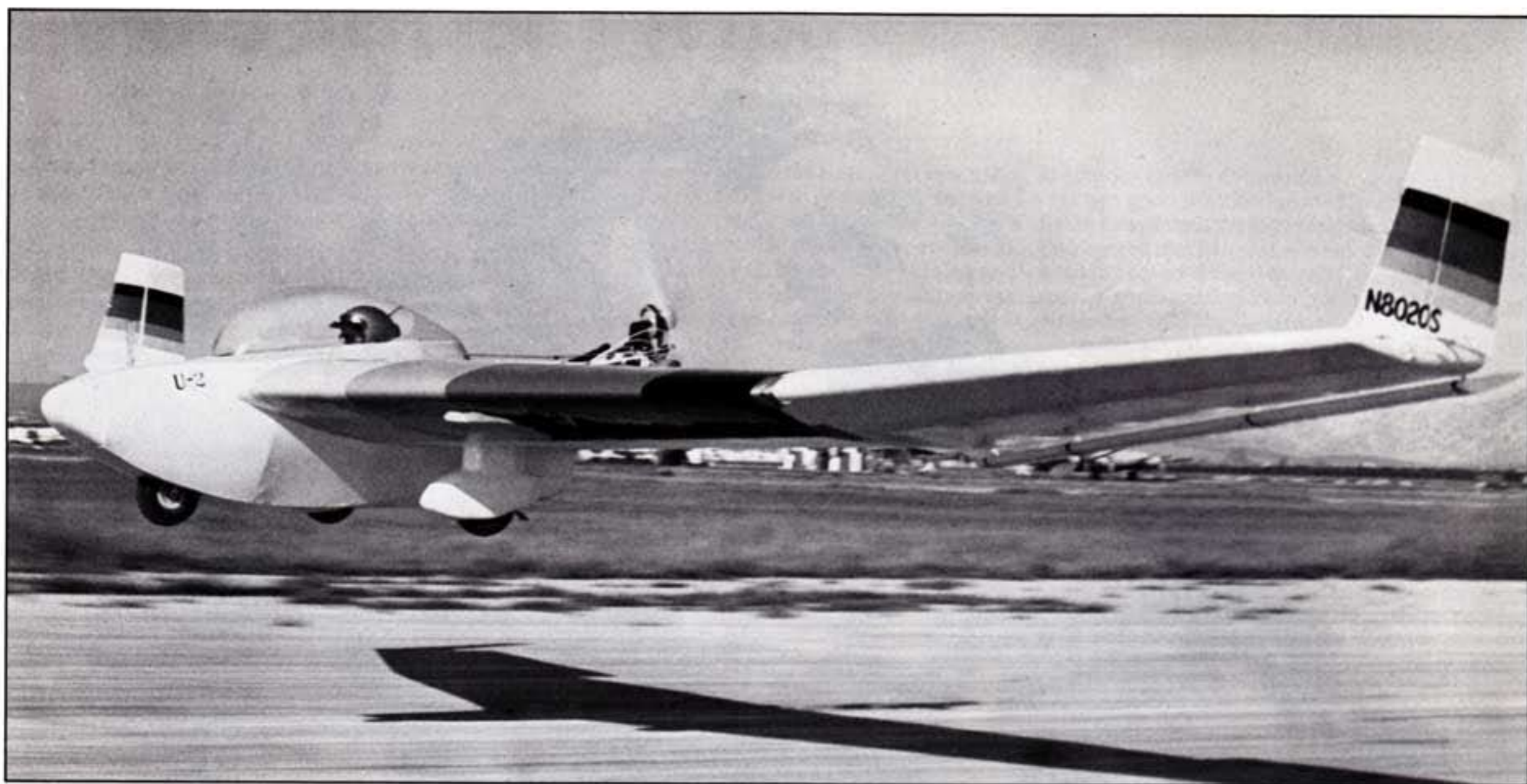
Jo commenced the flying tasks in July '79 with the Distance and Height Gain. The distance that he achieved was 60.82 km. Place of take-off was Gunter Canyon, California, USA, and landing was at the junction of State Highways 6 and 10 in Nevada. During the flight he achieved a height gain of 1000m several times. Take-off height was 2529m and the highest point reached was 4053m, so his height gain was 1524m. The Duration Flight task of 5 hours 5 minutes was flown in this country at the Long Mynd on the 9th April '80.

I'm sure that you will join with me in congratulating Jo on being the **FIRST** British Pilot to receive the Delta Silver Proficiency Badge No.2 and to have his name inscribed in the F.A.I. Register.

Rick Wilson R&FAIACO
Tel: 0734 21099

Jo Binns, Britains first Delta "C"

—photo Mark Junak



Mitchell U-2

Porterville Powered Fly-in

George Worthington reports from Porterville in California
on the 1980 Easter Mitchell Wing Fly-in

Everyone was invited to this fly-in. Not just Mitchell Wing owners but all the other powered hang glider types. Eight Pterodactyls, 7 Mitchell Wings, 3 Easy Risers, 1 Kasper wing, one twin-engine powered rogallo, 3 powered Quicksilvers and one foot-launched Icarus V. And of course the star of the show, the Prototype U-2. Surprisingly, there were no Wizards, FLACs, Eagles, or other powered rogallios as I had expected, (and hoped).*

Let me give you a little information about the U-2. All the others here at this meet are hang gliders, which have been given a landing gear and a motor. But not the U-2. It is an experimental home-built airplane. It looks like a Mitchell Wing. But the airfoil is different. It has a completely enclosed cockpit. Originally designed with a retractable tricycle gear, it temporarily has a streamlined fixed gear (because of the need, several times to reposition the main wheels). I saw it fly on Friday, April 4, 1980 with a 12hp MC-101 engine. The performance was impressive. It cruised at about 65mph. And it sounded like an airplane because of its speed and a large prop and an RPM reduction system. I made two flights in the ship on Saturday. On take-off number one, I over-controlled as I rotated to leave the runway, in spite of having been advised that the pitch was very sensitive. The landing was fair with only slight pitch over-control. On the next flight, I had learned enough about the stick sensitivity so that both the take-off and the landing were smooth. All in all, I consider the ship to be an excellent, high speed docile, economical little airplane. I would, of course, have loved to have turned the engine off to have tried some soaring and cross-country thermalling, but there was no opportunity to do this (on this trip).

The Pterodactyl engines which I saw here, are big (about 25hp) but turn small props with lots of noise. They perform well, but it seemed to me that they were somewhat limited in manoeuvrability because

of the requirement for the pilot to change pitch with weight shift. It's a compromise, I guess. They have limited pitch response but great portability, because they can be carried on a car without special racks. Also, it seems that because of the fact that they have much larger wheels (than the Mitchell Wings) and the landing gear is "sprung" (by the use of bungees), they can be successfully landed and taken off from much rougher ground. I think this will open up exciting possibilities to hunters, fishing enthusiasts, and outdoor people, due to the fact that they can land and take-off almost anywhere. In a 10mph wind they require only about 30ft. of ground roll for take-off, and about 20ft. for landing.

On the basis strictly of performance, on take-offs, landings and air manoeuvres, the ships I saw rate in a descending order about like this: U-2, Mitchell Wing, Kasperwing, Pterodactyl, Weedhopper and Quicksilver. The differences seem to be significant. At the bottom end of the scale, the Quicksilver is hopelessly outclassed. I watched about 20 Quicksilver take-offs and landings. They looked somewhat scary to me. They were often tilted up on one wheel and looked as though they might turn over. However, they never did. They were ungainly in their take-offs and landings in anything except calm late afternoon winds. They looked sluggish in the air. However, the engineering beauty of the landing gear system was very impressive. They even had attractive plastic windshields in front of the pilot's body. And because of their ungainly take-offs and landings, they were often more fun to watch.

It seems to me that (powered hang glider) engine-prop performance has come a long way since 1978. The horse power has increased dramatically. The Pterodactyls had the biggest engines, rated at 32hp, but detuned to a max of about 24hp for prolonged life. The Quicksilvers had the smallest engines, with the 10hp Westbend. The Mitchell Wings used the

12hp Mac 101. The Kasperwing used a 15hp engine.

The Kasperwing was an impressive "newcomer". It is one of a kind, which is now being sold in kit form. It can do some amazing things in the air. For example, it can descend almost vertically in a controlled mush. It can use the wing tips as excellent spoilers. And yet it has remarkable speed. We had an impromptu engine-off L/D contest, between a Mitchell Wing and a Kasperwing. From a point about 500ft. in the air, while flying side by side, both pilots turned their engines off and glided straight ahead. The Mitchell Wing glided 1600ft. further, before touching down. And its glide speed was about 8mph faster. In a second contest, between a Pterodactyl and a Kasperwing, using the same method, the Kasperwing glided 1000ft. further. It should be pointed out that these crude tests are not proof of anything. There were too many variables present. But it did surprise me, because the Kasperwing is strictly a single surface airfoil. I thought that the results, with the Pterodactyl and Kasperwing would be the other way around.

The Kasperwing has one particularly excellent innovation. Instead of having two twist grips to actuate the rudders, it has a yoke, like modern airplanes. The result is that with only one hand, the pilot can (1) actuate either rudder or (2) both rudders at the same time. The system that accomplishes this is made up of 4 or 5 push-pull-tubes, and is sophisticated and remarkable by hang gliding standards. The Kasperwing has a great future. Although it ostensibly had about 45% less horse power in its engine unit, it seemed to me to perform as well or better than the Pterodactyl. Hopefully, some side-by-side testing will be done by someone, soon, to test the impressions I received. Remember, they are just impressions and should not be accepted as fact.

Irish Incident

by Mark Leslie,
Irish HGA.

"It's a hang glider," I explained. "You stroll up the hill and jump off." The gnarled Connomara sheep farmer shook his head pityingly. "Whatever you say yourself."

Conditions were perfect for my anticipated cruise to Leenaun, nine miles down the jagged rock wall of the Maanturk Mountains in County Galway. Light winds had thwarted previous attempts, but not this time. I gritted my teeth on the 2000ft. 'stroll' up to the ridge top.

Smiling toothless faces greeted my ignominious return to the valley, weakly clutching the remains of my "heathen contraption". Hah! Curses! Foiled again! etc., etc. In my greed to

avail of the steady 25mph wind blowing straight up the 70 slopes, I had carried the glider to the edge whilst strapped in. The ensuing ignoble ground-loop was purely and inescapably of my own making.

SURGERY

Some weeks later saw the kite undergoing drastic modification by a cannibalistic process of transplant surgery in the hang gliding "elephant's graveyard" in Tom Hudson's garden. Spars were spliced, tangs tuned, seams stitched, nuts nudged, grommets gusseted, holes housed, riggers riveted and booms busily bent until the debris once more resembled a glider. After a careful check the patient was declared fit for flight. Scene Three sees our hero poised on the rocky cone of the Great Sugarloaf. Wicklow is ominously silent, blanketed in five inches of snow. The white deserted dual carriageway 1300ft. below beckons a tempting novel landing zone. With a three month lapse, flying regains the sheer terror so familiar when a novice. After a more than usually thorough check, I lift the nose with trepidation. One heave and we are off. An unnerving split second passed fumbling for the foot rest before I recline back

into my comfortable supine harness. Delightfully, I find myself steeply climbing. Fear and tension recede with the summit, replaced by the relaxed euphoria of smooth soaring.

ILLUSION

After five minutes of indolent floating I remember that I am here to test a repaired kite. I begin a few manoeuvres, observing the ruffled sail from my head back vantage. Half way around a tight turn my blood freezes. Is it an illusion, or is the right leading edge bending between the boom joint and the nose plate? Levelling out, the kink seems more pronounced. With 1000ft. of air space below me I am horror struck at the thought of the tiny pieces of my kite mystifying the accident investigators. Hardly daring to look up to the visibly increasing bend in the spar, I fly down, torn between the instinct to burn off height with speed and the desire to put the minimum strain on the air-frame.

After an agonizing eternity, Kilmacanogue GAA pitch floats 200ft. below. Patience cracked, I plunge the machine into the ground in a spiral side slipping dive. Remembering that there are no exploding fuel tanks to avoid, I emerge gibbering from a prostrate

ground-hugging posture, to inspect the guilty leading edge. Removal from the sail reveals a small dent in the underside surrounded by the white streaks of strained aluminium. This was externally invisible when the kite was untensed on the ground. Tom Hudson's verdict is that complete structural failure was but minutes away. This kite had been inspected by more than one person, and had undergone a thorough pre-take-off check.

LESSONS

1. When repairing a kite, do not just remove and replace the obviously damaged components, remove and minutely inspect all the apparently undamaged parts. If there is the slightest hint of a dent or crack, however small, replace the part. It can and will spread in flight.

2. Treat the first few flights on repaired machines as strictly "test flights". Fly with more than usual vigilance and attention to the kite. Perform deliberate test manoeuvres, limit duration, and make meticulous post-flight checks.

Failure to rigorously observe the first point endangered my life, but adhering to the second, luckily, saved it.

An extraordinary incident

Comment by Malcolm Hawkesworth

An account appeared in last month's *Wings!* about the experience of 26 year old Lindsay Newbold, who survived a multiple tumble from 300ft. in early April after his *Wills Wing XC 220* was struck by turbulence on a Welsh hill. Malcolm Hawkesworth, boss of the Peak HG School, who knows a lot about *Wills* gliders, has the following observations to make about the *XC220* and *XC185*:

In Lindsay's opinion the turbulence that caused the glider to invert, and then break up, was so severe that it would have broken up any glider. I would not entirely go along with that because gliders of today's state of the art tend to have less wing tube aft of the cross tube junction, no reliance on deflexors and do not rely so heavily upon defined tips for pitch stability. However, I would agree that any glider of the vintage of the *XC* would probably have acted in the same way.

One must also bear in mind that in many cases of total glider inversion, the pilot fell into the keel, causing it to break, followed by a total break up of the glider. This is still a high probability with most of the latest models.

Before any sanctimonious type reaches for a pen you should know that the force Lindsay experienced was such that his helmet flew off and he could not move his arms to deploy his parachute during or after the first inversion. He was lucky that he fell into the sail. He was even luckier in

that only the previous week he had purchased a parachute, which, when he did deploy it, stabilised the glider.

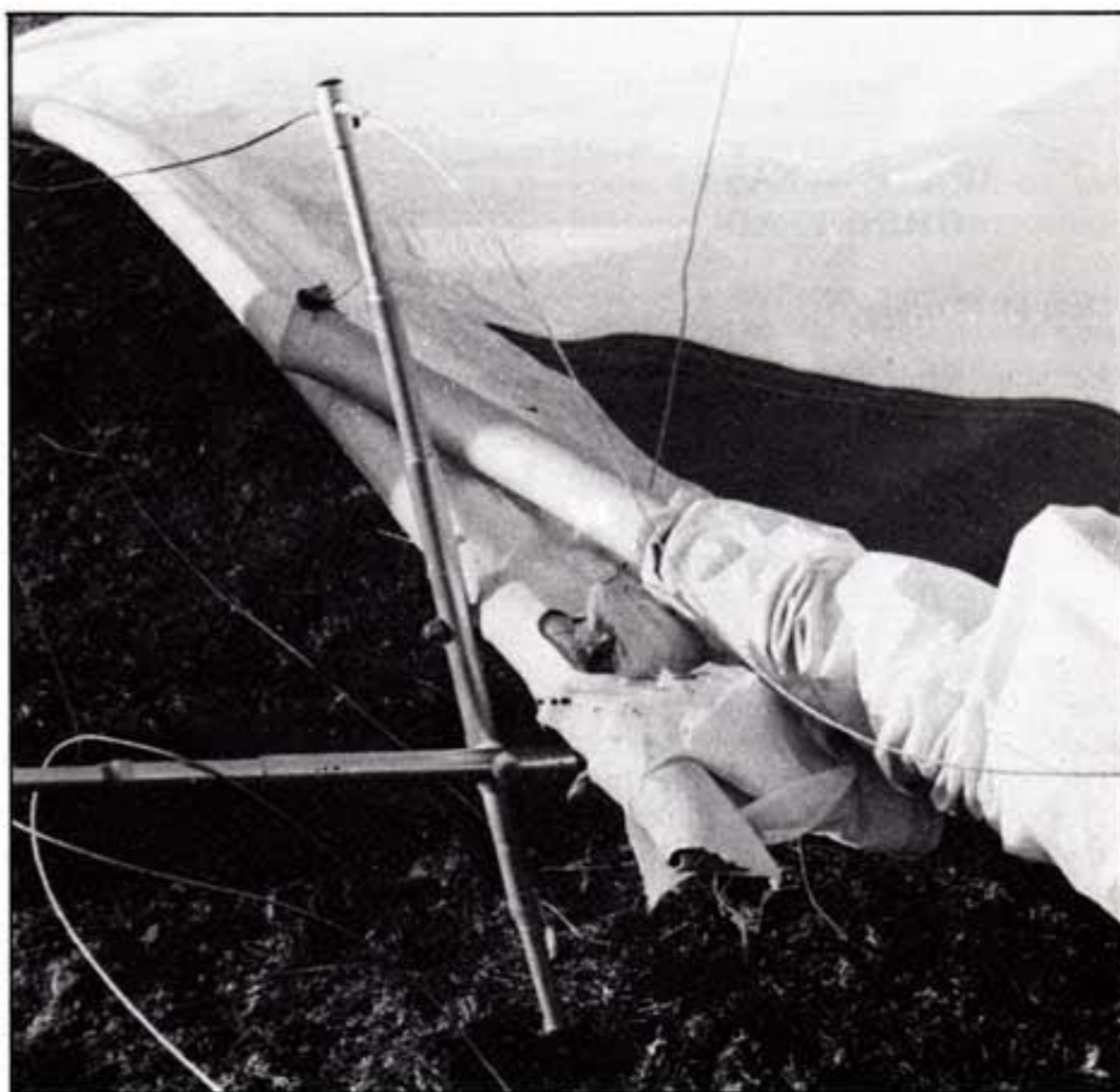
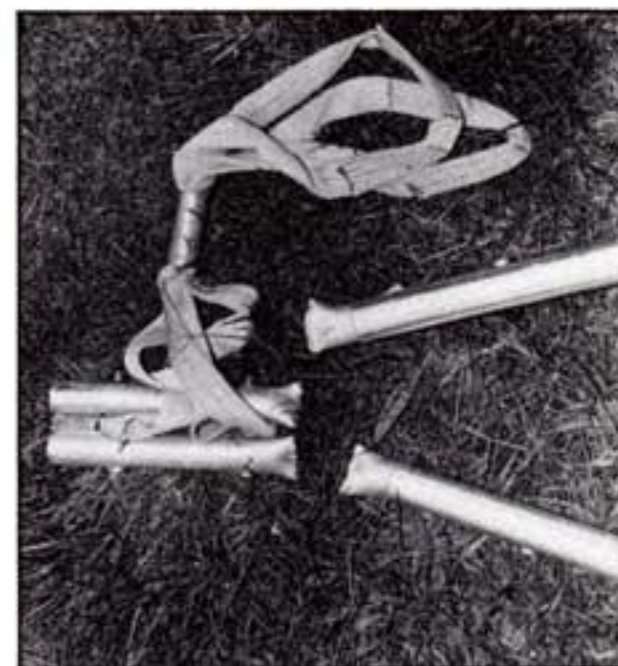
RECOMMENDATIONS

The following are recommendations that I WOULD PERSONALLY SUGGEST TO ANY XC owner, especially if it has had continuous use over the years.

- (1) Oversleeve the entire floating tip tube with $\frac{3}{4}$ tube and internally bush the front 6in. with a wood insert.
- (2) Internally sleeve the kingpost with 1in. 16swg.
- (3) Fit leach lines from the kingpost top to the rear of the longest batten sleeve.
- (4) Replace the down rigger wire every 100 flying days (this did not fail during Lindsay's accident but warnings have been published in all magazines in the past about wire fatigue where a deflexor wire has to pass around a pulley through a severe angle — this applies to any glider with a nose pulley and is worth mentioning).
- (5) Buy a parachute (that goes for everyone).

This advice is offered by me personally, without prejudice, based on examination of the glider, detailed interrogation of Lindsay Newbold, examination of photographs taken at the scene and knowledge of the current state of the art. In no way am I saying that implementation of the foregoing will guarantee 100% safety, but it certainly will help. If any XC

owner would like to call Malcolm Hawkesworth to discuss this further, please feel free. The number is 053834 308.



LETTERS Edited by Stanley Pottinger

NONK INSTRUCTOR

Dear Editor,

During a visit to that "safest" of sites, Rhossili, I was one of a party of nine Loughborough University students who went for a week during our Easter vacation with the University Hang Gliding Club to fly various sites in S. Wales. One of these sites was Rhossili and on this particular day the conditions were good, albeit not perfect, with a moderate-fresh NW wind. I had, in fact, flown this site three times before and although I don't regard myself as a nonk, I certainly don't profess to be an experienced pilot but was aware of my limitations. Anyway, on the day in question, there was a number of our party on top of the Pimple and, having just rigged our kites, we were eagerly preparing for take-off. Those who were in our group

but not flying were acting as nose-men. However, at this point a well-known South West Instructor (?) appeared. He himself wasn't flying but instead came over and started telling us how to fly the site in spite of confessing he didn't know the site very well!

He led our first pilot down the Pimple to a take-off point which he specified was the "correct" one. There followed a five minute lecture on how to take off and where to fly while the rest of us had to stand by. The pilot, who had some soaring experience under his belt, was seemingly being treated like a beginner on a training slope. When it came to my turn to take off I too was intercepted by the instructor who proceeded to give me more than mere advice. In spite of protest, he took over from my nose-man and then proceeded to give me my take-off instructions. He assured me that a "straps tight" take-off was the only one to use in the circumstances. I told

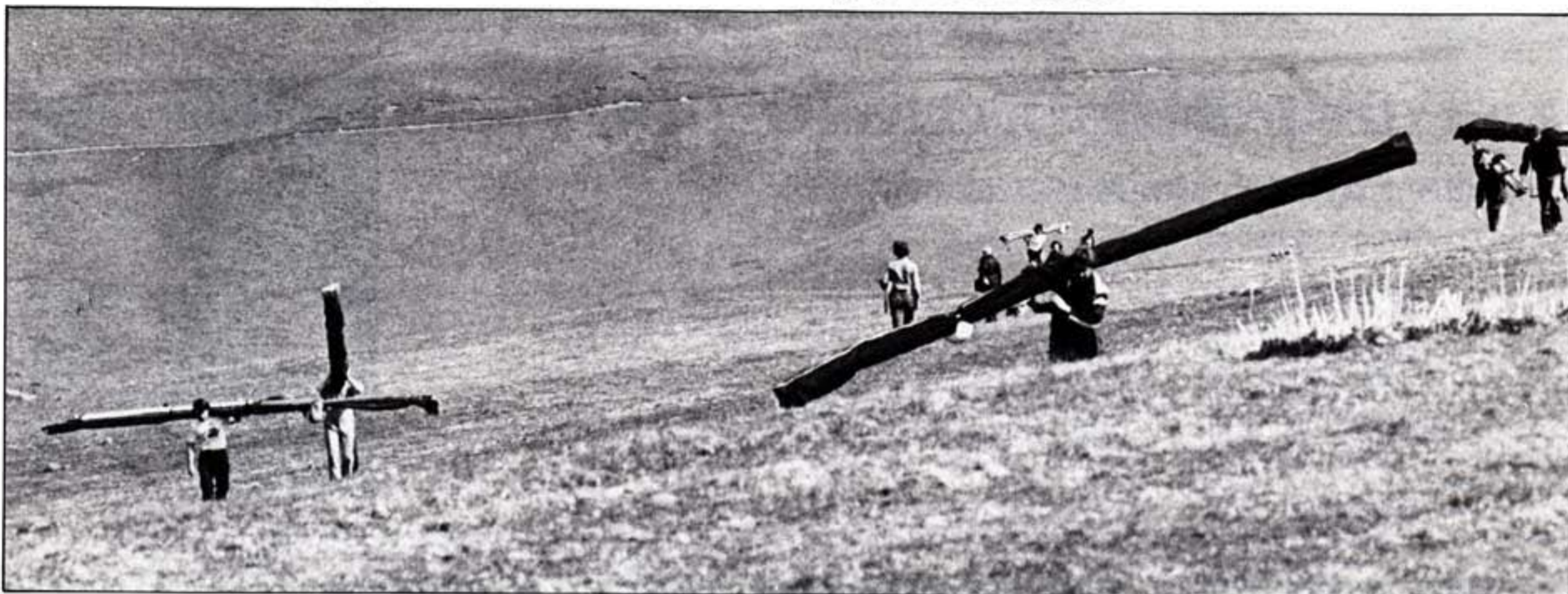
him that I had always used the "straps loose" take-off method, which I had been taught, and had always been happy with it. Nevertheless, I was informed, the "straps tight" method was the correct one for the wind speed (18-22mph) and anyway now was the best time to learn. Without wishing to enter into a "straps tight" versus "straps loose" debate, I would just like to say I was unhappy with the idea but how does one say no to an instructor? He continued by giving me a count-down after which I was supposed to launch myself into the air, or rather he released the nosewires by which I was automatically launched, ready or not.

Almost predictably, with the bar not fully in when the nosewires were released, the Spirit (which the instructor obviously did not know should not be launched with the sail billowing) ground looped on top of the hill, bending downtubes, the kingpost and snapping the keel in two places.

I can understand the responsibility an instructor feels towards less experienced pilots but I do think the line can be drawn. In this case, the instructor clearly did not know the site very well (if to be judged by his rather extraordinary take-off and even more extraordinary landing) nor the kite (he had to ask me what it was!). I also blame myself for not having the courage of my convictions to refuse to take off with straps tight as I was unhappy with it. This is not calling to question the method, indeed I would concede that possibly this method was the best one in the circumstances, but I would say I have learnt a valuable lesson in that one should not do anything that one is not totally happy about.

After all, it's *your* life!

Peter Savill



IRATE — EAST GRINSTEAD

Dear Mr. Trickey,

Re your letter "633 Hang Gliding Squadron" in May *Wings!*, your idea to minimise hill wear and tear is to have pilots take off in a bunch and then set off cross country in different directions, or something, clearing their cars away at the same time, somehow. You say "failing permission being given, small raiding parties may need to test the idea." Christ Almighty! You sound like a cross between Biggles, The Court Jester and Attila the Hun. This is England, it's peacetime and anything more damaging to future negotiations I can't imagine.

I think you should read 'Brothers in Law' in April and May *Wings!* to see how delicate these situations can be. My letter to Mr. Glanville in April *Wings!* states very clearly my views on

trespassers. After that, you should shove off back to BFPO 106 before you do any damage.

You did say your letter might be worth printing to see what comments it provoked!

Bill Lehan
East Grinstead

JUST AS IRATE — EAST DULWICH

Dear Editor,

Re the article "Wiseley Injured" in the May issue, I strongly object to the biased way Brian Milton presented it, especially the concluding paragraph, which implies that I am someone to steer clear of when I ask for a wireman.

I have been flying for four and a half years. I hold a Pilot 2 rating and I have never suffered a personal injury, or

caused one to the public or my fellow flyers, including Bob Wiseley.

What actually happened at Beachy Head on that Sunday in March was as follows. The wind was strong and gusty, so I decided to take off further down and to the right of the usual take-off area, as all the other flyers were also doing at that time. Due to the conditions that day the necessity for a prone launch was indicated. Bob was holding the nose wires, he said it was all clear so I told him to release, which he did. On take-off I immediately encountered a strong downdraught which made me accelerate forward and down. Bob was not expecting this and instead of going to one side as is usual, he tried to duck under my control bar, lost his balance and fell over backwards. At no time did my body or any part of my glider touch him. It was just an unfortunate chain of events that could have happened to anybody and should not be used to bring my

flying ability into disrepute. In conclusion, I have never encountered any reluctance when asking for a wireman, before or after the incident.

Really Milton, as a professional journalist you should know better than to make sweeping statements that have no basis in fact.

B.C. Puckey
East Dulwich

NUPTIAL NOTE

Dear Editor,

Just a quick note to tell you about our "goings-on" before we got off on holiday. The wedding came and went peacefully and uneventfully until we got outside the church and met the 'Daily Express' photographer. He took a few shots then we carted all our guests (my mother looked rather shocked but resigned to the fact that

this was typical of us) back to a field opposite our house. We rigged the Cyclone and got half a dozen burly chaps to tow us. I put my jeans on under my wedding dress and my blue wellies — but it's very difficult to wear a prone harness over a long dress! You should try it sometime . . . Had a few shots drinking champers, all in our gear, then tried two or three VERY abortive attempts at hand-towing two-man. Yes, it was a flat field, too. The main problem was the chaps just didn't give it enough stick. Anyway, these photographer chaps never say die (do they?) so he volunteered me to go up solo. The first attempt wasn't too brilliant but the second time I did manage to get 8-10ft. off the ground (and land on my feet). He went away happy. It certainly brightened up what may have been otherwise an ordinary wedding day, apart from the fact that I went to the church in our brown moggy pick-up which we tow with.

Mind you, it was a bit touch and go persuading Dave to go through with it, Clive to take photos and Nigel to drive me because it was such a peachy day. We were wondering if we'd get the odd hour to go down to Bovingdon and have a tow or two. Well, now we're off to Florida for three weeks. Everybody thinks we won't be doing any hang gliding — all our relatives are relaxing a little — but THEY don't know about Cypress Gardens!

**Kay and Dave Simpson
Hitchin**

P.S. Accident Report — one bruised shoulder and scratched eye (I must be nuts!).

FROM OUR CONSULTANT DEVELOPMENT OFFICER

Dear Editor,

I have recently acquired (for 50p) a degree in elastic band engineering so's I thought I would answer David R. Hawkins of Windfilth's letter (April *Wings!*). I have designed a propeller driven crash helmet that can drive a hang diver along at a steady 60mph. This can, of course, result in a broken neck but most pilots using my system wear a truss so damage from "reflex whipback crush" is practically eliminated. The system works by passing two lengths of knicker elastic connected to the propeller down over the back of the ears, down inside the string vest and through the front of the underpants. At this point, the elastic crosses over around a piston and two cogs, a little goose grease here stops the eyes watering, and then down the inside of each leg, finally tied off with a clover snatch to the big toes. A few pilots have become ambidextrous because of poor pre-flight checks here. When in flight, the legs are opened and closed in a scissor action which in turn spins the prop and away you go. If a good flying speed is not reached after two hours, chances are the coggles inside the helmet are rubber ducked and a little 1 in 3 bullshit oil is required.

When coming in to land, don't forget to stall or try a bit of rotor, this is always a good end of flight test.

Plans for the self-propelled helmet are up for grabs, £75 a copy with a free spirit level. Anyone with helpful ideas for my new parachute system? Six bin liners tied together with pussy gut and stuck to the queen post with a large gob of chuddy gum. Let's have some more constructive comments from experts.

**Gordon Hardy
George Caley Club**

D.I.Y. — A.S.I.

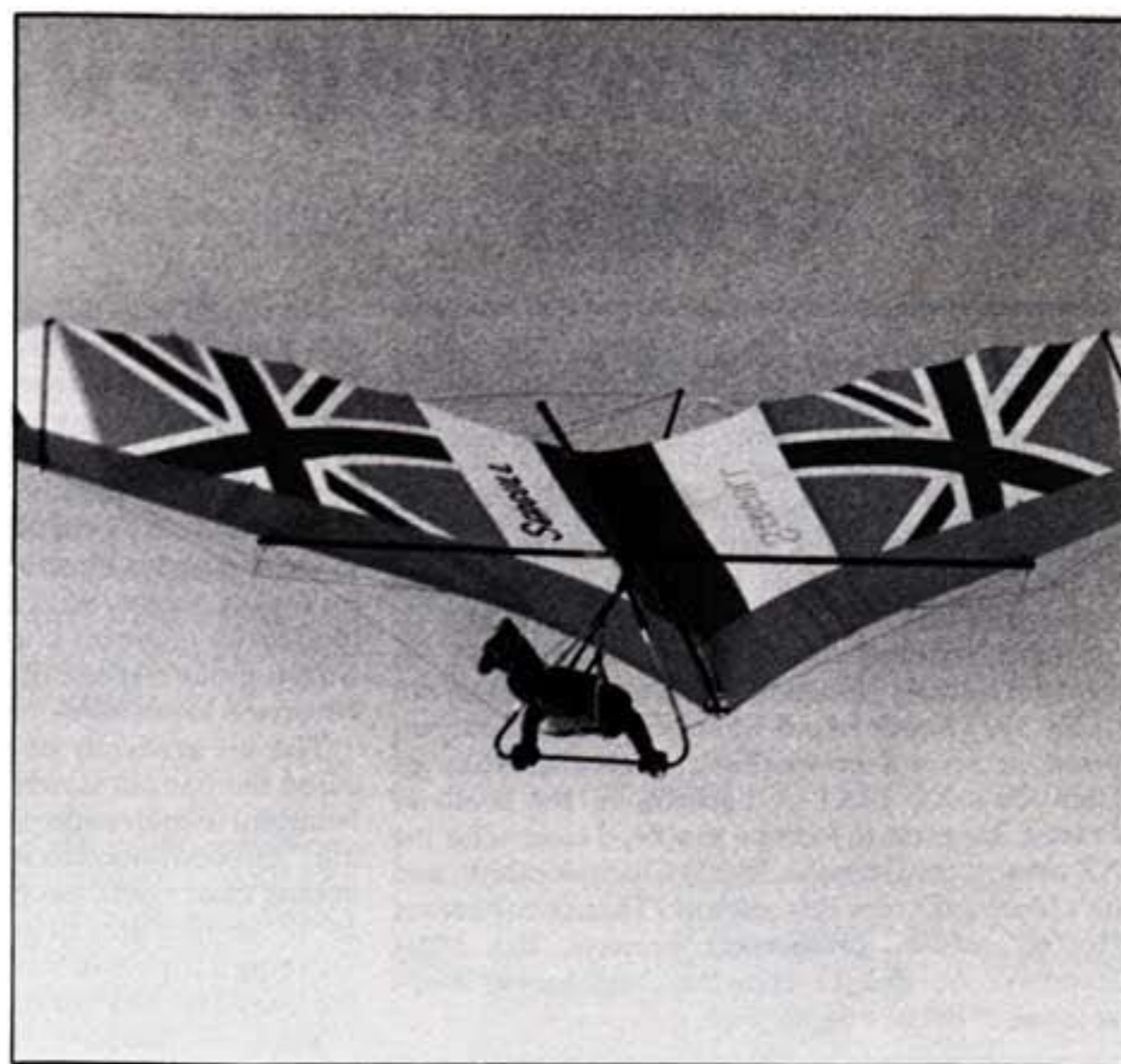
Dear Editor,

Now that's more like it, Milton! I refer to the May edition of *Wings* (I refuse point blank to put that stupid exclamation in). From an attractive colour cover, through a series of articles covering a wide range of interests in the sport, a most excellent production, with a welcome absence of the bitchiness evident over the past year. More of the same, please. I'd only add that, although most of the people concerned with the production of the magazine have been flying for a number of years, are fairly advanced and probably are fascinated with the League, most of us have only taken up flying hang gliders recently and fly for FUN, not competition. Can we have a few more articles of help to the new flyer?

By the way, I'm amazed that so few people fly with an airspeed indicator, as no other aircraft flies so perpetually near the stall as a hang glider. It has, as far as I'm aware, the smallest speed range of any aircraft. How many accidents have been due to insufficient airspeed? To remedy this, here's my idea for a cheap A.S.I. It's been tested and it works a treat.

Go to Halfords and purchase (for about £8) a bicycle speedometer. The one I got was a German one, with the speedo dial conveniently divided up into coloured sections. 0-15mph was in green, 15-30mph was in orange and 30-45mph was in red. This is nice as all you have to do when flying is keep the needle in the orange section, without squinting to read the numbers.

You discard the cable and the little wheel which rubs on the bicycle wheel, just retaining the speedo head. This has a square hole about 2mm across in the back, into which the cable end fits. Get a 4BA bolt about 2ins. long and file a square end on it, tapered down so that it can be jammed into the hole in the speedo. Then you cut an aluminium prop about 6ins. long, drill it about 4BA in the centre, fix it on to the bolt with two nuts and set the pitch of the prop by twisting the blades to calibrate the thing. I set mine up against a ventimeter and it's pretty accurate from about 10mph up to about 30mph. This is just the range we need and what's more the inertia of the prop tends to "average" the reading slightly, making it easier to read while flying. As it's designed to clamp on to



bike handlebars, it will fit on to a standard instrument.

**Roderick Buck
Grantham**

FROM ONE OF THE COLONIES

Dear Editor,

I am over here in the States setting up our Rehabilitation Organisation in North America. I have more recently moved to New York after two years in Los Angeles. I started my Hang Gliding with Joe Grebb and Rich Grigsby before coming East. I have no experience of flying in the U.K. but had watched it for several years. My home base in England is the village of Bury in West Sussex. I am a recent Hang III graduate but still feel very novice. I fly Ellenville (1,150ft. take-off) in the Catskills. We are organising the U.S. Nationals there in September this year.

One windy, rainy, winter weekend in January a bunch of us were talking about colours/makes/models for our next glider — red, white and blue came up and in my mind immediately translated themselves to the Union Jack. I am proud of being British and very proud of the British hang gliding successes in the American Cup. Last year, I was away, otherwise I would have been a loyal supporter for you. On that score, I would make an offer of accommodation and a temporary base for any pilots coming over here. I am just converting a loft — so at a pinch can put up several people at once.

We have seven British flyers here — three of us fly Ellenville every weekend — there are a few more further away. Jokingly we talk about a British North American team — don't worry, it is talk as yet and none of us is very

good. Incidentally, this must be a high percentage of British, as compared to American flyers in the U.S.A. — maybe there is something in our British make-up that still prompts us to explore the fullest dimensions of our space.

The new glider you see is a 10 metre Seagull. I have not yet got to full terms with it. It flies me more than I fly it, but I am taking it slowly. With the Union Jack I feel I have to reach a very high standard. Seagull did a superb job on the sail. I am a member of the BHGA.

**Peter D. Waters
2, W16th St., G.F.R.
New York, N.Y. 10011
Phone (212) 243-1658**

CATS TOR LOST

Dear Editor,

Further to previous notices in *Wings!* about flying in the Peak District, we have now lost one of our prime soaring sites — CATS TOR.

It took eighteen months of hard negotiation to win over a farmer who was initially extremely "anti" to hang gliding. He agreed to a twelve month trial period to see if pilots were honest and paid the site fee. As usual, 95% of flyers paid but there were a few who did all they could to avoid paying. The crunch came when, during negotiation for a second year's flying, this same band of flyers (?), one of whom is reported to be a local neighbouring club official, once again failed to pay the farmer. This was the final straw and permission was refused to carry on flying at Cats Tor.

The Peak Hang Gliding Association is, from now on, waging war on any pilots who attempt to avoid paying site fees.

**John H. Clarke
PHGA**

The Blorange to Cardiff

As John Fack wrote in the last *Wings!*, a New Zealander, Brian Horrall, won the Gilbey XC in early April with a 41.5km flight from the Blorange, in South Wales, to the Coast.

Rod Stuart, one of his fellow Kiwis, now touring Europe with a bunch of Sigmas, wrote in an account of the flight, and a short biography of Brian, who apparently first began flying hang gliders in 1976 on his father's sheep farm on the South Island of NZ. He soon got into big mountain flying, and was placed 4th in the 1977 South Island Championships. He's competed in several competitions, including Mike de Glanville's XC Meet at Lachens, in the South of France. He came to Europe as official reserve for the NZ team at the Grenoble World Championships, and he's touring Europe this summer. There's no photo of Horrall extant, presumably because, like Miles Handley, he dodges cameras. But here's Rod's account of Brian's flight. . .

On 7th April, 1980, Brian Horrall, a visiting N.Z. pilot, struggled to the top of the Blorange with his Lancer IVS. After an hour he launched into the skies above Abergavenny, South Wales. He scratched around for half an hour in marginal conditions, with the wind 10-15 knots, sheering from the north, finally landing back on top.

After another hour waiting (and yarn spinning) until conditions improved, pilots ventured into the skies again. Within 15 minutes about ten buzzing pilots were circling in blobs 1,800ft. above take-off. Brian was one of them, rising at 250fpm to a height of 1,600ft. He hesitated for a moment and then thought — GO FOR IT!

He stayed with this initial blob until it topped out half a mile down wind, and then started heading for the next range. He was soon in 300fpm sink, so did a 180 and flew back into wind.

Two minutes later his Lancer was cored out in a boomer, silky smooth, 600fpm, straight to cloud base. Brian was soon in cloud and so pulled on full speed and glided downwind for about 5 minutes, not losing any height. With an air speed of 30mph every blob he hit made his kite buck like a wild horse, but with a ground speed of between 50 and 60mph he covered a lot of miles.

The lift gradually became more mild and Brian eased the bar out slowly, finding time to take in the beautiful countryside slipping by, 3,000ft. below him. Lift continued to weaken and the ground kept getting closer until about one mile before Newport he hit another area of good lift above a small town. Working it for about 5 minutes, Brian gained most of the height he had lost on the run to the coast.

Then — disaster! His vario went berserk — 1,000ft. down to 1,000ft. up — spelling one thing — FLAT BATTERIES! Curses!

Brian switched off and tried to core the lift by feel. He scratched on, leaving Newport and heading down the coast.

With Cardiff city spread out in front of him, sitting at 800ft. with no vario, and cold feet, he decided to put his ship down. He landed in the University playing fields and was warmly greeted by a friendly Welshman who promptly presented Brian with a glass of fine white wine and invited him into his home nearby.

Brian had been in the air 1¾ hours, and covered approximately 30 miles.

Rod Stuart.

“. . . touring Europe with a bunch of Sigmas . . .”

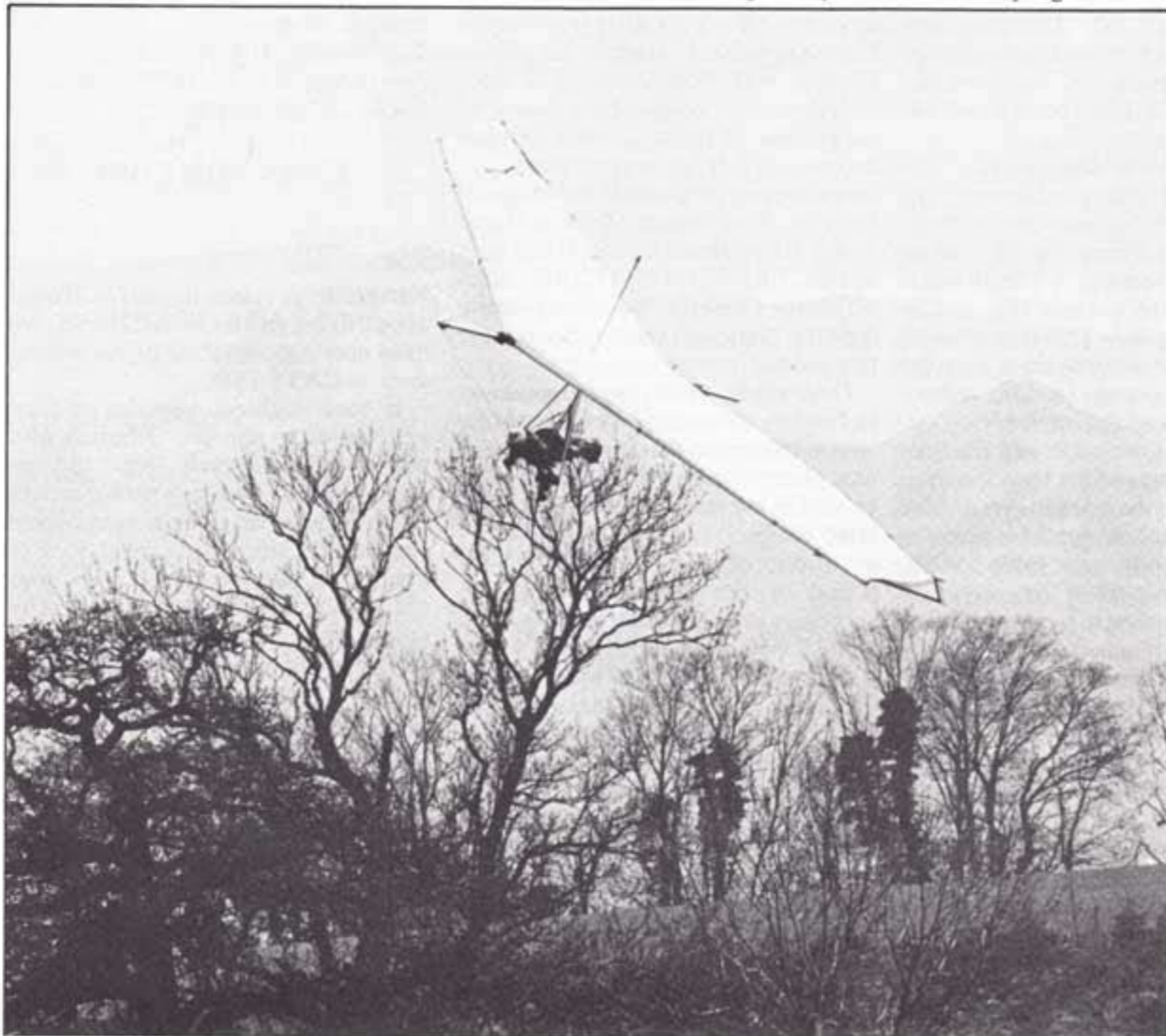


Photo: Mark Junak

First British Lotnia in Poland

by John Corfield

It's obviously rare that a P1 holder of less than a year's experience, and still flying seated, should claim a "first" of any sort, however trivial, so I hope the following account will be of some interest to fellow BHGA members.

In the middle of December last year I took my Vortex 120 with some trepidation (breakdown length 13 ft. 6 ins.) to Victoria Station to catch the train to Dover, Vienna, Katowitz, Cracow and finally Zakopane in the TATRA mountains in the south of Poland.

When I arrived, some days later, at Zakopane with the glider still intact, I was beginning to wish I'd travelled by car. I had checked at the Polish State Tourist Office in Vienna, and again in Cracow, and again in Zakopane, about flying in the Tatras, and all assured me that there was "no problem" . . . a characteristic and usually misleading Polish expression.

The following morning I set off with my glider in a taxi for the most likely flying site, a mountain called NOSAL, complete with a chairlift. But having dismissed the taxi, unpacked the glider, when I went to buy a ticket and approached the actual lift, it wasn't "no problem", but "not possible".

You can imagine my state of mind when I returned to the State Tourist Office, secured an interview with the Director of the National Park (which took a whole day), persuaded him to telephone the lift manager (who was not under his direct authority), and found myself faced with the immovable assertion that if a hang glider pilot killed himself *after having used the chairlift* then HE (the Lift manager) would be held responsible!

The Park director did what he could, which was to telephone one of the few ace pilots in Poland — Josef Gigon — who lived nearby, and Josef promised to take a day off work and come and fly the following day.

We couldn't use the chairlift so Josef and I carried our gliders up the steep slope of NOSAL between the pines. It took the entire morning, with me gaining about 1,000 ft., and Josef — 6 ft. 2 ins., 16 stone, a former mountaineer and ski jumper — climbing to 1,500 ft.

Josef went off the top, and I started rigging the Vortex, aided by a charming Polish schoolteacher who spoke perfect English and was working as an interpreter. It was at this point I discovered one of the A-frame uprights had a 20 degree bend; probably caused in the train. I had three thoughts in rapid succession: first, what would BHGA say if it were there? second, let's pretend it isn't there, and third, there was no way I was going to walk down and go back to Vienna without flying. I cautiously straightened the upright and rigged the Vortex just as Josef arrived at my level for his second flight down. He wasn't even breathing hard. I later discovered his glider weighed 90 lbs. (!! — Ed.).

Josef got behind me on the wires, I took a deep breath, looked down the thousand feet between 60 ft. pines, about 100 ft. apart, tried to forget the downhill wind of about 1½ mph, and ran down the 30 degree slope. The straps went tight, I shifted to the bottom bar, held in for a second, then pushed out and I was in the air. A hasty course correction and I was above the trees and could see the landing place, which was about half the size of the bottom landing at

Mill Hill Victory

By David Bedding, BHGA Sites Officer

In a test case in the high court on May 8th the Lord Chief Justice rejected a local authority's claim that a hang-glider pilot broke a local by-law by soaring over council owned recreation grounds at the foot of the Sussex Downs. He ruled that the by-law was invalid because the general law of the land entitled all fliers to fly at a height which caused no inconvenience to those below.

The Adur District Council's bye-law prohibiting hang gliding in the pleasure ground at Mill Hill cannot be used against us. It gave me considerable pleasure to be present at the High Court in London when this judgement was reached on May 8th.

It has been a long affair. The local public enquiry held in 1976 was widely publicised and resulted (we thought, against the balance of the evidence) in the bye-law being approved by the Home Office. The fears expressed at the enquiry look rather comic now. Hang Gliding has changed so much that the bye-law seems to be dealing with quite a different recreation.

Frank Tarjanyi was prosecuted for breaking the bye-law, and the magistrates acquitted him on the grounds that the bye-law conflicted with general law. Adur District Council appealed to challenge this ruling, and the High Court have now upheld the magistrate's decision, although not their reasons for it. The High Court judges considered that general law could be modified by bye-laws for local reasons, if these were sufficiently important to justify Home Office approval. Their reason for upholding the magistrates' decision was that part of the bye-law was insufficiently clear for a pilot to be able to obey the law.

Flying in the pleasure ground was prohibited by the wording of the bye-law, but the pilot had no way of knowing how high "in" was.

The Appeal judges insisted that it was fundamental to a just legal system that laws could be interpreted with sufficient accuracy for law-abiding citizens to obey them. Because of this lack of clarity at one part of the bye-law, the whole bye-law cannot now be used.

A flyer pausing to make use of ridge lift as he goes cross-country cannot reasonably be expected to know of a local bye-law prohibiting flying. Bye-laws are essentially local laws that are drawn to the attention of visitors on the ground. It's not feasible to erect signposts visible from the air.

This is of major importance, not only to the Southern HGC, but to all BHGA members. A number of other local councils may be considering the introduction of bye-laws and would not wish to spend a lot of effort and public funds on such an operation when there is considerable uncertainty in how to achieve just laws.

The BHGA solicitor, Anthony Maclaren, must be congratulated for the effective way he has organised the legal representatives over the matter.

Mill Hill is not quite over yet. We wouldn't be seen in a good light if we insisted on using Mill Hill in such a way that other users of the park were at a disadvantage. But then, way back in 1976, the SHGC recognised this, and was quite prepared to come to a reasonable agreement so that hang gliding was harmonised with other forms of recreation. The bye-law prohibiting hang gliding made this agreement

impossible. I've no doubt the Southern Club will have a constructive meeting some time soon with officials from Adur District Council.

Hang gliding has changed so much since the bye-law was first considered. We now roam the skies and are frequently a quiet and distant spectacle to those on the ground. Ours may be a reasonably risky sport for participants, but our record shows the risk is very small to others.

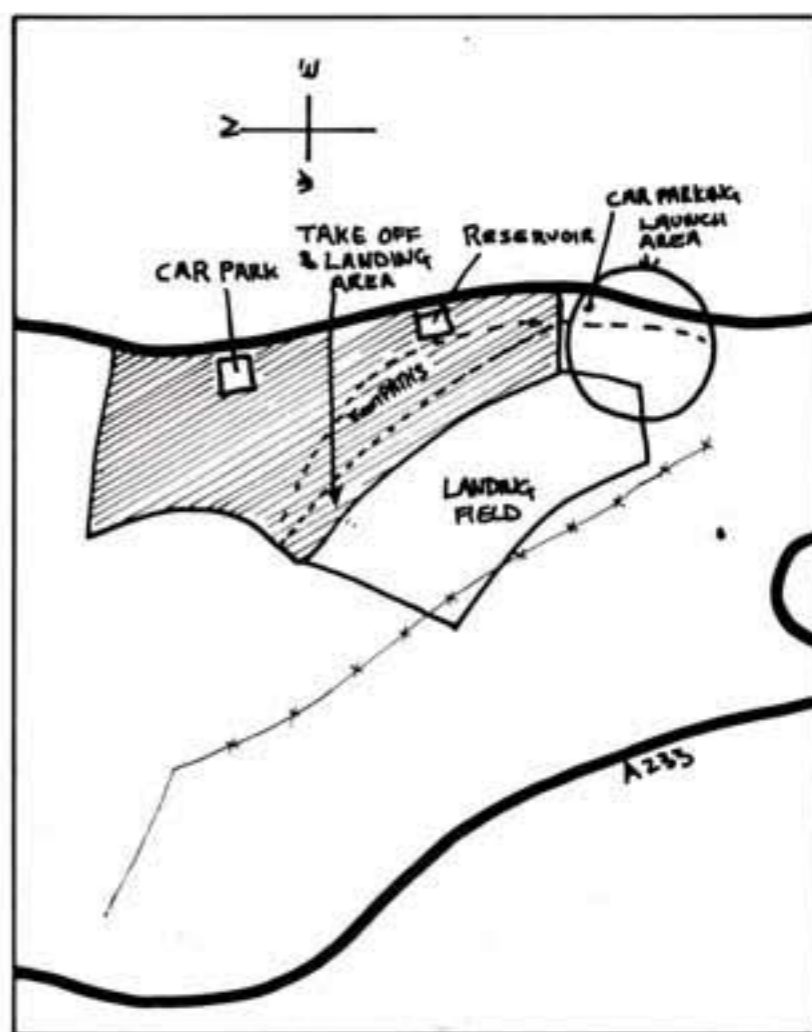


Photo: Mark Junak

1980 DIARY

June

7/8, Powered Meet, Wellesbourne Airfield. Details — Paul Baker, 0789-841114.

7/15 Norwegian XC Internationals, VAGA, for advanced pilots only. Contact Steinar Almehid, Fagertunvn 93, 1342 JAR, Norway. Telephone: (02) 243190.

9/15, Lachens Mountain XC, South of France, Open XC organiser Mike de Glanville.

18/22 Adventure Sports Exhibition, Bristol Exhibition Centre, Canons Road, Bristol, Avon. Contact 0272-298630. They're keen for exhibitors.

21/29, European Championships, Kossen, Austria. British team of 6+2+2, manager Roy Hill.

July

4/6, Scottish Open, Glenshee. Details — Simon Ogston, 0382-65437.

7/15, Owens Valley XC, Bishop, California, British team of 4.

24/27, Grouse Mountain World Invitational Championships, Vancouver BC. British team of 4, plus gift places of 4.

19/20, 26/27, Ulster XC, Prizes by Protec, £50 to winner, £100 if winner makes more than 10 miles.

19/23 Practice.

23/27, Competition, Seventh World Delta Glider Championships. PO Box 60, Cyprus Gardens, Florida, 33880 USA. Contact Richie Henson. (Jan Ketelaar went last year).

August

3/11, Japan Dry Run for 1981 World Championships. Derek Evans, John Fack and possibly one other to go.

9/11, Fifth League, venue still undecided.

13/20, Understanding weather. Course at Met. Dept., Edinburgh University. £70.

16/24, Bleriot Cup, proposed dates still to be agreed, Anglo-French team XC, teams of 8.

September

12/14, League Final, venue still not decided.

October

11/19, American Cup team championships, Tennessee/Georgia, USA.

17/19, Army, Jt. Service championships. Somewhere in UK.

One Day Calvert, I'll eat you for breakfast



Bob Harrison — take-off

photo — Mark Junak

Sunday, May 11th, 0830

Bleary-eyed look out of the window.

"The bastards!"

About 1,500ft. up, a long way out over Semerwater, two gliders were circling effortlessly. John Stirke, on a Solar Storm, and John Bowman on a Cyclone, had got into the early morning wave lift which was invisible in the clear blue sky.

Frenzy . . . bungies, ropes, kite bag, stuff a bit of bread in my mouth . . . "c'mon, Paulette" I snarled in my best Mickey Spillane manner. The pair of us bolted up the hill. This was Hawes End, Semerwater, in Wensleydale, where James Herriott and assorted vets are apparently still working on all creatures great and small.

At the halfway shoulder it was blowing 18mph. While rigging, I realised I had forgotten my fairings.

"Blast!"

Maybe, though, it won't matter. Can't go back because there's a strong breeze coming which will destroy the wave.

The first 15 minutes in the air was spent gaining height in the wave. It wasn't smooth. Inside, it appeared well-broken, and mixed with the gusts and wave turbulence I encountered a couple of raggy blobs.

FLIGHT REPORTS

John Bowman landed back on top as I took off, but John Stirke remained a long way out. Evidently the wave was still working. Perhaps, I thought, it will last a little longer before the thermals kill it.

John carried on playing around, 360s, spirals, generally enjoying his pre-breakfast flight — by now he'd been up more than an hour. Meanwhile, I worked some patchy lift near the ridge and climbed to 700ft. above take-off. All the while the lift became less nasty, and I felt it was probably only at lower altitudes it was broken up. If only I could work these scraggy ends to the silkiness above!

Previous experience told me it wasn't going to be easy. If the thermal activity was on the increase, it would be difficult to reach the wave before the inversion layer broke.

Concentrating on the strongest lift I found I was being pushed to the left, off the main ridge. As I went, the lift became stronger and smoother.

At 2,500ft. AMSL I was well into the wave proper, with just the occasional slight bump, and 100ft. up on the vario.

To save my nerves I cut the audio and listened to the wind, wondering how long I could stay in lift. Then I noticed John landing. He has a built-in vario and can smell lift like a hawk — I would have liked to have worked this particular lift together. Another pilot took off on a Superscorpion, stayed aloft for a while then landed. All three pilots drove off to breakfast down at Hawes (*with my driver!*).

I was still only 3,500ft. AMSL, and the inversion layer was holding me down. It was also just becoming visible. I tried desperately to find some visible evidence of the wave but there wasn't a cloud to be seen except for a splattering of Cirrus. I couldn't make out any haze patches which have helped me in similar situations before. I couldn't see any undulations within the inversion layer. I turned up the vario again and decided to check out the ridge.

Before long I realised I wasn't making any progress at all. In fact, I had even drifted 100 yards too far downwind than I wanted to be. Increasing speed, I flew forward again and found I had to pull on just to maintain my position.

Moving around, I found my "hot spot" once more, and watched the vario climb to 200/250ft./min, and

the altimeter started to show signs of life again. Soon I reached 4,500ft. AMSL — a silver C height gain at 3,200ft. — that was twice in a week and still no barograph! Please, John, *don't* lock the instrument cupboard.

The wave really looked set in now, and again I tried to find visible signs of it. Then it struck me, the view was magnificent. Too much concentration on varios and altimeters, too little actually enjoying where I was. You should have been there . . .

It gradually dawned on me I was having penetration problems, at around 5,000ft. AMSL. Too many times before, I thought with a sinking heart, I've worked wave and found it too windy. Push out and you get blown back without any significant increase in height. Pull in and you get the big boot!

This time, though, with the bar back and my arms locked, the needle (God bless it!) was still registering UP. But, I was still losing ground, and couldn't prevent it. I was determined to stay in the wave for as long as possible and was only regretting the forgotten fairings (I should have brought the Fledge with me).

Over the Roman road, ¼ mile behind the hill, I got to 5,600ft. AMSL. That's it, I'm going for it I thought. There were ridges downwind and I had no option anyway but to go there. I was above the inversion layer and the dirty atmosphere — which looked so clean at ground level — was obscuring my view. I topped out at 5,800ft. AMSL halfway across Wensleydale — the ground was almost a mile below — and the hills were covered in a black and uninviting veil of clag.

Touching my parachute, and worrying about wave rotor, I headed towards inevitable sink and darkness.

For the next couple of miles I got nothing except 2 to 3 down, but over Staggs Fell and Abbotside Common the sink increased to 750ft./min. I had been expecting the wave to bounce — even if only just a little! — but no such luck. The lee side of the fell appeared and the sink increased to 10 down.

"Not another 'Blown it'!"

Then my prayers were answered and the vario needle swung to horizontal, and I turned 180 degrees, at about 3,000ft. AMSL, and with rising ground just 1,000ft. above the ground. It looked a lot less.

To my horror I had to push the bar to waist level just to maintain. However, I slowly gained height, the first 1,000ft. putting me more comfortably above the fell tops. The higher I went the more the wind blew, and soon I had to fly at full speed again.

Even so, what a ride I was getting out of this lift! The kite was so well-balanced that the experience was like a dream.

Eventually, after just short of an hour, riddled with pins and needles, I had gained another 3,100ft. to put me at 6,100ft. That's a total height-gain of 4,800ft. from take-off. I had drifted half a mile downwind during this hour and was now registering 50 fpm down — time to go and it had to be downwind.

Flying over Birkdale Common (in 500 fpm down) I was desperate for more hills. I was in one of the main Pennine gaps and the next series of hills didn't start again for about 10 miles. The clag unfortunately prevented me from seeing more than 5 miles. Otherwise I think I would have headed slightly right of downwind.

On my way I ran into a couple of blips on my vario, and wasted 100ft. of height looking for non-existent lift, so I pushed on. There was nothing significant. Everything got a bit turbulent.

I was forced to land, not too sadly, in gusts and tree rotors, 16.3 miles from three friends I would have a delightful time winding up.

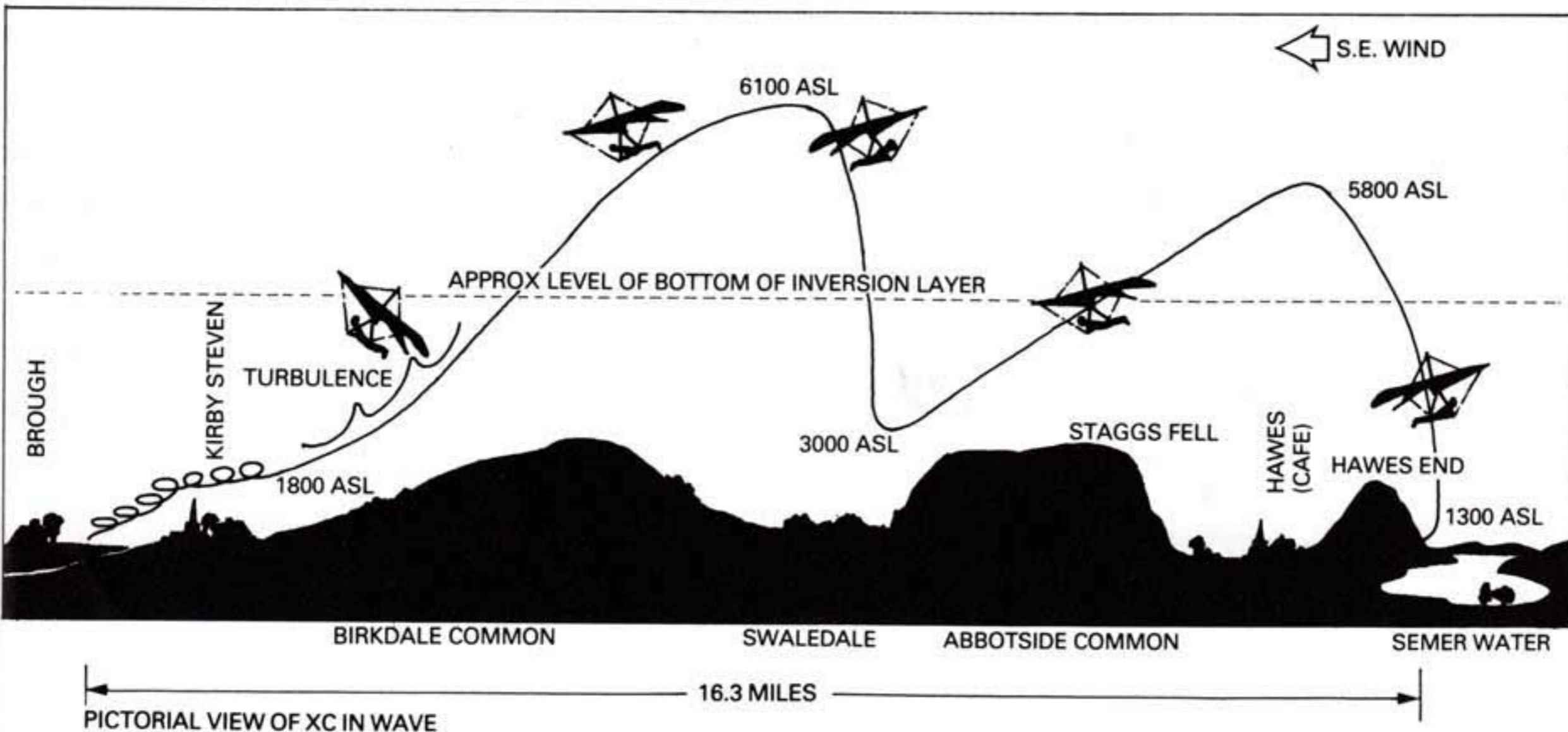
The wind-up, however, is on me, because Calvert still has the longest wave flight in the country. I missed beating it by a whisker.

One day, Calvert, I'll eat you for breakfast! (Maybe that should read . . . "while you're having breakfast . . .").

DETAILS

Glider: *Chargus Cyclone 180*
 Instruments: *Mainair Skydeck, Ball 600 Vario, Thommen Altimeter, Makiki pith ball vario, Suunto compass.*
 Distance: *16.3 miles*
 Take-off: *9am.*
 Landed: *12 noon*
 Height gain: *(best) 4,800ft. (no barograph)*

Bob Harrison



Pip-Pins (Ball Lock Pins)

This is an account of how a push button type pip-pin, used for securing the bottom bar on to the control frame of some modern Hang Gliders, failed whilst in use. Fortunately this failure occurred on the ground.

On 11th April, 1980, I had a flight from Edgetop in the Peak District, which ended in a bottom landing. I started to carry my kite (a Hiway Vulcan purchased from Mainair on 15th February, 1980) to an area where I intended to de-rig. To my horror I looked at one corner of the 'A' frame and saw the button-top of the pip-pin hanging loose on its retaining wire, it had broken off. I carried the kite a few more paces and the remaining shank dropped out, which obviously resulted in the 'A' frame collapsing.

On inspecting the pip-pin the inner portion, including the ball, had slipped out and unfortunately was not found. At the very top of the broken off shank there appears to be a smooth ring which could denote that these pins are 'undercut' at this point, at a stage in manufacture, (if this is true it obviously presents a weak spot).

The button top has broken off immediately below the top and I am amazed at just how small a cross-section of metal is supposed to stand up to the inevitable knocks and bending forces which it must be submitted to even when the kite is simply nose down with the 'A' frame on uneven ground.

Since this incident, I have had several thoughts on the matter, which may be translated into questions, which anyone using these pins might like to ask themselves, bearing in mind that if a failure takes place on the control frame of a kite whilst in flight the results would almost certainly be fatal.

Before I list these thoughts/questions, I would like to make it clear that it is not my intention to 'sling mud', I have no axe to grind and I have nothing but the highest

regard for both Mainair and Hiway, my only concern is the safety of my fellow flyers.

My thoughts:-

1. Did this damage take place on this flight/landing or was it on some other previous occasion, being undetected by myself?
2. If this pin had cracked but not separated, then it could have disintegrated whilst on a subsequent flight.
3. I have never tried to 'break-off', as it were, the head of these pins on pre-flight checks, which would help in the case of a pin that may have a crack developing.
4. How strong is this pin in shear particularly just below the head?
5. How rigorous are the tests and standards of the manufacturers of these pins — indeed what did the manufacturer intend the use of these pins to be?
6. Do we as pilots put ease of assembly before safety?
7. Why do I use pip-pins which have their overall strength reduced by the fact that they are hollow, instead of bolts, which are not?

Of course some of these thoughts are sheer speculation and some may say hysteria at what could have happened. It may be that this is a one-off by a pilot careless enough to bang his 'A' frame, but whatever you believe, I believe this incident brings into question the suitability of pip-pins for this application, particularly as I, and I am sure others, must have experienced a malfunction in the operation of the ball lock in these pins, due to dirt, thereby making their role as a fastener redundant and the possibility of a pin slipping out quite likely should this go undetected.

By J.B. Wilkinson

Comment

CLIVE SMITH

AIRWORTHINESS COMMITTEE CHAIRMAN, BHGA

SELF LOCKING BUTTON PINS

We have received a broken button-pin! The fracture occurred at the shoulder created by the head collar fitting over the shank. It was being used in the bottom-bar/control frame joint, and the button head was seen to be hanging loose on its lanyard after landing. The shank, although falling out subsequently, appeared serviceable under normal flight loads, despite the retaining head and ball-lock parts being missing. Reports of ball-lock malfunction on older examples are common, *but this pin was new*. The likely cause of this failure was an impact with hard ground before take-off or during landing. The pilots concern was that no hard knocks previous to the pin falling out could be recalled.

Item: Aviabank Ball-Lock button pin, alloy steel shank. (1/4in). (Quick release, positive locking, single acting, button handle) — Pt. No. BLS4BA15S — Usually black handle and blue button, cad plated collar and shank.

Use: Primary Structure on many hang-gliders, when used in control frame/bottom bar pivot joints, as nose wire securing pins and centre-box locking pins.

Glider types: Hiway Vulcan, SS and SS2, Stubby (Nose, c/f and c/b), Solar Storm (Nose, and c/f), Birdman Cherokee (latest control frame and nose).

The implications of this occurrence are obvious. Thorough pre-flight and post-hard ground contact inspection. Normal ground handling loads on stony fields and rock surfaces can damage some parts badly as can handling whilst 'in the bag'. Stow and inspect these vulnerable parts carefully i.e. rigging pins, safety clips, 'D' shackles, over centres etc. If it has obviously been knocked look closer for cracks or deformation. If in doubt replace it — it's very cheap compared to a parachute!

Current opinion — Fit these pins with the head aft and reduce lanyard length to minimum necessary. Replace unnecessary quick-release pins by bolts — see *Wings!* December 79 (Airmail Ans) for related discussion.

The failed part is undergoing metallurgical tests and all Club Technical Officers will have further information on the findings. They, together with the manufacturers, can advise you on matters of this nature and are to be consulted if modifications are contemplated.

Recent related incident: Control frame collapse during severe gust whilst parked into wind. Possibly half a ton download developed in this particular case. Negative 'g' on the ground (as in flight) is to be avoided where possible.

Counting on you

As the pilot of a Hang Glider you may well question why you should be concerned with a Census. But for the 2 weeks commencing on 23 June and finishing on 6 July, 1980 there will be a Census which will concern YOU and every other user of the air in UK. During this period the National Air Traffic Services will be conducting a Census that will seek to record every single flight undertaken by any form of aircraft — including hang gliders and balloons. The primary objective is to recognise the need for air traffic services and facilities for the numerous types of civil and military powered aircraft that use our airspace. But the National Air Traffic Services also wish to protect the safety and interests of recreational flying. They can only do this if they have complete knowledge of the sites and types of flying performed by all pilots. So please, in the interests of safety and in the interests of your sport of Hang Gliding — spend a few minutes to complete YOUR Census Form.

You will find, enclosed with this magazine: firstly, a Census Form for your completion, and secondly, a list of sites and appropriate codes. Use the list to identify the Code of the Site(s) from which you fly and annotate the appropriate Code on your Census Form. You need only use 1 form for all flights from the same site. But if you use more than one site or fly cross-country, please use a new form on each occasion.

If you do have problems in obtaining additional form(s) or in completing them please contact your Club/School Secretary, and if still in difficulty telephone the Census Office FREEFONE 3175. When you have completed your Census Form please place it in an envelope and return it to:

Census Office
Software Sciences Limited
FREEPOST
Farnborough, Hants,
GU14 7BR.

(No stamp is required).

Please help up to help your own safety.



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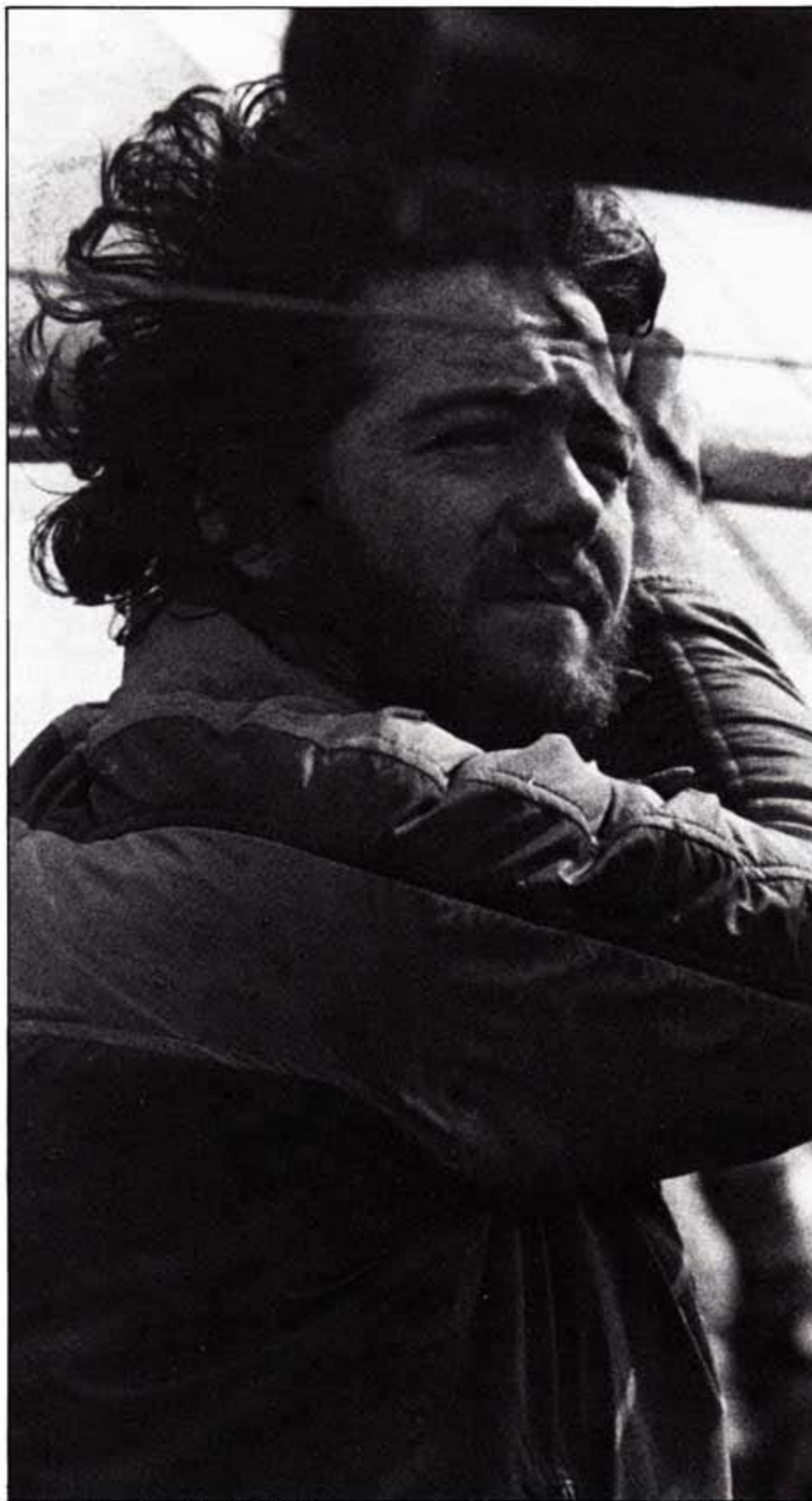
There are certain requirements for XC flight in Britain, and in particular from Avon sites. By far the most important of these is to remove the impediments to a good day's flying (namely the Doom Bros, Ray Willis, Andy Billingham and Nigel Milnes). These harbingers of sink and despair had taken to camping in the Welsh Hills on the weekend of 19/20th, so good flying was almost assured elsewhere.

As it was, 2-3 hours of Saturday were spent at Westbury White Horse, waiting for a loony to leap off in desperation. Finally, Jeff Rogers took off and appeared to be enjoying himself until he was blown back. We waited a little longer. After the dirty jokes and boasts of "mine goes higher than yours" and "Well, I can get mine up quicker" wore thin, Jerome Fack sampled the air. Appearing comfortable on his Atlas, I joined him on John's and, leading a scuttle for the gliders, we quickly established the presence of good wind shadow thermals. So good were these that the two of us, joined by John Hunt, were soon winding over the back in a well-defined blob which gave a comfortable 3,000ft. A.T.O., although the lack of clouds seemed to preclude any sizeable distance flights. Lift was sparse and ill-defined after the plain, so the flights were short; 9 miles for myself, 6.5 for Jerome, while John was fortunate that the chappies using the firing range showed good manners and stopped shooting while he landed next to them.

Sunday dawned, same direction but even stronger, so a long lie in bed before deciding the clouds and apparently weakening wind were worth a visit to mighty Westbury. We arrived at 2.30pm, late, even for the Facks, but the presence of kites in the air was encouraging. Jerome, once again first off, was plucked immediately to 1,400ft. A.T.O. By the time he was back to 500ft., I had joined him.

A word about Westbury. Situated in Wiltshire, the county most favoured by Anne Welch for XC flights because of its good thermal activity, and higher than average cloudbase, it regularly delivers the goods with massive, strong, thermals, easily located by the convenient chimney while giving good ridge lift and easy landing. It has to be very high on the list for a first XC providing the thermal can be relied upon to lift you over the dangerous (and illegal) plain.

As I flew to join Jerome, I could see the smoke spelling out thermal. He however was convinced the lift would be better on the main ridge and left, despite my continued height gain, and so it came to pass that I embarked upon the wilderness, with only my (John's) glider and parachute to comfort me. Pity, I enjoy the company.



Bob England — Best of Clubs

Warminster was reached at the same time I reached cloudbase, at 3,800ft. A.T.O. The later stages of the thermal had become quite rough so I had adopted the technique used yesterday of wrapping my little fingers around the gubbins at the corners of the "A" frame. The realization that the gubbins I was clinging to for support

was an integral pip pin to the glider, and visions of a gust releasing the bottom bar, folding the glider prematurely, suddenly focussed in my mind and I resorted to the white knuckle technique. The worst of the turbulence I discovered to be confined to the last four hundred feet before cloudbase so I decided to remain at

3,600 or 3,700ft. for comfort. Naturally at this height it's what is above you that's of prime importance, and the vista of flat cloud base for as far as I could see told me that the over-development over most of the area had occurred. Although it was lifting well at the moment there was the necessity to cover ground quickly to reach a newly developing area before the sink and flatness of over-developing set in. This was the best part of the flight when I discovered that for 15-20 miles I was able to fly in porpoising flight, avoiding the blue holes of sink and going to max glide in weak sink, slowing up in the lift to recover the lost altitude. The intense richness of the Wiltshire and eventually the Dorset countryside was very vivid from the air. Smooth textured farmland was jewelled by a procession of stately homes, and ye olde villages sprouted mushroom-like with tufted thatched cottages sewn amongst snug hollows and copse strewn valleys. These villages gave way, past Shaftesbury, to pronounced escarpments, the edges to a coastal plain that marked closer uniformity in land and sky.

Having planned the flight carefully (I knew the coast was downwind somewhere) I was pleased and excited to clearly see it. However, I was now down to 1,500ft. as the over-development, which appeared to be greater than I had anticipated, had killed off most of the sunshine. Working two weak thermals lifted me to 2,500ft. again and allowed another 7-8 miles, but it was only forestalling the inevitable, and I landed at 4.45pm having been in the air for 1¾ hours. Still it was N.N.E. when I left, so I must have covered a reasonable distance having seen Exeter just further on.

"You're at Wimbourne" chirruped the children leaning over the fence.

"But that's not 60 miles from Warminster", I cry.

"Where's Warminster?"

Well, distance is relative. As relatives go, my sister's house was only two miles up the road, so a kind lift from a friendly parent enabled me to drop in just in time for supper.

The following day the weather once again forcibly dragged me out to Westbury, where Kevin Winters, sans vario, on his Skyhook Sunspot, showed how to lead the way on a day trip to Salisbury cathedral. I restrained myself from visiting my cousins who live there, because of the late hour. However, I do have stacks of Uncles and Aunts and Grandparents in Guernsey which is due downwind of Westbury, and with a strong N.N.E. if I set off at ten. . .

Bob England

Reprinted from May 1980
Avon HGC Magazine

SMALL ADS.

All small ads should be sent to Silvia Howard, Commercial Editor, *Wings!*, 4 Somerwood, Rodington, Nr. Shrewsbury, Salop.

Ads sent to any other address will be redirected and therefore delayed.

For your own safety, if you are purchasing a second-hand glider, check that it is a registered BHGA model, see it test flown, test fly it, and inspect it thoroughly for damage or wear to critical parts. If in doubt seek advice from the Club Safety Officer.

SITES GUIDE to most of U.K. and Ireland: £2.75. BHGA membership required for U.K. orders. Barrie Annette, 133 Twickenham Road, Isleworth, Middlesex.

ULTRA SPORTS, BRIGHTON. 2ND HAND GLIDER MART. FOR SALE: Cloud Base's £100 plus Midas E's £150 plus SST 90 £250, Large Emu £300, Large Cherry £400, Vulcan (as new) £650, Atlas Medium £575. Wanted (cash awaits) Super Scorpion B/C's, Vortex 120's. Contact: (0273) 22534.

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THE HALF MOON HOTEL, LLANTHONY, ABERGAVENNY, GWENT. Situated in the valley behind Hay Bluff and Pandy Run. Friendly atmosphere, good food. Free house, party bookings catered for. Phone: Sonia on Crucorney 376 or write for information.

QUAD POD instrument system. Visual Vario, Airspeed, Altimeter, Compass, Bracket and pod. ½kg. £70. Few only. V. Hallam, 18B Queen's Road, Brighton. Tel: 24151 ext. 171. Also B sizes S. Scorpions available and wanted.

SOUTH WALES HANG GLIDING CENTRE, 67 Cardiff Road, Troedyrhiw, CF48 4JZ, is pleased to offer bed and breakfast at £4 per night to keen flyers. Tuition arranged for beginners and advanced students. Tel: Ynysowen 690787.

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MIDAS SUPER E, but with fixed tips. Easy handling, but likes to go high! Ideal for ambitious Pilot 1. £200 o.n.o. Tom Ricketts, Reading (0734) 81907; 83844.

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CHEROKEE 200 (Medium). Excellent performer, nice sail, colours, XC experience. £440. Tel. Paulerspury 678 or Towcester 51684.

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SMALL ADS.

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