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The Official Magazine of the BHCA

Jan. 1980



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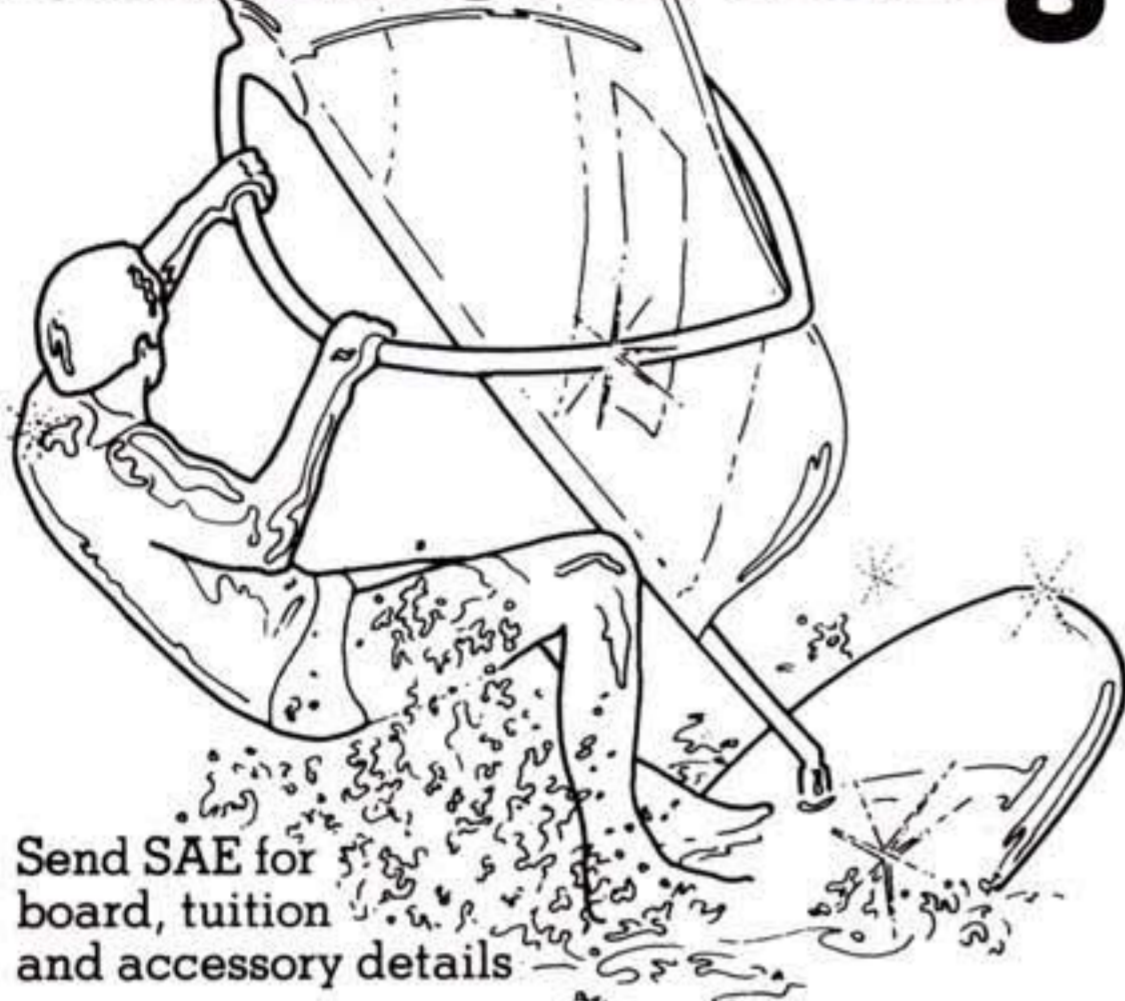
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From: Membership Secretary.

Head Office is inundated with work at the best of times and it is as much as we can do to keep up to date.

Unfortunately, however, time is being wasted because of insufficient detail from *you* the members, (time having to be spent searching for membership numbers etc.).

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Lynne.

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# wings!

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*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.

# EDITORIAL

My name is Brian Milton, I'm 37 years old, I've been flying hang gliders since Brian Wood hurled me off the Devil's Dyke in a Wasp 229 in October, 1974. And I've been a professional journalist for 8 years.

Following a paper put to the last BHGA COUNCIL meeting on December 2nd, I'm now *Wings!* editor.

## FUTURE POLICY

I intend to run *Wings!* on classical magazine lines. At the moment, the organisation is scattered all over the country. It's going to take a couple of months to pull it into my working order, so bear with me while that happens. I intend to cut the deadlines from the (present) *month* between final copy, and membership getting the magazine, to a *week*. There are four areas of the magazine that affect you.

## FEATURES

Timeless pieces, such as one coming up in February from TONY FUELL on the technique of turning, which ideally should come in 5 weeks ahead of publication, typed, double-spaced, with a 50-word biography and a real photograph (as against one taken in a booth) of the author, preferably head and shoulders so we can all recognise who it is . . . I've missed *faces* in *Wings!*, and feel we don't know enough about *who* we are.

## NEWS

News is not just what happens, but what you talk about. If you look at this issue, you'll get a primitive idea of what I mean. Developments in powered hang gliding, comments in foreign magazines, appointments to companies, research by hang glider manufacturers — this is all news. It's worth 30 words, 100, maybe 250 words, as news, before being blown into a full feature. I want as much news as possible, again with photographs . . . all photographs in black and white, please . . . colour is almost useless. Ray Sigrist going down, *twice*, at the Dyke is news . . . Any XC.

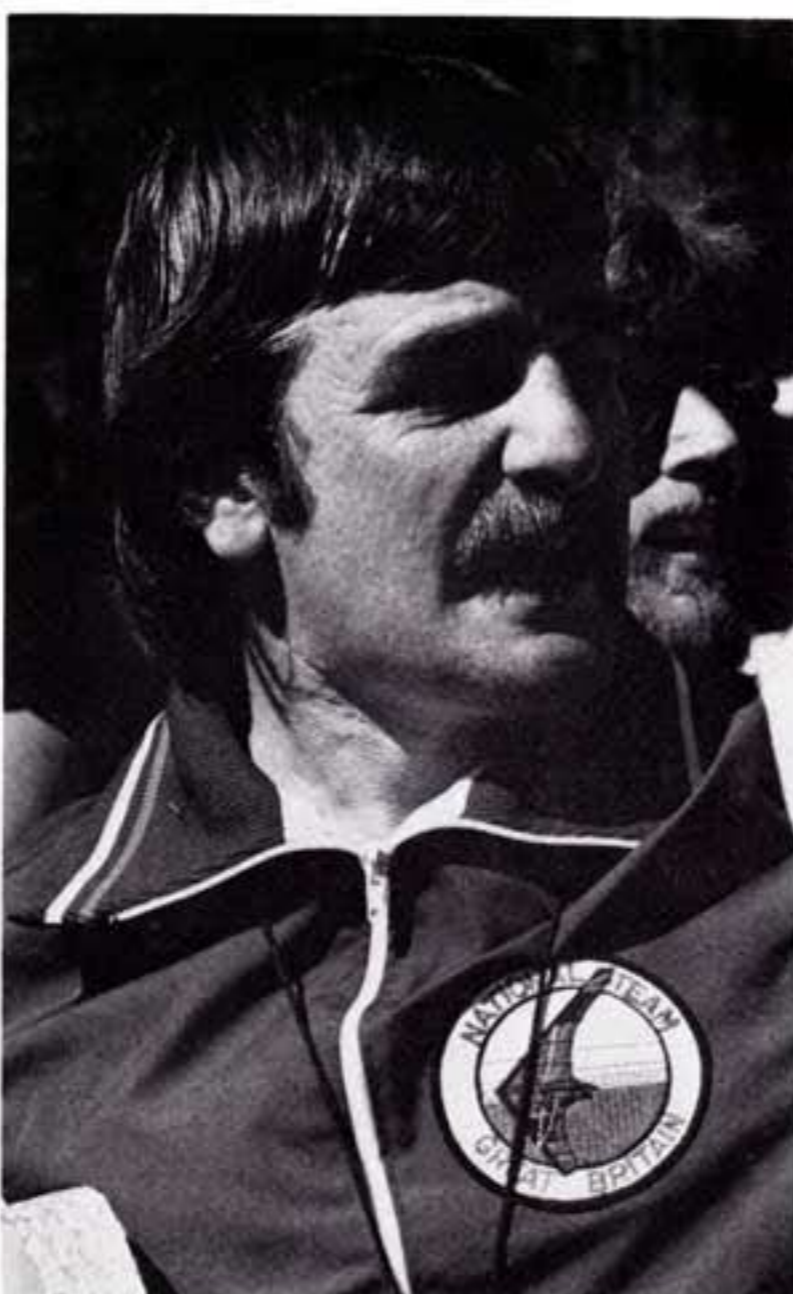
As editor, I'll be responsible for choosing and chasing features and news pieces. I hope to revive the system of area reporters, so that after a while there's a *flow* of information between the hills through *Wings!* to you.

## LETTERS

This is the main avenue of criticism of what's happening in hang gliding. There's a separate letters editor, STANLEY POTTINGER, 31 Westbury Road, Bristol, BS9 3AX. That's also my own new address. Depending on the advertising, and therefore the size of the magazine, I will be able to tell Stanley how much space he has. Subject to the libel laws, he's going to be independent of me.

## ADVERTISING

Whatever the practice in the past, in future all advertising, and that means ALL ADVERTISING, goes through Sylvie Howard, 4 Somerwood, Rodington, near Shrewsbury, Salop. There's a new advertising rate in this issue, which JEANNIE KNIGHT cleared at last Council, but that's going to be looked at once more . . . one way of enforcing



air worthiness, for example, is to charge half as much again for unapproved hang gliders to advertise in *Wings!* The old practice of free personal advertisements for BHGA members will also have to be looked at again if the cost of *Wings!* (£16,000 approximately out of total income from membership subscriptions of about £30,000) is to come down and it's to expand again.

## TECHNICAL ARTICLES

Really complex technical articles are, in my opinion, read by only 50 people in the total readership of about 4,000. Unless they are brilliant, and easy to assimilate, I'm not going to be very sympathetic towards them. The recent long-drawn-out correspondence on parachutes was solved by JOHN HUDSON'S excellent initiative in setting up a PARACHUTE SEMINAR in the middle of December, which will be featured in the next issue of *Wings!*. If a number of articles come in on the same subject, I'll be keen to get a seminar promoted to resolve technical matters — preshaped battens is one example — rather than lengthy and passionate articles which leave the membership with no certain conclusion.

## COMPETITIONS

There will be a certain amount of concern that *all* that will be in *Wings!* in future will be competitions. After all, I remain for the moment BHGA Competitions Chairman. I intend, in the *shape* of this year WINGS to carry two major features on the NATIONAL LEAGUE; that's the first competition of a year, and the final. At the first competition, all the work of manufacturers throughout a winter come on show, and membership wants to know what's new. Also, there are a number of new League pilots, who are they? Keith Reynolds is

the *best* least-known, pilot in the country, despite being 1978 National Champion . . . whoever wins, I expect *Wings!* to find out who they are, and why they are good enough to win . . . so look forward to articles on the top pilots. The final will be covered in detail just because it's the final, the end of a long hard struggle. Inbetween competitions will be covered only insofar as they are interesting . . . if they are pure XC, for example, or records are broken, or a new winner emerges other than the eight who have already won. But I hope to carry news on why individual pilots choose their kites, and why they change, to give a more public meaning to the competition that goes on.

Did you know the first ever International Team XC took place last summer, between France and Britain? Scoring was by adding kilometres, and amazingly, it was a draw, after six days of flying, with eight pilots on each side. VOL LIBRE made it a big feature. I hope to do so next summer . . . the competition was the Bleriot Cup.

Isn't it possible that British pilots walk a little taller when their teams beat foreign pilots? Isn't it possible that British pilots feel more confidence in their own hang gliders if they know they have taken on the world and won? I hope to carry news on how our teams do abroad, but in the context of other hang gliding news.

## CLUB MAGAZINES

I would like copies of all club magazines. They are an invaluable source of news and comment, and I intend *Wings!* to run monthly pieces with some of the best club pieces.

## HANG GLIDER WHICH?

I hope, before too long, to begin a once monthly consumer feature, in-depth, on a modern hang glider. It's probable it will come from MAINAIR, because of John Hudson's integrity, but the details haven't been settled yet.

## NOVICES

There's a big turnover in hang gliding. About 3,000 people a year go through schools, but only about 300 take up the sport. Why? John Duncker's article in this issue is the beginning of a regular feature from learner pilots, some of whom won't be complimentary about how we welcome new pilots.

Two other points: First, I've moved house from St. Albans. I now live in BRISTOL, that's 31 Westbury Road, Bristol, BS9 3AX.

Secondly, I want to declare two financial interests. I have bought out FLIGHT PROMOTIONS from Fiona Campbell and Arthur Puffett, and I've blown all its funds on a sponsorship drive for 1980. I hope it works. I also have a minority interest in SOLAR WINGS, the new hang gliding company started by Dave Raymond, Cliff Ingram and Mark Southall. I don't expect either interest to distort my editorship, although BHGA Council will obviously be the judge on that, and so will you.

Finally, the main arguments on *Wings!* going public will be put on March 1st at the AGM. I hope you're there.

Brian Milton.

# Prone for Beginners

By John Duncker

I have always had an urge to go hang gliding, ever since I saw people jumping off a hill called the S'Eleve, close to Geneva, six years ago. The urge was reinforced two or three years ago when, while out flying a radio-controlled model glider off the East Lomond in Fife, Scotland, I saw hang gliders being soared and top landed, but it was not until I decided to go to college as a mature student that a chance to satisfy this urge came along. A student lecturer doing his teaching practice, was an enthusiastic hang glider pilot and organised a weekend familiarisation

Despite all these depressing prophecies I decided to go anyway.

The programme for the first day consisted of films and theory in the morning, with rigging practice and first hops in the afternoon. It was at this point I first discovered that instead of flying seated I was to learn to fly prone, for a second or two then back on to the uprights for landing; all while under the control of tethers.

The second day of the weekend course had to be cancelled due to bad weather, but I was hooked! I arranged to come back during my Easter vacation for three days. On my second day's training, the school went to a bigger hill and my tethers were reduced from three to a single nose tether, controlled by the instructor. After careful instruction, I took off from near the top of my first long hop. As I had witnessed another pupil stall on take-off, I was determined to avoid this undignified behaviour. So I kept the bar well in! All the way down the hill! Ignoring the piteous cries of the instructor who, despite running downhill like a jet propelled gazelle, had been overtaken and then left behind. When I came back to earth I heard great hoots of laughter drifting down the hill following the winded instructor as he puffed up to me.

My next flight was the red letter one, no tethers, solo! The big step.

The instructor positioned himself halfway down the hill and bellowed instructions as I flew down to make a good stand up landing. What a fabulous feeling that was, I grinned all the way back up the hill and did it again.

Then it was another student's turn. I relinquished the harness and glider and sat down to watch and listen. He had already had several flights, some good and some pretty shaky. He conferred with the instructor and then carried on up to the top, leaving the instructor halfway down the hill ready to shout orders.

After a brief delay, the student appeared on the crest, shouted release to his nose man, who promptly scuttled to the side. The glider then slowly tilted to one side, till the wing tip touched the grass; he then commenced his take-off run, despite urgent bellowing from the instructor. This bellowing became even louder and more anguished as the student pushed out hard, stalled and then turned towards a clump of trees. The glider staggered and wallowed through the air, heading inexorably towards the trees with the student flailing around beneath it as he attempted to follow the now quite frantic orders from the instructor. A groan went up from the concerned onlookers as the hapless pilot got one leg hooked over a rear wire, but this seemed to steady the glider, which then side-slipped through a gap in the trees and headed towards a small brick building. A note of sheer desperation crept into the instructor's voice as he raced across the hillside trying to keep up with this kamikaze, hurling orders and counter-orders as the over corrections of the pilot finally caused a 180 turn back towards the hill and to what seemed to be the inevitable crash. The kite then smoothed out in its flight path and wheeled around the panting instructor with the pilot smiling in enjoyment. (He was a very experienced pilot who had taken the place of the student while the glider was on top of the hill.)

The change of language from the pool instructor was amazing and the air on the hillside was decidedly blue. Meanwhile, all those on top of the hill who



...the air on the hillside was decidedly blue!

were 'in the know' were rolling around helpless with laughter shouting — "Wind up! Wind up!"

After the merriment died away, the student made a good flight down. The course continued and after a dozen or more flights I was ready for the big ones. The three Pilot One qualifying flights off the 200 foot hill. They came and went smoothly — at 6.00 a.m.! And there I was, rated Pilot 1.

This was all about three months ago and I now have a few hours logged air time. Some of the flyers I have talked to on the hills have been concerned that I started flying prone and that prompted this article for I felt that prone is the more natural method and deserves every encouragement in this country. Well, has anybody seen a bird flying seated or even supine? No, even fledglings fly prone. This method also avoids what appears to be a dangerous period, the conversion to prone, with its accompanying disorientation and consequent stalling accidents.

Intermediates flying seated may feel that they are regarded as nonks and are, therefore, tempted to convert to prone before they are ready. Also, established seated pilots may well be uncomfortable as they have to unlearn one set of reflexes and build new ones.

Finally, a few brief reflections:

The theory was harder than I expected and the pilot one verbal exam had me sweating.

Many accidents are caused by stalling and I think a greater emphasis should be placed on stall recognition and recovery procedures, possibly with tougher stall requirements in the pilot one task form.

The instructor impressed upon me the necessity of making out a mental flight plan with alternatives for every eventuality before lobbing off — this is now a habit with me and has helped greatly in tight moments.

Do intermediate pilots need some form of special badge or recognition signed to ensure that they are recognised as being less experienced flyers and, as such, are given advice assistance and perhaps more consideration from their more experienced brethren?

One last thought, all student pilots should go to Rhossili for their first soaring flight. After all, with the wind blowing 20 smack on, you could stay up with an umbrella in each hand in that long, wide, glass smooth lift band. I managed 30 minutes, 360, both ways and a top landing there on my first soaring flight, and felt very safe. I also was able to get sufficient height to practice stalls and slow flights without any immediate danger of hitting the ground, and this has stood me in good stead since then.

You're supposed to get familiar with the bloody hang-glider

LIKE YOUR HELMET, LOVE



... a week-end familiarisation course.

course. A classmate of mine went out on the course and returned with glowing reports of how much fun it was, and that he intended to go back for more.

Overcoming wifely objections I reserved a place on the next college block booking. But on the following day I had second thoughts and decided to ring up the hang gliding school to check out a problem that I felt might affect my progress. The telephone conversation went something like this — "Hi! I would like to come down next weekend and learn to fly a hang glider". Instructor replies — "Great! We will be pleased to see you; should be a good weekend as you are coming down with the college". I then said — "I feel though, that there might be a problem; you see, I weigh 17½ stone!"

Yea, 17½ stones



Dead silence for a second from the other end before the instructor started making cautionary noises about how physically demanding the course was, how I would have to run up and down hills all day and how vulnerable a heavy person was to sprained ankles and wrists.

# The 1979 National Hang Gliding League Final

By Brian Milton

Photographs by Mark Junak



Brian Wood 1977 National Champion

In the first year, there was a big fight between two Southern pilots, Brian Wood and Johnny Carr, and two northern pilots, Robert Bailey and Bob Calvert. Brian was the first ever British champion, in 1974; he'd beaten the legendary Australian, Steve Moyes, in the British Open in 1976; he won the first League competition and looked set for overall victory in the year, but was concussed one day, flying a new glider, and many thought he had thrown away his chance. Johnny always shone, he was always *class*, but getting second place three times in the five competitions that made up the 1977 League, he could be forgiven for feeling he was always a bridesmaid . . . Bob Calvert is the *hungriest* pilot, so much so his temperament has sometimes got in the way of his great skill. He was pressed hard, that first year, by Robert Bailey, a competition underlined, almost, by the fact that Calvert is from Lancashire, and Bailey's from Yorkshire.

In the event, that first year, Brian Wood hooked a massive thermal in one flight and won the whole League by just 14 points — in 1,600 — from Johnny Carr, with Calvert third and Bailey 4th.

#### Keith Reynolds

In 1978, Calvert and Bailey were up there in the running, but a newcomer, a real natural, Keith Reynolds, kept up the honour of the south. Almost casually, Keith took second place in the first two League competitions, and though he was challenged once by Bob Calvert, held on to his lead through the next three competitions to end up British Champion. This time, Calvert was second, and Bailey was third. Brian Wood, incidentally, ended up in fourth place. Johnny Carr took fourth place in the European Championships, but in the League, became a teenager.

The National League is possibly the toughest hang gliding competition in the world. Founded in 1977 by 54 pilots, with an invitation that would curdle your blood — all about the responsibility for any flight resting with the pilot — in three years the League has taken Britain from virtually nowhere in world competition to a silver medal at the last World Championships in Grenoble, and the first victory in the American Cup Team Championships in Tennessee, against the USA, Canada and Japan (and the second, against the USA, Canada and Australia).



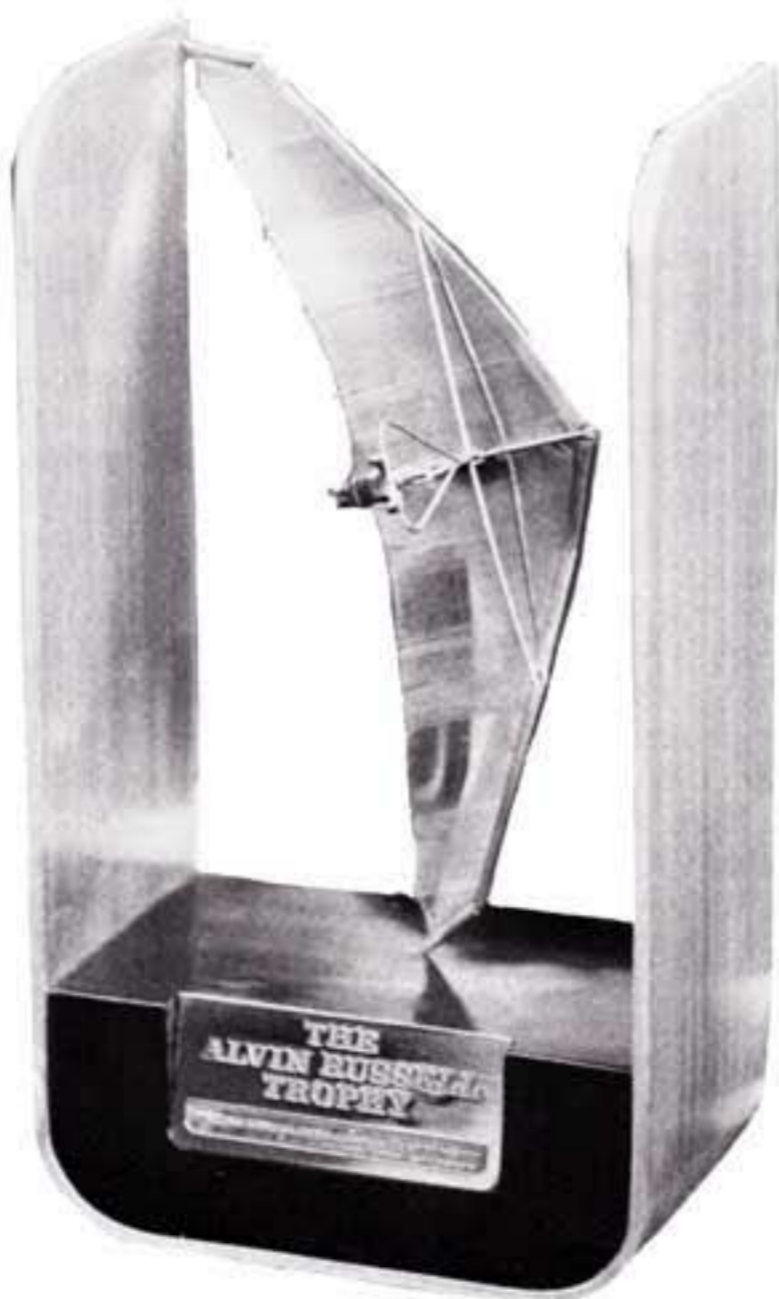
Keith Reynolds — 1978 National Champion

In 1979, then, Bob Calvert had everything to fly for. It was *his* League, *his* turn, surely, 3rd, 2nd, this time surely 1st place? The year started badly. The best individual pilot in the 1978 American Cup, Graham Slater, looked invincible, and carried on his winning streak by taking the first competition. Calvert pulled a 6th place. The second competition was blown-out, but Slater was winning that one too. The third, in North Wales, was pure cross-country, an event at which Calvert and the British record holder, Bailey (50 miles) excel. Slater couldn't hack the 1,200 foot climb every day with 60 lbs. of hang glider (and 15 lbs. of assorted other gear) on his back, and scored a zero. Calvert made a 2nd place, and Bailey a 4th. The fourth competition, in Scotland, saw a mistake by Slater, and ended up as a tussle between Calvert and Bailey, (Reynolds in 3rd place), which Calvert won by 6 points in 400 . . . every individual League competition is worth 400 points, and pilots may drop their worst result.

The fifth competition, in the Dales area, saw a new pilot — Bob Harrison, from Rochdale — the winner, but in the year's result, Bailey caught some points on Calvert, and going into the Final, there was just 50 points between them. But, Calvert had a very high reserve score, 308 points, so Bailey had to score at least 358 points — and Calvert score poorly — to win, and to make sure, he had to win the competition and try and force Calvert down.

#### Final Competition

The type of competition adopted at the League Final, September 15/17, 1979, in the Abergavenny area of South Wales, was what's called "One-on-Five". Five pilots, in seeded order, flew against each other, with scores contained within that group. There were to be, in all, the minimum three tasks



Alvin Russell Trophy - awarded to League Champions

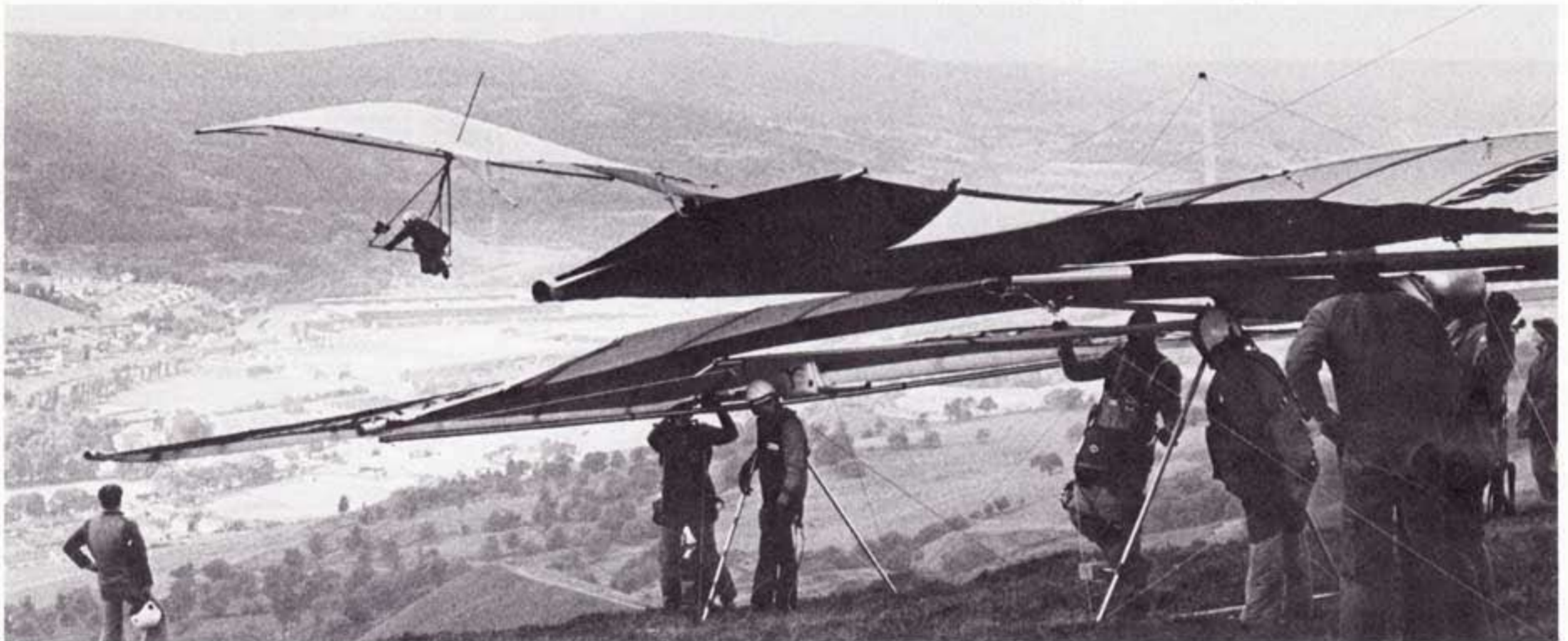




Bob Harrison and Paulette



Bob Bailey — The "professional" — being interviewed by BBC Grandstand



Bob Calvert taking off in "suicide" aborted task

needed for a League, rather than the hoped-for maximum of five, but it turned into a fascinating struggle.

On the first day, watched (but not yet filmed) by BBC Grandstand, we climbed up the 600 ft. Hay Bluff, a northwesterly ridge that had never been flown in League competition before, but is, in hang gliding terms, a legendary hill. The way the seeding worked, Bailey and Calvert would never meet; pilots from placings 1-8 would face pilots from 9-18; 19-27; 28-36; 37-45. The task was a simple trap (which I set — twice — and then fell into *myself*, thus dropping myself from the League altogether). In still air, with a maximum flight allowed of 15 minutes, pilots went into the air against each other to see who could stay up longest. It was pure sink rate, but, off to the right, well out of any lift provided by the ridge, there was a pylon, worth 20 of the total of a hundred each task is worth. If you went out to the pylon, sinking all the time, you may not make it back to the target . . . in which case you would score *zero*. The skill came in hacking other pilots out of whatever lift there was, and leaving yourself with enough height to go around that pylon and still make it back to the landing field. Four of us ended the competition — having fallen into the trap — of scoring a grand total of zero. Calvert won his task, Bailey came second.

The second task was like the first, except that instead of having a maximum time of 15 minutes, pilots had to *land* exactly 15 minutes after take-off. Whatever deviation, either side, would count against, but going *over* time would carry twice the penalty of going *under*. Thus, 20 seconds short of the 15 minutes scored better than 11 seconds over.

**Brilliant**

Both Calvert and Bailey won their tasks, but, the



Bob Calvert going for the spot in his Atlas

scoring system being what it was, Bailey was 18 points behind Calvert. It all came down to the third task. That was set on the second day, after searching for a suitable hill. We found one overlooking Merthyr Tydfil, a slag heap about 1,000 ft high. The task was, get what height you could (2,000 ft above the top was what the local pilots said you needed) and fly over behind the ridge about 4 miles to a hill in Tredegar. The faster you do the flight, the more marks you get, but just for *doing* it you get 60 points. It was a brilliant task, if as frightening as I've ever seen in hang gliding. When 35 pilots are hacking around looking to pounce on the same thermal, you can hear much more of the occasional hang gliding cry of "Mummy!" I certainly couldn't take it.

First to make the attempt was a newcomer to the League, Dave Thomas, on a glide-angle machine, the Wasp Gryphon. Then no one tried for a long time. We heard on the radio Dave had made it, so others set off to try and do the same — Dave certainly hadn't 2,000 ft when he left . . . maybe it could be done with less.

In all, seven pilots made it, one arriving at Tredegar so low he disappeared behind some trees for *20 minutes* — everyone thought he had blown it — when he appeared in a really buster thermal and made it to the top. That was John North. Another, Peter Day, from Reading, just went around in circles all the way, in a thermal everyone else abandoned because they thought it too weak . . . Peter plugged away and made it. Graham Slater, quietly, without anyone watching, took off and hooked something big enough to get him across.

But all the while we were watching Bailey and Calvert. Bailey had to really beat Calvert, which meant he had to be so much faster. So, after taking

*Continued on next page.*



COMMITMENT — 4 League pilots in a cold wind. John Hudson, John Bridge, John and Jeremy Fack. Photo Mark Junak.

off, he would be followed by Calvert, and they'd hack around for 20 minutes, with Bailey trying to get Calvert off his tail. When he had done so (or thought he had) Bailey would sneak in and land on top, and then check out again . . . your time was from your last check-in to landing at Tredegar. In all, Bailey landed *seven* times, but that sneaky old Calvert was always watching, and as soon as Bailey took off Calvert would spiral out of the sky and check-out just later. Would either of them make it to Tredegar? From Calvert's point of view, it didn't matter; Bailey was the only one who could overtake him in the League, and as long as he shadowed Bailey, he was OK. The deadline, for the last flights, was 6 pm, and thermal activity normally damps down about an hour before this. It was thought, after 5 pm, highly unlikely anyone would succeed in getting across . . . and then we heard, Calvert had gone for it.

#### Calvert Blows It?

There were moments of great excitement on the hill, as the radio at Tredegar reported him approaching, *below the ridge*. If he didn't make it, all our scores would be better, and maybe Bailey could have a go and do it.

Roy Hill, chief marshal, gave us a running commentary . . . how Calvert was below the trees . . . how he disappeared . . . how the successful pilots rushed to the edge of the ridge to urge Calvert to stay down (northing too sporting, you understand) . . . long tense moments as Roy began to feel Calvert had blown it . . . then a great shout that he was still flying . . . groans from our part of the hill . . . he'd hooked a thermal! . . . and that was it. He was third fastest, but easily won the whole competition. Robert Bailey, in second place this year, having a 3rd last year, and a 4th in 1977, still has to beat him. Maybe next year.

Meanwhile, the 1979 British National Champion was Bob Calvert, from Blackburn. At last — after so many disappointments, where he wanted to be and where he felt he should have been two years ago.



Bob Calvert 1979 National Champion

### NATIONAL HANG GLIDING LEAGUE 1979 Final position after 5 competitions

Name	Kite	S. Wales R. Hill	N. Wales J. Ketelaar	Scotland D. Squires	Dales Birkbeck	Final Milton	Total
1 Bob Calvert	Atlas	308.88	384.80	400.00	353.47	400.00	1538.27
2 Robert Bailey	Cherokee	300.60	223.17	395.38	388.82	236.40	1321.20
3 Lester Cruse	Cherokee	320.99	61.84	333.82	393.15	268.64	1316.60
4 Graham Hobson	Atlas	—	400.00	248.90	390.80	204.16	1243.86
5 Graham Slater	S/Scorp	400.00	—	327.70	248.69	243.94	1220.33
6 Keith Reynolds	Predator	339.10	94.40	347.36	297.57	209.54	1193.57
7 Jeremy Fack	S/Scorp	300.23	—	287.88	394.-3	192.08	1174.22
8 Bob England	Gannet	325.45	138.44	339.95	254.82	236.40	1156.62
9 Bob Harrison	Cyclone	235.36	20.96	291.00	400.00	227.00	1153.36
10 Richard Iddon	Skyline	200.04	110.53	279.57	345.72	285.91	1119.24
11 Dave Thomas	Gryphon	235.00	111.84	202.63	331.65	327.74	1097.02
12 Mick Maher	Gannet	329.70	27.28	297.20	250.14	186.70	1063.74
13 Dave Garrison	S/Scorp	326.29	17.99	270.54	298.83	163.15	1058.81
14 Richard Brown	Atlas	198.52	117.32	270.49	290.89	253.97	1013.87
15 Peter Day	Moonraker 78	211.19	110.91	298.46	264.38	214.14	988.27
16 Mike Atkinson	Cherokee	277.11	22.00	324.05	276.28	88.65	966.09
17 John Bridge	Cherokee	202.63	113.81	321.11	293.42	146.41	963.57
18 Brian Wood	Cherokee	258.09	119.11	281.71	271.96	—	930.87
19 Greg Burgess	S/Scorp	248.22	153.37	250.93	261.14	153.37	913.66
20 Johnny Carr	Cyclone	267.94	118.22	247.32	273.40	—*	906.76
21 Roger Black	Cherokee	203.41	17.99	290.88	269.07	134.32	897.78
22 John North	Atlas	204.03	17.99	204.77	307.30	173.27	889.37
23 Keith Cockroft	S/Scorp	241.81	78.67	290.04	192.06	154.47	878.38
24 Trevor Birkbeck	Cherokee	269.56	119.05	220.91	234.81	149.09	874.37
25 Alan Weekes	Gannet	174.66	111.84	226.71	310.55	155.81	867.73
26 John Fack	S/Scorp	266.59	—	219.62	244.54	107.66	838.31
27 Ashley Doubtfire	Cherokee	252.86	37.57	149.08	295.94	138.35	836.22
28 Ian Thomas	S/Scorp	209.40	70.37	170.81	255.18	197.45	832.84
29 Graham Leason	Cherokee	247.79	109.04	192.27	282.06	—	831.16
30 John Hudson	Cherokee	243.19	20.68	242.76	204.69	135.66	826.30
31 Jan Ketelaar	Cherokee	204.93	88.24	275.01	248.33	—	816.51
31 Mick Evans	Gannet	307.42	19.33	166.58	158.34	170.58	802.92
33 Richard Ware	Cyclone	226.97	—	174.92	241.30	154.47	797.66
34 Chris Johnson	S/Scorp	258.28	100.38	171.17	257.71	—	787.54
35 Brian Edmeades	Cherokee	138.02	17.99	216.78	187.20	217.60	759.60
36 Geof Snape	S/Scorp	189.27	229.91	126.79	184.31	730.28	730.28
37 Roger Wates	S/Scorp	263.06	106.20	211.28	—	141.03	721.57
38 Paul Baker	S/Scorp	175.37	43.84	—	253.02	248.51	720.74
39 Mark Southall	Cherokee	162.63	117.32	249.15	179.08	—	708.18
40 Tony Beresford	Cherokee	—	32.48	246.03	205.23	201.43	685.17
41 Jim Pedroza	Gryphon	194.16	142.33	173.93	187.20	—	684.09
42 Steve Marshall	Cherokee	261.18	43.84	—	288.55	—	593.57
43 Brian Milton	Safari	154.58	19.33	251.09	160.87	—	585.87
44 Carl Ford	Maxi	218.11	17.99	255.49	—	—	491.99
45 John Burgess	Cherokee	207.09	17.99	—	177.82	—	402.90
46 Dale Clothier	S/Scorp	326.65	19.33	—	—	—	345.98
47 James Bond	Cherokee	—	—	237.93	93.06	—	331.89
48 Clive Betts	Emu	248.96	—	—	—	—	248.96
49 Len Gabriels	Safari	198.82	—	—	—	—	198.22
50 Bruce Hudson	Emu	166.95	—	—	—	—	166.95
51 Robert C-Smith	Gannet	107.50	35.04	—	—	—	**142.54
52 Frank Taryjani	S/Scorp flown only in blown-out Southern League	—	—	—	—	—	—

\*Johnny Carr missed the League Final because he was invited to the US Masters, and the dates clashed. Chargus paid for his US trip.

\*\*Robert Close-Smith has had trouble with his knee since the middle of last year. This year, it was operated on, and as he would have been crippled if he had flown too early with it, he asked for a bye this year, and got one.

# Why I'm Leaving the League

By Jan Ketelaar

The hassle and travelling in going to all the League competitions and organising one of the competitions for the last two years has proved a strain. I thought that very few of the league competitions were satisfactorily organised. When the flying finally got started, the standard was good; the British individual and team records bear witness to that. This is not written to knock the League; we all know that it works. The results in international competitions and recent rapid British glider development prove it.

This year's League final was disappointing. A note arrived a week beforehand to say the venue had changed. After busting a gut to get there on time, straight off night shift, I found little in the way of organisation: late start, sitting around, no safety back-up, or weather forecasts or radios.

On the last league competition I ran, *3rd League 1979*, my main concern was to secure a number of sites before committing myself to the competition committee; this took a month of work — seeing reluctant farmers individually, checking with the police, the RAF, Park Wardens, etc. Only when I was finally confident of sites did I agree to run the comp. The real work began then.

First I gave a P.R. lecture at the local NFU headquarters to give the farmers concerned a slide show and talk; possible problems and friction areas were cleared up. Then, on an official basis, I contacted RAF Valley, the local police, St. Johns Ambulance, Snowdonia Park Wardens, and the CAA. Along with the farmers, each was sent a letter showing what we expected to do. A soaring forecast was ordered from the Manchester meteorological office for each day of the competition to be obtained at 07.00 hours ready for the marshalls' briefing at 07.30. According to the forecast, the marshalls would know what tasks would be set, cross-country type (X-C) or defined skills type (DST). The necessary equipment was organised, although this was the only area that didn't work — the BHGA supplied radios had flat batteries when they arrived; luckily, we did not need to use radios, and our borrowed back-up ones did work. A local camp site was selected both for the friendly and comfortable accommodation, as well as having a landing field for which the owners obligingly mowed a 25 metre spot. Free meals and accommodation were provided for visiting marshalls.



One month in advance of the league meeting, all pilots and officials were sent detailed lists of accommodation and site maps and instructions. In addition, marshalls were provided with extra task formats, emergency phone numbers, etc. a month before the competition. As it turned out it was a pure XC league.

## CROSS COUNTRY TASKS (X-C)

Out and return type, open distance, goal flights — these need no explanation. All skills are tested: flying accuracy needed to core thermals efficiently, decision making and landing skills. These tasks are interesting and provide complete and varied challenges to the pilot.

For two weeks leading up to the first day of the 3rd league, the weather has been superb for X-C, but very violent early in the day, with large cumulonimbus developing over the mountains, giving hail and snow showers, and high wind gusts. The conditions damped down by the late afternoon-early evening to produce good activity and a moderately high (4,500ft.) cloudbase. The furthest flight on the first day was 28 miles and flying did not even start until three o'clock.

On the second day a warm front was forecast and it was due to fog in by 1.30p.m. and to start raining. This information was conveyed to all the pilots by 9.30a.m. Despite a long walk up the mountain and the conditions being soarable for only three and a half hours, the longest flight of the day was 24 miles.

The third day it was still raining, and those who had walked up but did not fly on day two, were faced with a long hard retrieve to get their gliders down from the mountain.

Taken all together, in about seven hours of soarable conditions two X-C tasks were completed with maximum distances of 28 and 24 miles, on consecutive days, in different directions from the same site, in marginal conditions, at a time when the unofficial X-C record was still at 34 miles. Not bad.

The fact that this competition was dropped for scoring as a low scoring league by many pilots was largely their own fault. Very many seemed not to have read the competition materials or heeded its instructions. The soaring forecast and local knowledge provided by resident pilots should have been taken more seriously. Many balked at the weather, mountainous terrain and long walk up. Some refused to walk up, some to fly. No flying, no scoring. I think some of George Worthington's article on the X-C Classic in America is relevant here: the majority of British pilots, he says, seemed to have persuaded themselves even before taking off, that flying in the mountains there was dangerous despite what local flyers said.

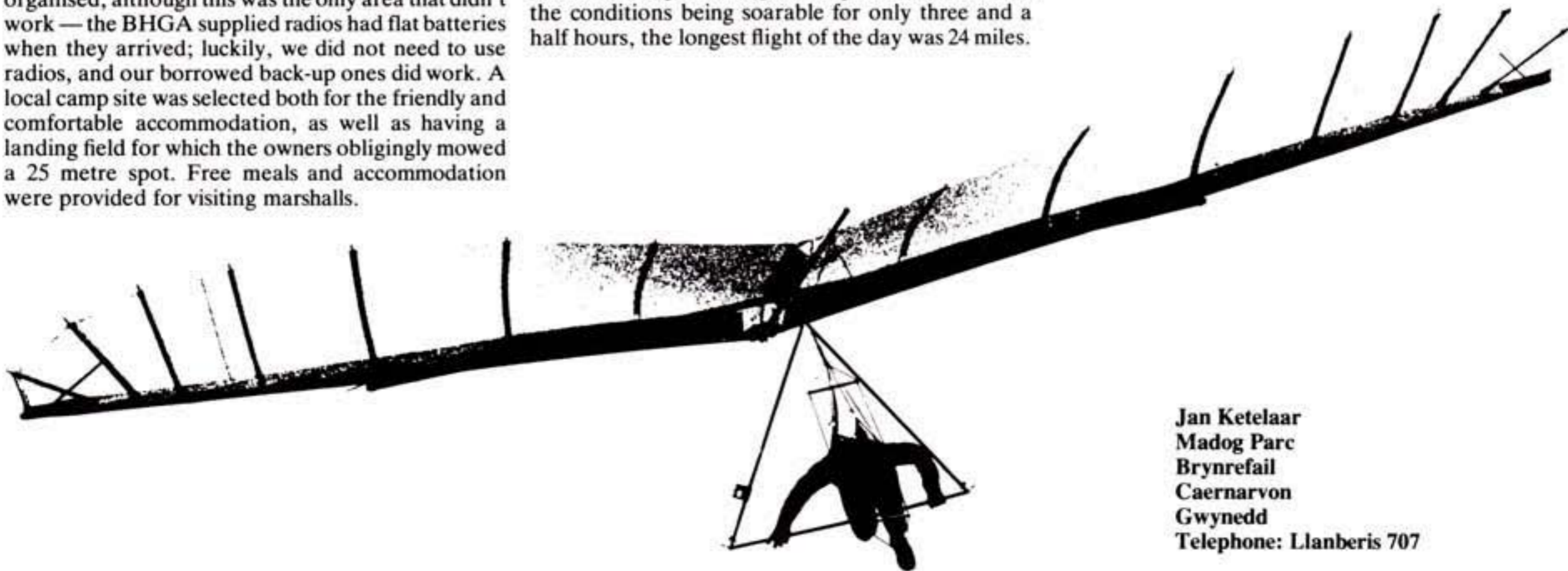
In my view, if competitions are to progress here, a little more time should be spent on organising them. I spent almost five months preparing the 3rd League and running it on the allocated £150 budget (admittedly accomplished only with the unpaid help of friends and cooperation of local farmers). Frankly, I was disappointed that very few of the other competitions seemed to reflect the same time and care.

I think that without proper organisation there is no room for regular growth of skill in competition flying, X-C or DST. It will always be what you could call Ad Hoc Flying. It might turn out to be very good indeed; but you are always limited to what you can do at short notice.

I have decided to leave the League and concentrate on open competitions abroad. I still intend to keep a close watch on League progress, and wish all the flyers in it well.

I am considering the organisation of an invitational type of X-C event sometime in 1980, in this area.

Please write to me if you are interested.



Jan Ketelaar  
Madog Parc  
Brynrefail  
Caernarvon  
Gwynedd  
Telephone: Llanberis 707

# Another View of Owens Valley

By J.A. Hudson

Mick Pollard, the Safety Officer of the Man Wing Club had also contacted George, and we swiftly joined up and convinced Richard Brown, a fellow Pennine Club member to come along.

We flew out of Heathrow on 27th July and arrived in Los Angeles around 6.00 p.m. to find that the local buses had small luggage compartments and no rear exits. As a result we had to convince a seedy looking taxi driver to load our three wings onto his car and take us to where we were to collect our "Camper".

What a drive that was! The car was a heap and swayed and rolled the whole time. All three of us hit imaginary brakes countless times, drawing the larconic comment from the driver "Hey man, sit back and watch the view!" Being dumb Limeys we were taken for a bit of a ride when the driver decided he was lost in Hollywood and spent ten dollars worth of time finding the address we wanted! Still we arrived at the Camper rental company physically in one piece if not mentally, but received another blast when greeted with "This is the smallest one we have sir" Gulp! 8ft wide and 25ft. long! "You'll be OK John" quickly interjected both Mick and Dick, immediately designating me driver for the first shift — who needs enemies with friends like that? However, the Camper had everything we wanted, Shower, toilet, fridge for the beer, air conditioning, cooker, beds etc, but more to the point, a rear access ladder and a huge flat roof which swallowed up 3 gliders with no trouble at all.

## GOOD OMEN

Next morning we awoke to see that our random selection of a freeway exit had deposited us right at the base of Sylmar, one of California's famous thermal sites. This had to be a good omen and a few hours later we were on top of the mountain assembling our gliders. Some locals soon arrived and, wishing us well, flew off. Dick was first ready in our group but as luck would have it, along with all the locals got drilled, landing at the bottom a few thousand feet below. Mick and I followed but were lucky to survive the heavy downs and to have a great time thermalling about for a couple of hours.

This was a marvellous introduction to Californian flying, but Owens was our destination and after a quick meal we left Los Angeles and set off towards the desert.

Cerro Gordo is just one mountain in a range of mountains which flanks the 100 by 8 to 10 mile wide flat bottomed Owens Valley. It is situated about 250 miles North East of Los Angeles and separated from the city by 150 miles of Mojave desert sand.

As we drove further into the desert we exchanged pale glances with each other as the Camper was buffeted by howling winds and signs flashed past warning "Danger — Campers and trailers beware high winds for the next 30 miles" — And we were going to fly hang gliders in this desert!!

We woke next morning to breathtaking scenery — Barren mountains, scrubland and no sign of man other than the asphalt strip called Interstate 14. Everything was different shades of grey or brown, but it had a magic quality about it. This was a real desert and the first one that any of us had seen.

We drove to Bishop, a small town some 60 miles past Cerro Gordo Mountain — the whole drive was along the base of two awesome mountain ranges, the Sierras on our left and the Whites on our right, both

**In three short years Cerro Gordo in the Owens Valley, California has acquired a reputation of being a horrendous place where miles are easy if you have lots of "Bottle" and are slightly mad! Tales of arm wrenching turbulence, free falls and uncontrollable rolls abound.**

**Cerro Gordo has all this, but it also has some unbelievable height gains, some amazing flying and yes, those miles.**

**After discussions with George Worthington, I decided that conservative flying, the right frame of mind and good buttock muscles should give me the flying holiday of a lifetime — I was right.**



John Hudson. Photo Bettina Gray

ranges having peaks rising some 10,000ft. above the valley floor to around 14,000ft. ASL.

## MAD ENGLISHMEN

We made contact with Don Partridge a local pilot who was very generous with his help and advice. As an introduction to Owens Valley flying he advised us to take a hop off Raydine, a 1,700ft. "bump" behind his ranch. We were anxious to fly and so took a chance on driving our camper up the dusty mining road, an escapade which almost resulted in us getting it stuck on a steep incline. Three local flyers were amazed that we'd even tried and immediately dubbed us "Mad Englishmen".

Our flight off Raydine was little more than a still air sled ride but again a neat way to cross swords with the Owens Valley for the first time. The next day was a little different as along with Don and Chris Arai, a student who spends his summers in the Owens, we found ourselves halfway up McGee mountain,

flanking the Sierras.

Take off was at 7,000ft. ASL and soon Dick and Don were specks in the sky. Good flights in the Owens very much depend on how well you time your launch to coincide with the thermal cycle. There are huge ups but corresponding downs and a loss of 10,000ft. is quite common. Chris, Mick and I launched and soon Mick too specked out. I had a hell of a time and really thought I had blown it, when I picked up a hard blob in the entrance of a gully some 2,000ft. below take off. It was very rough, but I was desperate — what better incentive than your buddies skying out above you? — before long I popped out over the top of the mountain, a gain of about 5,000ft. and was feeling very good about it when nature gave me a not so gentle reminder about where I was.

## FRIGHTENED

In the middle of a right hand 360 the nose pitched up, the left wing dropped and I literally fell about 500ft. — I dropped over the bar, slid forward in my harness, lost my stirrup and felt my legs banging about against the rear wires or perhaps even the keel. Fortunately the glider remained the right side of vertical and pulled out subjecting me to some pretty heavy "G" forces — I banked over the top of the pull out and flew straight away from the mountain recovering my nerve. That escapade frightened me, but the conditions seemed to mellow a bit and that blasted Mick Pollard was still 2,000ft. above me.

An hour later both Mick and I were at 15,500ft. (he was still 100ft. above me!) and the view was just amazing. We could see the whole range of the Sierra mountains which are huge towering granite peaks, deep snow filled valleys and massive areas of uninhabitable land stretching for perhaps 70 miles and covering 1000 square miles of beauty. After 1 3/4 hours I developed an intense thigh muscle spasm, caused no doubt by oxygen starvation and cold, so decided to pull in and fly down.

It was strange to feel the temperature rise as we flew lower; at 15,000ft. plus it was freezing whilst at 2,000ft. above the valley floor the heat was intense. At times the desert temperature reached about 120° but 106° was common and 95° felt quite chilly!

Mick landed after me and as we gathered at our camper the intense flying experience we had just enjoyed on our third day in the States spaced out our minds and we bubbled with enthusiasm and bored our companions beyond belief, since some had not had as good a time as we did. After skying out for half an hour or more, Dick found heavy sink and after a desperate mountain scraping attempt to find an elusive up, landed at the bottom. Poor Chris, a skilful local also launched into the same air as Dick and he too went down.

## ISOLATION

Don in the meantime had set off on a lone cross country 10 miles out and return. As he passed over a hitherto unflown peak he set up a huge Eagle which circled up to investigate this new bird — Don showed no sign of aggression and after circling together for a while the eagle dropped back to his erie. This event outlines some of the magic atmosphere of the Owens Valley. Apart from the Annual Cross Country Classic the area is flown by relatively few individuals and when you do take to the air it is very rare to see someone else in flight.

There is a tremendous feeling of loneliness and isolation which is not surprising considering the geography. There are about 3 miles of desert between the road and the foothills and then perhaps another 4 miles from there to the spine of the mountain range. Multiply this seven miles by at least sixty miles of usable range around Bisop and you have 4200 square miles of land!

From Cerro Gordo the potential is about 120 miles of range giving 8400 square miles. We just could not get used to these alien amounts and assimilating the scale was our main problem.

The main danger of flying the Owens is getting caught in the "Canyon Trap". The range is nothing more than huge mountains, faces and flanks each separated by titanic gouges in the earth. These gouges are the canyons and are generally about 3000ft. deep, with walls falling almost vertically to the narrow meandering bases. One of the more majestic canyons is 8,000ft. deep. Can you imagine flying along and suddenly coming onto that huge black hole in the ground?

Thermals tend to be generated by the rock canyon walls and so drift up them towards the spine. The danger lies in following thermals intently and drifting back at a greater rate than climbing up — Lose your thermal or hit some sink and you are in real trouble. The canyons criss cross each other randomly and once in deep you may find yourself faced with 3,000ft. vertical walls at 90° to the wind lying right across your path. This is where the immeasurable turbulence is found, and this is what causes the inverted flight and barrel rolls.

We all spent a deal of time just flying about experimenting and learning to gauge the immense distances.

On our fourth day, Dick drew the short straw and became driver for a trip with George Worthington to Cerro Gordo. I was to fly along with George and Mick went off with a group of locals. Cerro Gordo is known as *Scary Gordo* and how right that is. Not so much for the eye popping turbulence to be found but more for the spine tingling atmosphere I found around the place. Cerro Gordo is famous for its mine and at the turn of the century, over 10,000 miners burrowed miles of tunnels through the peak. All that is left today is an area of desolation and the ghost town workings in the saddle of the mountain.

#### EERIE

I felt the atmosphere of the place as though it were alive with all those miners of long ago. For an hour on the top I was edgy and nervy — these were not hang gliding nerves, but something else. Hang Gliding nerves started at the sound of my first dust devil. A dust devil just has to be seen and heard to be believed! First you hear it — a big one sounds like a train — no exaggeration — it roars and whistles like an express locomotive, whilst small ones zap around like demented demons. As soon as they pass an area of loose dust they appear — suddenly you can see them and the sight is unbelievable. The dust is sucked up and swirled around at an amazing speed and the devil takes the form of a miniature tornado, twisting and spiraling into the sky.

As we sorted out our gear and waited for better conditions, Devils would scream around the rigging area in a random fashion at about 30 mph. They disipate as quickly as they form and the silence after them is uncanny. George warned us to leave nothing loose on the ground as devils have many times sucked up helmets, variometers, clothing etc., spitting them out sometimes 10, sometimes a hundred feet above the ground. The day before, a particularly malevolent dust devil had destroyed five gliders and injured two people.

One glider was tied to a telegraph pole which was lying on the ground and had its nose weighted down with about 100 lbs of rock. George Worthington said that when the telegraph pole got above his head, he let go of the glider and ran for it! I saw the rocks, the

pole and I believe George. The power in these things just has to be seen to be believed.

Fortunately nothing so large came through and although I unclipped and rushed to hold my glider against small devils 3 times, I eventually got off on my first flight from Scary Gordo.

The flight was totally uneventful since I was afraid of working too close in, GW's words of warning ringing in my ears. I was up for about ¾ hours only and settled for a landing about 10 miles down range. George went 30 but turned back to land in a more accessible place about 20 miles from take off.

Whilst Dick and I were at Cerro Gordo, Mick was flying the Sierras, launching off Mount Tom. When we got back and talked about the day's fun he was as chuffed as nuts that he timed his launch right and gained 1300ft. flying for ¾ hour in still air, whilst the local pilots he was with got drilled.



Richard Brown. Photo Mark Junak

#### CHESHIRE

You can imagine the atmosphere with three pilots, all out to get great flying. The odds are that one of you will catch heavy sink. As a result, as soon as one of us complained of the "big hand" forcing a premature landing, the other two made little effort to suppress cheshire cat grins and the next half hour was filled with "Oh dear me, never mind, chuckle chuckle".

On our fifth day we all flew Puite, a site next to Gunter, the launch for the classic. Puite in an easy launch at 9,000ft. a.s.l. and the day started to work well. There was little drift and I was delighting in working thermals all around the site, making gains of 7,000ft. and 8,000ft. or so.

All three of us were going well, but when we checked together at the end of the day, Mick had the best distance 25 miles. I was next with 18 and Dick ended up at the bottom.

However Dick got his own back later on with a spectacular flight to the end of the range

(Montgomery Pass) taking the best distance of any of us — 31 miles and doing it all below 11, 500ft. skilfully working everything he got.

My best distance was 29 miles and although these may seem small when one reads of 80 and 100 mile flights, believe me it wasn't easy. The conditions were not really "popping", although they were better early on in the holiday when we were learning to judge the conditions.

We all flew purely for pleasure and thoroughly enjoyed every flight we made, never pushing it too hard. Both Mick and I blew it a couple of times, making the error of landing in the desert, faced with a 4 mile walk out and hopefully getting to base on the thumb. I once walked 8 miles and that's no joke after a day's flying — Glider retrieval then takes up half the next day.

Once after walking 3 miles, Mick called at a house to ask for water and when the door opened he found himself staring at a .38 calibre revolver! Once Mick had calmed him down, the householder became generous and plied him with ice water and beer.

**This was without doubt the best hang gliding — nay adventure — of a lifetime. We flew every day but three, which were lost to bad weather, and all got out best gains, best distances and most spectacular flights of our entire flying lives.**

Make no mistake, flying in the Owens is definitely flying on the limits of man and machine — the dangers are extreme, and leave no room for error. Being "drilled" into a canyon would give a 50-50 chance of escaping without injury.

A simple broken arm or leg through a blown landing even out of the mountains on the desert floor would create the hazard of dying through shock or loss of blood, owing to the distance one flies from civilisation, and the loneliness of the terrain.

#### MAGIC

We did so much one could write a book about it — So many magic events like soaking away the desert dust every night in the natural, crystal clear 70° volcanic springs, ice cool beer in one hand and four or five fliers around talking about hang gliding all over the world.

Like scratching 600ft. above the valley floor and making it back to the spine, counting the gain, not in hundreds but in thousands of feet. Like relaxing over dinner in George Washington's luxury mountain retreat, chatting into the night about the flying career of this amazing character. Like making it to Janies, the red light house on the Nevada border, 30 miles from launch, where the greetings from those charming ladies is "Hi there — any of you guys want to play hide the weenie?" Like flying into sink and working like a dog to get out but losing 10,000ft. in 15 minutes. Like the history of the place, where all around one feels the ghosts of the thousands of miners who have carved holes in the ground everywhere, and where careful searching will almost certainly net you a genuine hand made flint arrowhead. Like flying along in a brilliant blue sky, 10,000ft. above the shimmering desert floor in one of the most awe inspiring flying areas in the world.

It was almost too much — almost — we'll be back.

#### Notes

Mick Pollard flew a Victor, John Hudson a Cherokee and Richard Brown an Atlas. Mini-pac oxygen systems were all taken but only Mick had a long flight using it. We all flew easily to 12,000ft. but felt effects of oxygen starvation after half an hour or so above this. We carried in-flight water utilising cyclist type containers and drinking straws — this water was invaluable. We all used Skydeck variometer/altimeter consoles and Replogle Pressure sensitive paper Barrographs. Best gain was 9,000ft. best height 16,500ft. ASL — Highest launch 10,200ft. Best distance 31 miles and each did about 80 cross country miles.

The cost of the whole trip was about £550 a pilot.

# Industry Watch

By J.A. Hudson

What does the future hold? — Unlike the general trend in hang gliding there is a strong sense of optimism among members of the Hang Glider Manufacturers Federation (HGMA). Although the troubles of the day are undoubtedly having an impact on the financial success of the individual concerns, this is in no way inhibiting development and innovation.

1979 has been one of the most chaotic and changeable years members can recall. A year when a real commitment has been demanded from the various individuals running hang gliding business. Some have shown themselves capable of handling the pressure in a dynamic way whilst others have been blown away on the winds of misfortune.

## CHARGUS

Chargus Gliding are well established, and have had great success with their VORTEX. Murray Rose will continue with both the Vortex and the CYCLONE but development is well advanced on a new intermediate/advanced glider which is going to feature some brand new developments. A lot of work has been done on the leading edge pockets and their Research and Development programme has revealed some very interesting details in airfoil design.

The company are also going to produce five competition gliders, specifically flying in the League. There will be very high performance machines with extremely well held air foils. The glider utilises 24 battons to hold in the shape and involves new production techniques which Murray is keeping a closely guarded secret.

Chargus are negotiating with a large electronic company for team sponsorship, and hope to use the five gliders in a factory backed team, competing in the League and International Competitions.

Their philosophy is that top competitors need special gliders with performances beyond that of the average pleasure pilot, but through hard aggressive competition a great deal of valuable information is made available, which can be applied to production machines.

## HIWAY

In February Hiway decided on a change of scenery and moved their whole operation to South Wales, committing themselves to 14,500 square feet of manufacturing floor space.

This is a very bold step for Hiway to take, and indicates the entrepreneurial attitude of the joint owners John Ivers and Steve Hunt.

Hiway have updated their SUPER SCORPION, one of the most popular gliders of 1979. The glider will continue to be available throughout the year since it's role as a predictable safe glider has been established without doubt.

The glider has also carried many top competition

pilots to dizzy heights on the International Competition scene.

The VULCAN is Hiways latest advanced competition/cross country glider with an aspect ratio of 6.45, an area of 184 square feet and 33% double surface airfoil. The design philosophy behind the Vulcan was aimed at increasing the penetration and high speed capabilities of an easily handled flex wing. Also shortly to be in production is the STUBBY — a happy sounding name for an intermediate/trainee glider which promises to be fun to fly and own.

Hiway are currently waiting for the BHGA air worthiness certificates for their new machines, having completed the testing and documentation. Research and development is continually taking place at Hiway and a good percentage of it is spent investigating tow launching and powered flight, both of hang gliding and microlight "minimum aircraft".

## SKYHOOK

Skyhook Sailwings is one of the longest established hang glider manufacturers in the UK. Owned by Len Gabriels, Skyhooks have proved their staying power time and again. Often in the fore front development, Len seems very confident of the future.

The SAFARI and SUNSPOT gliders will continue to be available until the spring but a new glider called the SILHOUETTE is making a strong impact in the North.

Following the pattern for clean simple lines, the Silhouette has no wing wires, a deep keel pocket and pre-formed battens. Large and medium models will be available and the Silhouette has 200 square feet and an aspect ratio of 6 plus.

Skyhooks are also well into development of a 33% double surfaced machine which Len hopes will be 1980's "hot ship" — Currently flying a 150 square feet prototype Len is pleased with its good glide and handling, but it will be a few months before the glider is ready for production.

Following sound business practice Skyhooks continue to investigate Tow launching and powered flight, although the company see power development going towards low thrust line undercarriage set ups rather than "Soarmaster" type power units.

## BIRDMAN

Another long established company is Birdman Sports. Run by Ken Messenger the company have had a very successful year with its popular glider the CHEROKEE. Ken has had manpower problems recently but is now back up to strength and has increased his production capacity by around 100%.

The Cherokee will continue to be available throughout 1980 but will naturally be updated on small details. Birdman are looking overseas for agents and fresh markets to compensate for the seasonal UK fall off in demand over the next few months and the new staffing levels are hoped to bring delivery down to a couple of weeks.

Gannet  
Photo Mark Junak





## EUROWING

SCOTKITES, North of the Border, also decided on a change of name and location in keeping with a decision to "make it in this game".

Now called Eurowing Ltd., the company is based in a new factory in Glasgow. Led by Brian Harrison, the company long since gave up designing its own flex-wings and concentrates on building American Electra-Flyer Corporation products under licence, for both the UK and European markets. 60% of their production goes abroad. For 1980, Eurowing hope to severely dent the UK sales market with two models new to the UK.

The Electra Floater has proved very successful in the USA and has been re-vamped and re-named the SPIRIT (there's a name from the past!). It will be a cross-tubeless flex wing with an aspect ratio of 8.1.

Eurowings other developments concern the design and manufacture of a new powered ridged wing with an optional undercarriage and Soarmaster type power unit. To be called the GNAT the glider compliments their other venture the Cato ridged wing.

## FLEXIFORM

The year started badly with the tragic death of Paul Maratos, a man of unbelievable determination and the force behind Flexi-Form Skysails Ltd. Paul was Flexi-Form, but two enthusiastic pilots, Mike Hirtley and Hughie McGovan gave up their jobs withdrew their savings and put their security on the line. They bought the business and seem to be succeeding well.

They've taken the original Skyline and carried out a few improvements, releasing the glider as a SKYLINE II. This is their basic "bread and butter" glider.

They have two new models almost ready for production, the POLARIS and the HIGHLINE — The Highline is a development of the Vector and they believe that this glider will be their competition Flagship.

The Polaris is a development from the Skyline and features unique built-in fairings for the cross tube which automatically open into place as the glider is rigged.

The Polaris also has a hinged keel which is said to greatly improve roll response.

## SOUTH DOWN SAILWINGS

South Down Sailwings is a newly formed company, not yet a member of the BHGMF, but with strong ambitions.

Ian Grayland, one of the owners of the company, is confident that his design, the SIGMA is going to be a success. Developed from a prototype designed some two years ago, the SIGMA is a single surface, cross-tubeless machine with an aspect ratio of 6.5 and is to be made in two sizes.

## SOLAR WINGS

A similar new company called Solar Wings opened its doors in 1979. Headed by chief designer Dave Raymond the company is currently putting their new ship through airworthiness testing. The glider is a flex wing called the SOLAR STORM, and has a 125° nose angle, large applied leading edge pockets, and an aspect ratio of 6.23.

Eventually to be made in two sizes, with a third smaller model against specific orders, Solar Wing expect it to compete strongly with similar easy to fly deflexorless models.

Mark Southall, who is a director of the company, will be expanding his harness production facility.

## GOLD MARQUE SPORTS

Another brand new company has started and its

owner, John Bolton, hopes to carve a moderate niche for his company, Gold Marque Sports. John has developed a single surface flex wing, with a 170sq.ft. sail aspect ratio of 6.87 and a nose angle of 124°, called the GYR 170.

Although the Company has not yet joined the Federation, nor completed its air worthiness certification, John has applied for both and hopes to be fully recognised by early January.

## WASPAIR

On the other side of the coin, Waspair Ltd., one of the first major manufacturers, and one of the largest in 1978 have gone to the wall — Liquidators have been called in to clear up the remains of the company and the collapse of such a major concern has caused ripples of dismay throughout the entire hang gliding materials supply industry.

## VULTURLITE

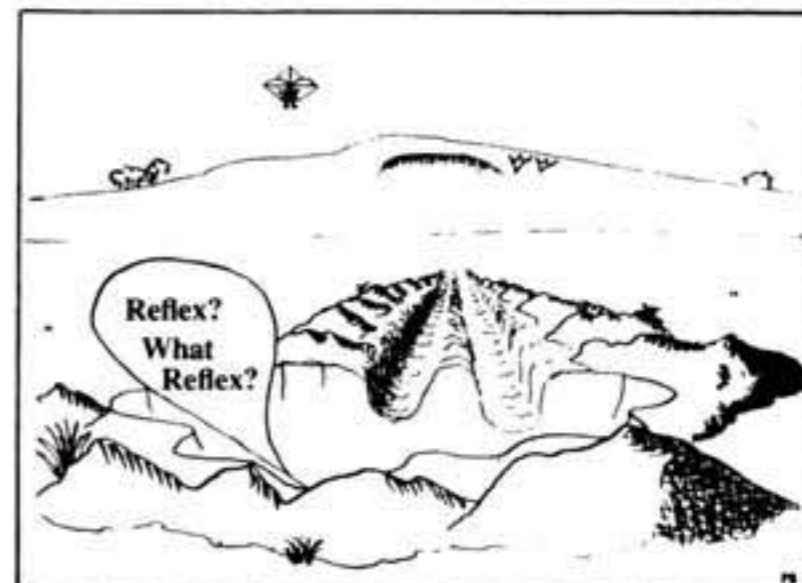
Early 1979 saw the aggressive appearance of Vultulite Ltd., and the EMU.

This was a strongly launched company which looked set to make a big name for itself. Unfortunately the owners soon found that there are a lot of uncontrollable forces in hang gliding which make the road stony and hard — they too eventually went into liquidation.

ECLIPSE hang gliders are well-known in their own area, and produce some well-finished gliders. The SUPER EAGLE is their main bird, and is made in three sizes. The small has an A/R of 5.88, and an area of 173 sq.ft. The medium, A/R5.67, with 191 sq.ft.

The gliders have single deflexors and wing tip camber wires.

ECLIPSE is run by two enthusiasts, Brian Wright and Will Mills. Briap sees no outrageous new developments in 1980, but is sure that subtle design changes will have a significant effect on the current range of flex-wings. Their own development concern two high A/R wings, or 126 degrees, and 135 degree nose angle, expected this summer.



# The American Cup — Snippets



AMERICAN CUP TEAM — front, l to r. Dave Garrison, Graham Slater (Vice-Captain, winner Rogallo Trophy for best individual score) Keith Reynolds, Robert Bailey, Jeremy Fack. Standing, l to r. Derek Evans, (Manager with \$5000 cheque) Bob Harrison, Bob Calvert, Brian Milton, Bob England, Johnny Carr. Target at front becomes 1980 National League target. Photo Bettina Gray

We spent Sunday, in front of a big crowd, doing anything for entertainment. There was a glide-angle competition off a 40 foot lump, which Bob Calvert — having got 6 flights in before anyone else had rigged — won, on his Atlas, from Pete Brown. None of the British team won a prize on the spot landing competition, but we were successful in a strange competition called hurling-the-welly — in this case, a pair of \$100 cowboy boots owned by our sponsor, Alan Casey, from the Chatanooga Choo-Choo. Finalists, after a team 1-on-1, were Jeff Scott for the USA, Robin Pederson from Canada, Jeremy Fack, Lester Cruse and Robert Bailey for GB. Lester, a junior British record holder at the javelin (we discover), was easily favourite to win, with a classical style that included bouncing on one foot after hurling the boot 30 feet further than anyone. The two other styles were *brute force* — Robert Bailey and Jeff Scott — and a novel Canadian *floating* style — Robin Pederson. But Lester blew one of his throws, the final came down to Bailey and Pederson, and Robert did it for Yorkshire.

At the end of four days, we had had four tasks, out of a minimum of six needed to make the American

Cup work. We weren't to know that, after Wednesday, a rest day, Lookout Mountain would be unflyable for the rest of the week, and we came so close to spending \$14,000, working 8 months, and travelling 4,000 miles - for nothing. At the end of the first half of the competition, we had finally moved into the lead . . . the Aussies were almost destroyed in the speed task, with no first places, one 2nd, four 3rds, two 4ths and one DSQ (Phil Matthewson, after three 1st places, and some brilliant flying). This is how the scoring looked:-

Country	First Place	Second Place	Third Place	Fourth Place	DSQ
Britain (278)	7	12	10	3	0
Australia (274)	9	8	9	3	3
Canada (267)	9	8	6	9	2
USA (258)	7	6	7	6	6

That evening, a banquet was held in the Chatanooga Choo-Choo. We were all tired out. On the bus on the way back to our hotel, I suggested wearing boaters and our blazers, but it seemed pointless . . . no one was playing our game. We went in our ordinary jackets, and as we left our bus, met the Americans, who skunked us . . . top hats, ruffled

shirts, morning suits, canes, from 6ft. 7in. Jeff Scott to small and aggressive Joe Greblo (who isn't as small as he's made out to be). All the American team had dressed up, and it was a fair cop . . . they had us . . . it was their night, from the relative quietness of the banquet, to the sleazy joints we meandered through later, with Grigsby and Nichols like *deux ex machina*, always in the background waving dollar bills . . . all I can say is that I'm glad the third lady of ill-repute who did strange things in front of me was not persuaded by dollar bills to end up sitting on my face . . . does one "lie back and think of England" in such situations?

On Friday evening, I asked Tracy if we could go elsewhere on Saturday — if the wind was wrong — just to get the extra 2 tasks at least in, to make the competition official. In a brave decision, considering how much money he's spent on the American Cup, how much he needed to recover, he said yes. I think his reasoning was, in its second year, if the competition failed to be completed — even if he took money at Air Space on Saturday and inertia prevented many of the public asking for their money back — he would have absolutely nothing left to sell to the TV or a sponsor. So the competition had to go ahead. Now, coolly, it's easy to say that. In the thick of it, Tracy Knauss said yes almost immediately, a decision very few promoters, anywhere in the world, would have made, I think. It was certainly very impressive to us.

We improved our position, from a 4 point lead, to one of 12 points, and this was the final placing. . .

Country	First Places	Second Places	Third Places	Fourth Places	DSQ
Britain (416)	11	17	13	7	0
USA (404)	15	9	11	7	6
Canada (404)	13	10	12	10	3
Australia (397)	9	12	12	12	3

Notice that, judged by 1st places, we come 3rd. Also note that Australia made no 1st places on the last two tasks; that Britain had no flier DSQ'd; that team flying, in fact, is really decided by the 6th, 7th and 8th best pilots . . . every country has one or two superstars, but finding strength in depth is what the American Cup does, and it's the only competition in the world to do so.

So, we won. It was an anti-climax. That we had an American Cup at all, in the end, was due to a wise and brave decision by Tracy Knauss. Dave Murchison worked his balls off, and was cheerful at the end, after all the stick he took. . . I hope he gets a chance to go to other competitions, and we have a lively correspondence about what's going on elsewhere in the world. At the prize-giving, Bill Moyes gave me a set of his old false teeth, mounted on a plinth, with some symbolic chains attached — possibly something to do with his forebears having been sent as convicts to Australia — as the most persistent protester of 1979. . . I do hope I don't win that next year. . .

I had an invitation on November 1st to meet the Prime Minister, Mrs Margaret Thatcher, at 10 Downing Street, for a reception to send off the English cricket team to play against the Australians . . . no sweat, I told Ian Botham, after he told me stories of how keen the Aussies were to win (I wonder if Bill wants his false teeth back?) . . . it was a bit like a dream, rubbing shoulders with famous athletes, jockeys, politicians, in the same room as the Chinese Premier had been an hour before I arrived . . . on December 18th, at the Royal Aero Club, Prince Charles gave us the Prince of Wales Cup, the highest award in sporting aviation for winning the American Cup in 1979 . . . it's nice to be able to say to him it wasn't a flash in the pan . . . but like everyone else, I know it wasn't satisfactory . . . let's just hope that next year is better.

**Brian Milton**



# Best of the Club Magazines

THE GEORGE CHARRINGTON COLUMN (reprinted from November '79 Avon HGC Magazine).

Ha! Betcha thought I'd forgotten about yer little ol' magazine agin on muh beautiful California coast an' all. Well, a' bin strutin' muh style out at Zeke's Ranch in the "Out n' Back XC Classic '79" an' only just made it back to Cisco Pancho to tell yer all 'bout it.

The meet was organized by ol' Zeke

whose bin flyin' the desert 'n canyons behind his ranch fer 'bout 7 years now, as' a've bin flyin' agin him over his 95 mile ridge on 'n off fer as long as ah kin remember. He's a founder member of our little ol' flyin' fraternity "The Kanyan Krackers" so when he decided t'organise a XC, well, ah jest jumped at the chance t'show that

ol' buzzard a thing or two 'bout canyon flyin' an' converjence whup-stall.

Anyways, we all pitched up on the Sat morn in 115° heat with m'thermal underwear soakin' (m'damn ground crew persuaded me t'wear the damn things 'cause they thought we wusn't gonna make the take-off winder on time) an' after his usual borin' briefin' about wildcats, rattlers 'n Bigfoot, we got ourselves ready fer a timed distance run t'Aunt Sally's Bronco Bustin' School down ridge 'bout 2 miles inter t'desert. Now ol' Zeke's not too good at the pre-flight check routine an' after tellin' us not t'fly too low over canyons an' t'watch fer 5000 ft/min down sink near the edge, the derved ol' fool fergot his A-frame water bottle clips an' couldn't take the risk of flyin' desert w'out water. Well, ah jest 'bout fell offa m'pack horse when he ambled up t'me an' said as how our duel would have t'be persponned fer another year. Ah couldn't believe muh luck. All them other guys were green behind the ears compared with me an' Zeke, so ah was ararin' t'go.

Now some of them fellas wus limeys, so outta sheer generosity ah decided t'give them the benifits of muh experience flyin' places like Torrey Canyon at 18,000 feet. Ah told them 'bout the awful sink in them canyons, how not

t'get too close inter the wall an' t'carry a CB radio fer safety sake, an' t'make sure the water bag wus tight 'round yer waist on takeoff etc. . . and yer know, them Limies wus so stiff scared they didn't launch at all!!

Hell, ah've bin flyin' these her canyons fur years an't'turbulence only inverts the sail when yer climbin'! What's t'matter wit youse Brits anyway - d'yuh think these sites are unsafe? Ah tell yuh, yer shouldn't be out here wit me an'all us cracked Yanks in places like this if yer ain't man enouff. Shucks, ah plumb don't know how t'convince you Euro's the U.S. flyin' takes a hellava lot of guts. Particularly when y'know that ol' Zeke don't have any ice fer yer cokes when the meet's over.

Anyway, with Zeke outa the way, the Limeys chickened, an' few other cracked yanks down in t'dried up river bed, I flew an' won. An' ah didn't even have much practise either. Two weeks back we went up t'the Grand Ganyon an' it wus closed — bad luck that! So the next trip's gonna be Death Valley, Ca, an'thanks to m'good buddy Ground-pounder, his new Superbug in-flight deck wit the depth guage on't is gonna make me a new World Rekord for flying below sea level. See y'all! George . . .



... ah jest 'bout fell offa m'pack horse

## Editorial from

### "Soar Point" — Mercian

A few weeks back I made the usual pilgrimage out to Meon on a day with wind which can only be described as 'funny'. Couldn't make up its mind what it was doing.

Two of us were there before anyone else, so having rigged up we waited and watched the wind. It was nicely onto the slope but there seemed to be a few 'holes' in it. After about 20

minutes I decided I'd got the measure of it and got togged up. Quick run got airborne from the far slope and about 20 yards out was smacked down by a vicious downdraught. No harm done so I went back pulled the pin and waited. Several other members arrived joined a little later by flyers from other clubs. We all agreed it was a 'funny' day.

Many people did fly but the day was notable for the number of hairy take-offs, scrapes and accidents. Retrieving kites from trees and bushes is quite good fun if you're not flying but the

sound of rending tubing or tearing terylene is not the happiest noise.

Why did it happen? It was obvious that conditions were poor. The disc in the ventimeter was up and down like the proverbial bride's nightie and it still didn't make people cautious. Let's face it Meon is not the greatest site. There are trees which give strange eddies. There are difficulties in getting between various obstructions on the near take-off area. The landing areas too are often not as accessible as they might be. All of this should make us doubly and even trebly cautious.

Later in the day as I packed up still without having flown, I mused about the events I had seen and decided that it was the daftest display of collective irresponsibility I have ever seen. From time to time we all of us do looney things in our flying, our driving, our everyday life but whilst it is very tempting to take a bit of a risk because you've come a long way and you haven't flown for a few weeks and it justifies not doing the garden, we must console ourselves with the thought that there are times when it needs much more courage *not* to fly.

## WING-TIPS

### WRONG WAY WINDS

Winter winds, all the wrong way, or fog, or just a light drizzle and you're on the hill and you don't want to fly. Well, the special *Wings!* Games Correspondent has been out finding a way to pass the time, other than the natural hang gliding pastime of flying the bar. Here's the result of his recent American researches. . .

1. **Hackie** — Small bean-ball, about 2 inches across. Six or more players stand in a circle, and hackie ball is

thrown up in the air. Object is to keep it flying, by foot, shoulder, knee or head — but not hands or arms — for as long as possible. No one wins. Object is just to create a record. Americans and Derek Evans do it for hours. Keeps you fit. Ugh. . .

2. **Boule** — Skilful French game for the discerning hang glider pilot. Boule played between 2 players, or two pairs. One small wooden ball and 6 heavy metal balls. First player throws **chucky** (wooden ball) between 6 and 13 yards, then throws first metal ball. Second player then throws his ball. If 2nd player is nearer chucky, 1st player throws. If not, then 2nd player throws up to maximum of 3 balls at chucky, halting if or when he gets nearer than 1st player. Scored by player having nearest ball(s) to chucky. First player or pair to 15 points.



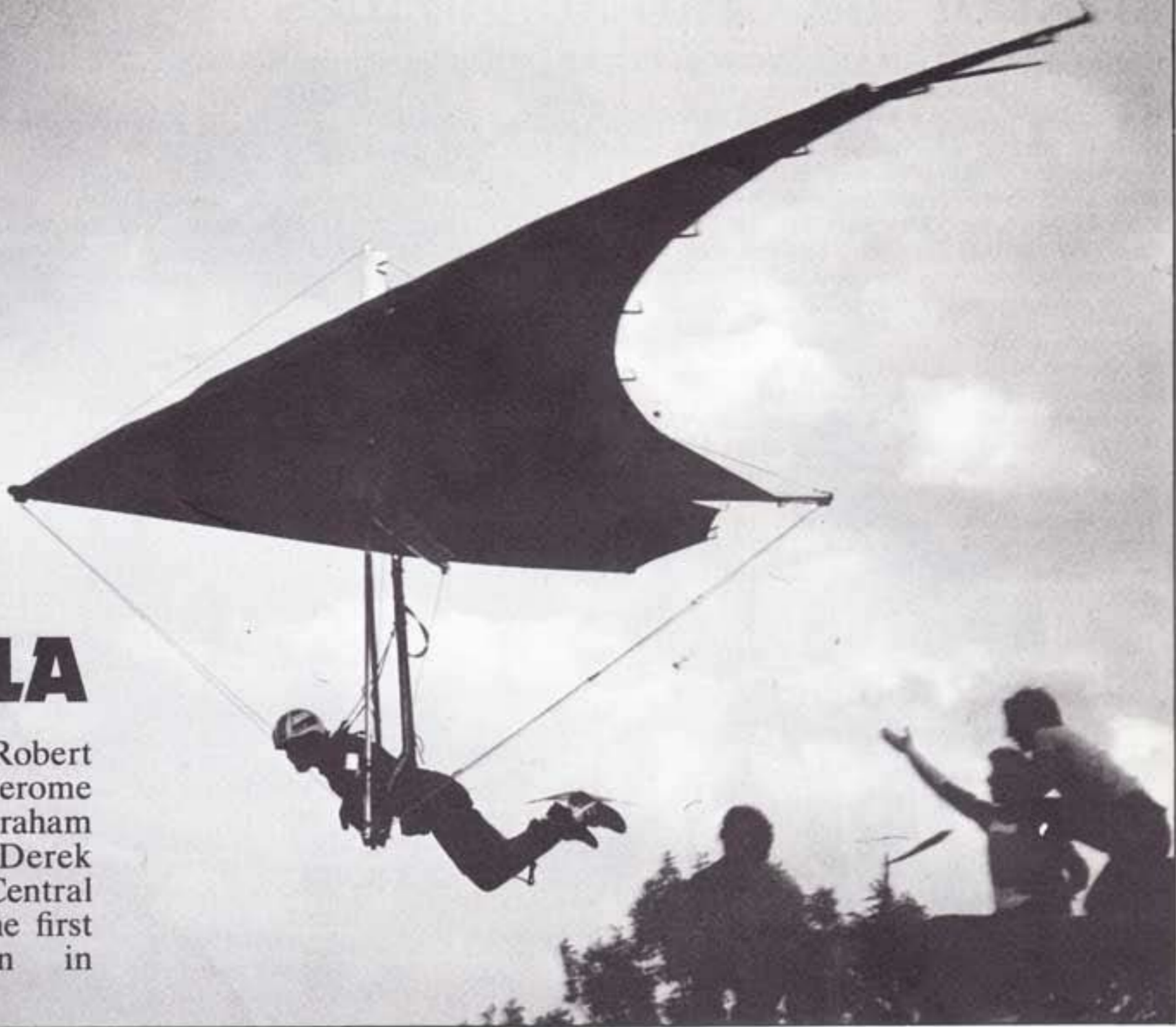
3. **Welly-Hurling** — Take standard British welly, and — on a 1-on-1 — set up eliminators. Try for *style* as well as brute force. No weights allowed in the welly. Don't throw against Lester unless you really think you're the best in Britain, or you're Robert Bailey.

4. **Hooligan Frisbee Golf** — Any number of players, each with a frisbee. Start one end of a take-off area and pick "1st hole". . . it can be Bob Calvert taking off, a commentator, the control-frame of a particular kite. There's strength in numbers, and one must have a sense of humour and a thick skin. One must also be able to run fast in case "1st hole" objects to being so delegated. . .



# GUATEMALA

After the American Cup, Robert Bailey, Bob England, Jerome Fack, Dave Garrison, Graham Slater and Team Manager, Derek Evans flew down to Central America to take part in the first International Competition in Guatemala.



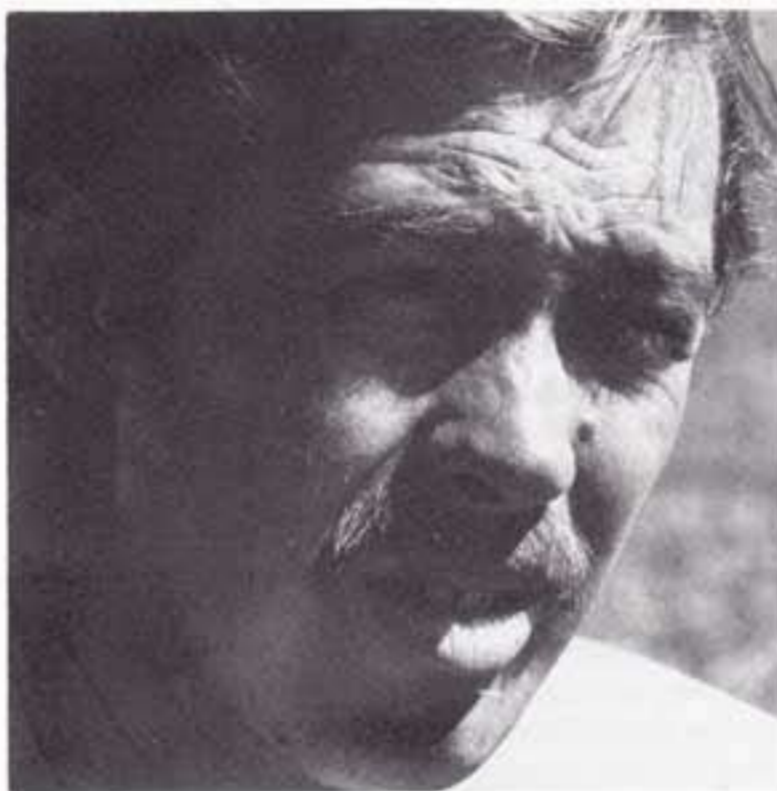
We dined with a President, survived an earthquake, flew reverently from a Nunnery Garden and suffered a thousand deaths at the hands of determined Guatemalan Army Truck Drivers. All this in the balmy atmosphere of beautiful Lake Atitlan, 5,000ft. a.s.l. and 3 million miles from the nearest Barclays Bank, where your rubber plants grow like young oaks, the pointsettias like rhododendrons and where Montezumas Revenge is blamed for most of the unplanned landings.

Forty two Pilots from America, Canada, Guatemala, Britain and Scottish Australia took part in the first Guatemalan Open Hang Gliding Championships and had the pleasure of flying the 2,000ft. ridges which plunge into the north side of the Lake. Across the 60 square miles of clear water loom two 10,000ft. volcanoes and around these monsters each day came the southerly sea breeze, the "Y front", from the Pacific bringing with it the cloud which so often clagged-in the launch areas.

## Four Hour Bus Ride

Temperatures were normally in the high 70's and at that altitude one avoided rushing about. Keith Nichols, an American Cup Team Member, was Meet Director and he had planned the Competition around four fabulous take-off sites. One, called the "Nuns" overlooks a beautiful Bay, 1,700ft. below, and is part of the Nunnery gardens. The "Sites Officer" had apparently secured its use by promising to replace all damaged roses and by fixing the Bishop's plumbing. The landing area was the dried up estuary of a river in the middle of which a "Judges Island" had been created by "Bulldozer" Arthur Kennedy, one of the Organisers.

The Competition had the support of the local Hotels Association, the Tourist Board and, it seems, the President of the Republic himself. He had mobilised the Army to transport us, to guard us and to frighten the pants off us on each journey we made.



We survived the 4-hour bus ride from Guatemala City mainly, we believe, because our Army Drivers' assumption (that all other road users were cowards) was correct.

After one practice day, the competition got under way with President General Romeo Garcia having a 7.30 a.m. breakfast with us all in the Hotel. He was surrounded by heavily armed bodyguards and so, with some trepidation, I presented him with a B.H.G.A. Pennant—I reckon he was about 8ft. tall! Some of his armed guards later asked Jerome Fack, in the confines of the Hotel lift, "when were the British going to leave Belize?" "Soon" was the quick-witted reply, but apart from that, we had no other worrying moments.

## Earthquake!

An exhibition flight of six kites for the President's benefit started flying proceedings, with each landing being greeted by a blast of music from the Brass Band perched on Judges Island. Only one task was possible on the first day because of low cloud, but Bob England and Jerome Fack maxed out and all five of our pilots finished in the top 12.

The next day started well—we had an earthquake for breakfast! The tremor lasted about 5 seconds and everything in sight shuddered—trees, plants, poles and even the wooden walls of the cafe in which we sat. But worst of all, the ground moved sickeningly several inches under our feet. No damage was recorded as luckily the epicentre was 200 miles away. I wind-dummied the first task of the day from the Nuns site and a maximum duration task of 25 minutes was set in fairly marginal conditions. This was followed by a few heats of a speed run over the 2.3 mile course before clouds descended again. Saturday's speed task was completed the next morning and was followed by another "minimum time" run in very marginal conditions. Many pilots landed out on the beaches and had to be rescued by

Police Patrol Boats, but British fliers pulled ahead with some very judicious flying. Graham Slater and Dave Garrison led the field on their Super Scorpions and Bob England, flying his impressive Gannet, lay 4th. Larry Tudor was beginning to show on his U.P. Mosquito but had difficulty in landing it at first. This ship must be quite the best high speed glider flying at the moment.

Round 5 was a duration and spot task which saw Dave Garrison into first place and brought Andrew Barber-Starkey into 2nd on his 10 metre Seagull. He and Larry Croome led the Canadian contingent and we are indebted to this very likeable pair for their deep knowledge of hackie, underwater singing and Montezuma's Revenge (MR). Hackie will be appearing shortly on our hillsides, underwater singing is definitely a dangerous sport, and M.R. can certainly spoil a Canadians day!

#### Tussle

The last round of the preliminaries was from the Nuns again — maximum duration of 20 minutes plus spot landing. Only the top 30 were destined to survive the cut. Bob England had a great tussle with Larry Tudor and won with a landing on the button, but Andrew Barber-Starkey slipped into first place with Dave, Graham and Bob taking the next three. Jerome and Robert Bailey were placed 10th and 13th.

So far so good, but the format of this Competition meant that your score was determined solely by how well you beat, or lost to, your opponent — not how well you flew the course. Two experts together nullified each others flying and produced mediocre scores, whereas an inexperienced opponent could give you maximum points. With this in mind we moved into the finals and all scores were zeroed.

Round one was a duration, speed and spot task in strong wind with low cloud cover. A few near-misses in the cloud and Malcolm Jones came into real contention for the first time on his 11 metre Seagull. He shared first place with Larry Tudor. Jerome Fack, Graham Slater and Robert Bailey were next and Bob England and Dave Garrison placed 10th and 11th. The Super Scorpions were well placed for a win, and Bailey's Atlas was beginning to show its paces in the unstable air — a great all-round kite with phenomenal climb in strong conditions.

#### Restricted Finals

The next scoring round was a mini-deviation task of 2/3 minutes with a landing on a Hotel beach. Pure "Mickey Mouse", but there was no alternative with all the other launch sites clouded in. The crowd loved it and so did Malcolm Jones, as he had another easy win. We suffered a little on this task losing ground to Jim Cobb, on his Electra Floater and to Andrew Barber-Starkey.

Rob Kells from the Wills Factory showed in this round on his Raven — this is the American answer to the Super Scorpion and it will undoubtedly do well.

The final round was from the Repeater Station, a 1,600ft. hill 1.6 miles from the landing area. Speed run out to a pylon, maximum duration of 15 minutes and spot landing in thermal conditions. Robert Bailey, Jerome Fack and Bob England won their heats well, but without big scores and Dave Garrison flew a blinder as the lift began to die. He saw off his opponent Phil Matthewson who just failed to scratch back up the ridge. Graham Slater suffered the same fate in the deteriorating conditions and it was all over. Malcolm Jones had no competition and the Canadians and Americans moved up to fill the first five places. Regretfully the weather had restricted the finals to a pretty meaningless three tasks and the competition ended on a fairly hollow note.

A disappointing result from our point of view but it was nevertheless a very enjoyable competition flown in a beautiful part of the world and we hope we are invited again.

**Derek Evans**  
Team Manager.



*Opposite top:*  
Graham Slater launching  
SuperScorpion  
photo Derek Evans  
*Middle:*  
Robert Bailey, from Leeds  
in Yorkshire, top British  
score in Guatamala,  
assessing a task  
photo John Fack  
*Bottom:*  
Bob England, from Bristol  
with his 'stringbag' Gannet  
photo Mark Junak

*Above top:*  
Jerome Fack, from Bristol  
into prone on his Super-  
Scorpion. Note the  
"nonk rubber"  
photo Mark Junak  
*Above:*  
Keith Nichols meet director  
in Guatamala, and Larry  
Croome, Canadian pilot,  
who placed 5th in  
Guatamala.  
photo at American Cup by  
John Fack.

#### Results

1st Malcolm Jones — Seagull 11; 2nd Andrew Barber-Starkey — Seagull 10; 3rd Larry Tudor — Mosquito; 4th Jim Cobb — Electra Floater; 5th Larry Croome — Seagull 11; 6th Robert Bailey — Atlas; 7th Jerome Fack — Super Scorpion; 8th Rob Kells — Raven; 9th Bob England — Gannet; 10th Dave Garrison — Super Scorpion; 12th Graham Slater — Super Scorpion.

# TAKE OFF — THE FINAL WORD

BY KEV JORDAN

In recent years many articles have appeared in *Wings* discussing the various virtues surrounding one method or another of taking-off. One may be better than another in high winds, or low wind, or one may be preferred when flying prone rather than seated.

This article merely endeavours to highlight the problems generally more frequently encountered by more experienced pilots when attempting to take-off in high winds. However, it may also be encountered in other circumstances where somebody is being given an assistant take-off.

When taking-off in anything but a light breeze, it is normal for a pilot to have assistance from a nose wire man. He serves not only to steady the glider but to aid in selecting the exact direction and angle of attack required by the pilot. If he maintains too much pressure on the front wires immediately prior to take-off, the glider will suddenly pitch up when released.

For example, consider the case where a pilot wishes to take-off in a wind of, say, 30 mph. Normally the pilot will hold the 'A' frame in the way he feels most comfortable, and the nose man will steady the glider and select the optimum angle of attack. The pilot may then ask for the nose to be raised slowly, and gradually more and more of his weight will be supported by the glider. Eventually he will call for the nose to be released.

Just prior to being released, the forces acting on the glider may be analysed. See fig. 1.

In order to execute a smooth take-off the forces being exerted by the nose man must be reduced so as to produce only a minimal change in the overall equilibrium of the glider when he releases.

In fig. 1 the forces acting in a downward direction can be summarised as  $M_1$ , the weight of the pilot; and  $M_2$ , the restraining forces from the nose man. The force acting in opposition to  $M_1$  and  $M_2$  is  $F$ , the aerodynamic forces produced by the sail (lift). Other forces also exist but serve no useful purpose in this illustration.

Fig.1

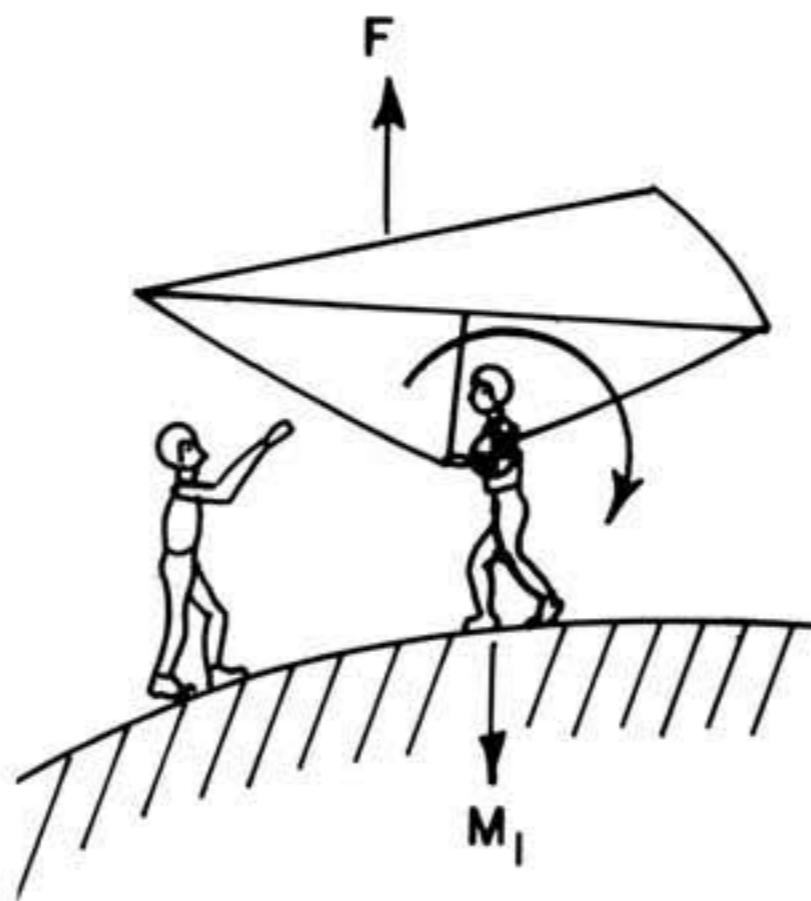
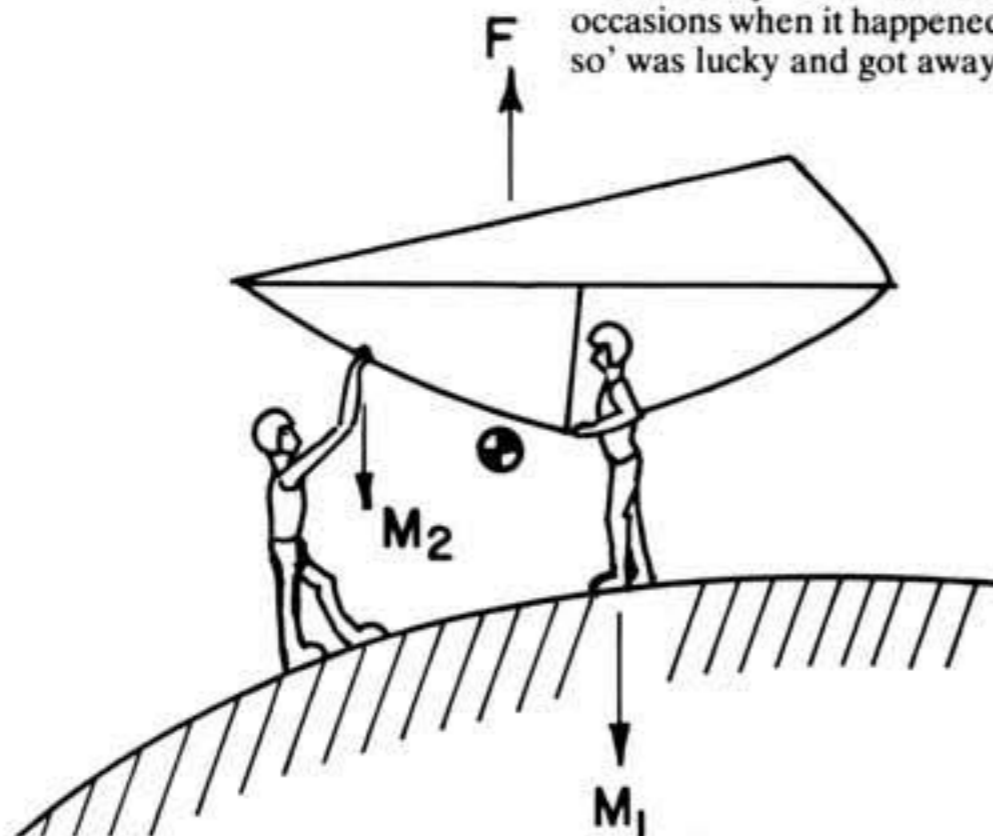


Fig.2

As can be seen, two forces are acting downwards to keep the glider on the ground, whereas only the weight of the pilot is required during normal flight. The presence of the nose man creates a false centre of gravity which is situated somewhere between the two people. The glider, in order to maintain an equilibrium of force, assumes a very low angle of attack (as if in a dive). Referring back to Mark Woodhams' article in *Wings* No. 3, the restoring force produced by the glider greatly increases as a function of the inverse of the angle of attack. Therefore, the nose man is required to counteract a high positive pitching moment for which he himself is mainly to blame.

If the nose is suddenly released, see Fig. 2, the centre of gravity is immediately transferred backwards towards the pilot. The angle of attack of the glider, however, is still in such a position that it creates a strong pitch-up force.

The net result, see fig. 3, as you no doubt guessed long ago, is that the nose flies up out of the nose man's hands, and the pilot is ripped off his feet. The pilot will immediately pull forwards in an attempt to avoid the rapidly approaching stall and all its consequences.

You may now be reminiscing on the many occasions when it happened to you, or when 'so-and-so' was lucky and got away with only a broken arm.

However, your next question will be, "well what can I do to stop it happening?"

The answer is to reach a situation where the force being exerted by the nose man is so small, that when he releases, the change in equilibrium is minimal.

The way to achieve this is relatively simple. As the nose is being raised, more of the pilot's weight becomes supported by the glider. In order to reduce the force being produced by the nose man, the pilot must move forwards towards him. When he is directly under the line of force,  $F$ , the glider will be in equilibrium. If attempting to launch in very high wind, say 40-50 mph, it is far better for the pilot to be in the prone position as if in normal flight. The person on the front wires may then lift the glider into the air so that it is flying. He will probably still be holding the glider down. The pilot then pulls forwards to increase speed until his own weight is sufficient to maintain the same angle of attack. At that point, the nose man releases and the glider performs a stable and controlled take-off.

To illustrate the point further, consider two people on a see-saw,  $M_1$  and  $M_2$  represents the people sitting on each end and,  $T$ , the force at the pivot.

$M_2$  wants to jump off, whereas  $M_1$  wants to stay on. In order to achieve this, they both move towards the pivot. When they both reach it,  $M_2$  jumps off and  $M_1$  is left sitting directly above the pivot. The see-saw itself remains level. The same situation occurs in a stable take-off.

The moral of this story is therefore: when being given assistance by either a person on the nose, or, for that matter, on a side wire, make sure that the forces they exert prior to release are minimal, otherwise a rapid change in pitch or roll will occur, the consequences of which can be disastrous.

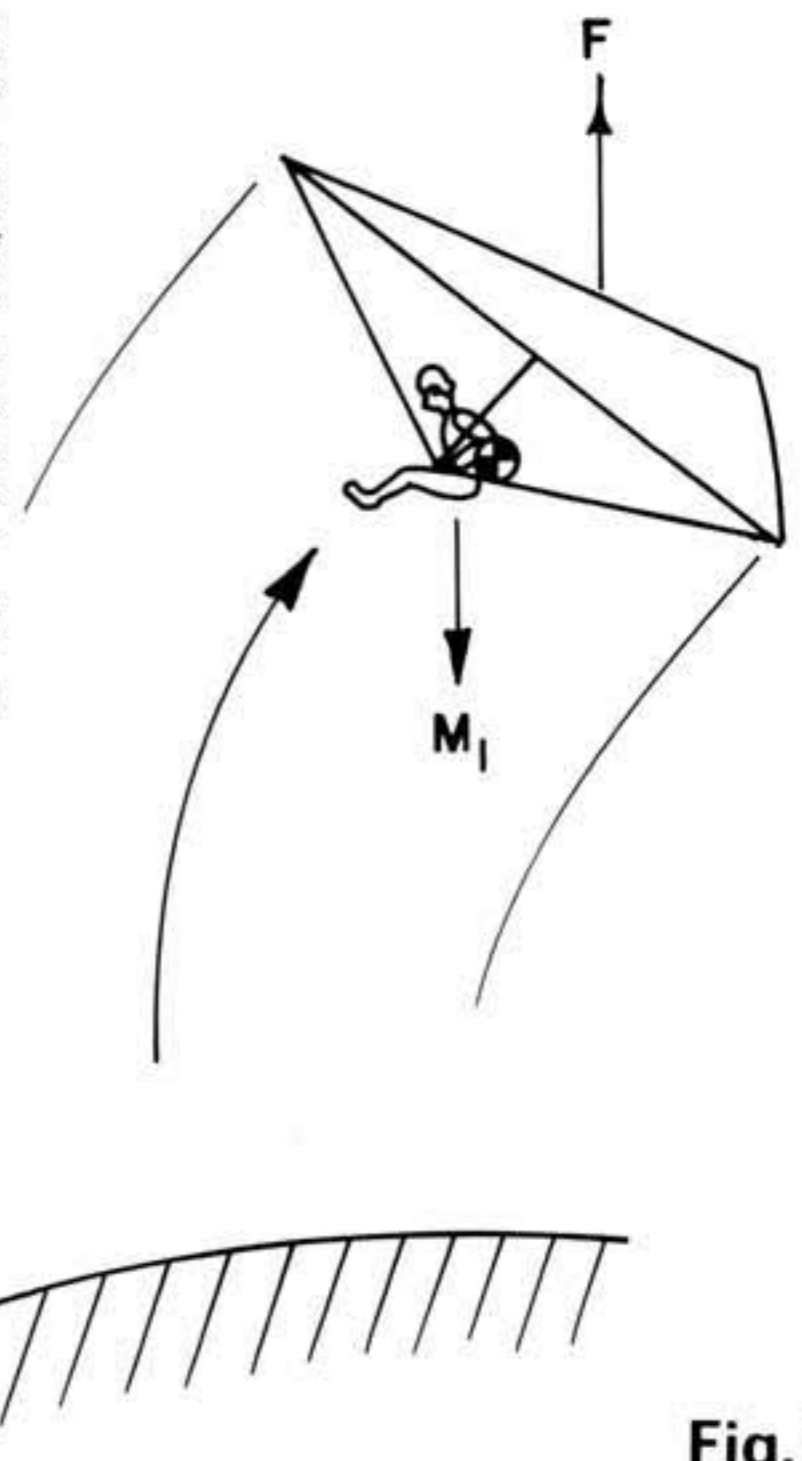


Fig. 3

# AIRMAIL

## FLIGHT CONDITIONS

I got caught out the other day in rather unusual circumstances. Maybe knowing what happened will help other pilots to avoid similar embarrassment or even injury.

I'd been soaring Bishop (600 ft. advantage, W-facing) in a light westerly wind. The street lights of Glenrothes came on and, reluctantly abandoning a delightful view, I headed out to the tricky but familiar bottom landing area.

Over the western boundary of the landing field I started a series of 360s to lose height and drifted back, as expected, to the bottom of the hill, where I opted out of 360s, at 150-200ft. and set up an approach, using slipping S-turns, which on twenty previous occasions had dropped me neatly within ten yards of the spot.

As I S'd, I encountered turbulence, controlled the glider through it, reacting quickly but without worry, and turned on to final. This held more height and covered much more ground than it ever had before. I overshot my spot, the dyke loomed up and finally I had a gentle nose-in.

What happened? A smooth light soarable wind at the crest, and a landing into that wind direction, a direction confirmed by the drift in the 360s?

Think about it before reading on.

It was dusk, the ground was cooling rapidly and Bishop is quite a tall steep hill. The landing was downwind, in a light katabatic flow, confirmed by the shear turbulence at 100 ft. or so and later by the glider inflating from the back.

As winter approaches, these circumstances will occur more often. The

existence of a soarable wind at the top does not mean (though, until this happened, I'd have thought it would) that the direction at the bottom of a big face will be the same. A windsock would help, but probably the best general way to avoid a crunch is to *think* when turbulence is encountered in such a position and quickly re-plan the approach.

**Ian Trotter,  
Edinburgh.**

## HOW HIGH THE PRICE

Dear Editor,

Being a physiotherapist (knowing the sad consequences of spinal injuries and thinking about safety in hang gliding) I would like to ask you whether you know if it is possible that some kind of life saver could be developed like that which is used by sea and river pilots. It is a jacket inflated by compressed gas capsule activated by pulling a little cord. I can imagine not only lives will be saved of people flying coastal sites but even over land shocks might be absorbed better and protect the spinal cord.

If the jacket was developed especially for hang glider pilots it might be constructed from under the buttock up to the crown.

It doesn't weigh much, will not hinder much the movement of the body before inflated may be even not after being inflated.

I'd sooner brake all my extremities than one vertebrae.

Is there anybody in the hang gliding world that would like to inquire after the possibilities at such a factory. In the States they have done research with inflatable air cushions for cars, maybe we might inquire if this principle can

be applied to these jackets.

Who will help us? The price of a fall from not such a height where we might pull a chute is too high. A jacket may bring it down.

**Your double dutch friend in Holland.**

## HOW TO GET ON THE TONY BLACKBURN SHOW

Partly inspired by the Thames Valley H.G. Club sponsored fly-in, we decided to hold our own. The Dunstable Club has a small membership but we thought we could manage to raise about £200-£300, for the local charity, "Friends of the Hospitals of Luton and Dunstable".

Given suitable conditions, each pilot had to make three spot landings, on either top or bottom spots, the maximum score being 10 points per flight.

Saturday 17th November, was the planned start of the fly-in, but strong southerly winds blew it out. Sunday 18th, despite occasionally strong westerlies, allowed some sponsored flying to be achieved. Most pilots managed to hit the top spot using Cyclone, Vortex, Midas E, Cherokee and a Falcon 3! (not all at the same time).

The event was used as a good P.R. exercise, so local press and Anglia Television all turned up in force. We also got a mention on the Saturday morning Tony Blackburn show on Radio 1.

The fly-in was continued over 24-25th November, to allow other members to get their flight in. When total sponsorship is known we will buy a specific item (a truss?) for the Luton and Dunstable Hospitals.

After reading the pre-publicity for the event a woman O.A.P. and her

friend came along to the Downs and presented us with a bag of coins they had been saving (£10 approximately) to give to a worthwhile charity (not the DHGC).

The event proved an enormous success among our members, team spirit and all that! And it achieved *good* publicity from local press and a small spot on "About Anglia", T.V. under weekend *sport*.

**Chris Ellison,  
Dunstable HGC.**

## OVERTAKING RULE

Dear Editor,

I refer to the students handbook page 16, paragraph 5... "when ridge soaring, a glider must overtake between the hill and the glider it is passing."

Air Law says overtake on the right. If you cannot overtake safely on the right it is your responsibility to stay clear, i.e. by turning away.

BGA rules say (and I cannot agree with them) that a glider may overtake on either side within the UK. This seems unsafe to me, because there are places (Devil's Dyke at 4 p.m. in winter) when one only sees a silhouette ahead against the sun and one might think one is overtaking when actually a head-on situation exists, and turn the wrong way.

I have lived with rules of the air for 30 years and the one clear point is always avoid by turning right. This is unmistakably safe. In any case, what happens abroad? So what authority lays down that a glider must overtake on the left?

To sum up, the simplest and most comprehensive rule is best. This leaves less chance for indecision and or erroneous choice when the pressure is on, and for inexperienced folk.

**Vince Hallam, Brighton**



photo by John Wadsworth

# The 1980 Annual General Meeting and Conference — 1st and 2nd March at Warwick University

BHGA Council Members need your views and ideas to guide their decision making over the next 12 months. If you care about how the sport is run, be there or make sure that your club sends a delegation. This year's AGM will again be hosted by the Mercian Club at Warwick University due to the enormous success of last year's event. Proceedings will begin at 2.00pm on Saturday and shortly after this the meeting will split up into groups to discuss all subjects that members and Council want discussed.

Bar facilities will be available in the evening and again a film evening will be held with a repeat of another competition to find the best 10 minute amateur hang gliding film. Manufacturers, schools and equipment suppliers will again take part in a trade display.

Sunday will see the AGM proper with reports and conclusions reached on each of the subjects debated on the previous day, elections to fill Council vacancies and voting on any other proposals. At lunch time food and a bar will be available.

## Council Vacancies

Our Chairman for the last 2 years, Reggie Spooner, is standing down, also Derek Evans, our Treasurer for 4 years, is not standing for re-election. There will be at least 3 other Council vacancies to be filled.

Council member Roy Hill is standing for election to the Chair, and at the time of going to press we know that Percy Moss, David Squires and Diane Hanlon are standing for re-election. All three have been co-opted to fill Council vacancies since the 1979 AGM. David Bedding who has recently volunteered his services to look after the sites area will also be standing for Council.

## Topics for Discussion

Whether or not you can attend these should be notified to the BHGA Secretary A.S.A.P. So that they can be sorted easily, please send a SEPARATE SHEET OF PAPER FOR EACH SUBJECT with a brief outline of your views on it. The person leading the discussion on a subject can then make known these submitted views.

## Nominations for Council

Will those wishing to nominate members for election to Council please send their nominations to the Secretary. Each should be seconded and accompanied by the nominee's written agreement to accept office if elected. Council members are not just expected to attend Council meetings. They are expected to become responsible for one of the Association's fields of activity. They should be enthusiastic and prepared to work. The work load need not be oppressive if a Council member is able to share it by forming and leading a team, group or committee to run his/her area of responsibility.

If Roy Hill is elected to the Chair we will need a Council member to be responsible for training. We also desperately need Council members to look after clubs, airworthiness, and — most important of all — a Treasurer who can handle competently the Association's finances.

## Full Details and Voting Slips

These will appear as a centre page insert in the issue of *Wings!* that will be despatched to members in early February.

## November Lottery Results

We now have over 230 members in the '500' Club and the prize money in November amounted to £113.50 — a similar sum was transferred into BHGA reserves representing our "profit" on the draw.

### Prize Winners

1st—J.A. Cunningham, Durham	£45.40
2nd—H. Dunthorn, Aberdeen	22.70
3rd—A.T. Delaney, Manchester	11.35
4th—J. Brown, West Yorks	6.81
5th—L.I. Hazelhurst, Birmingham	5.68
6th—E.A. Fowler, Frimley	5.68
7th—A.M. Rowe, Chelmsford	4.54
8th—J.G. Saphier, Liverpool	4.54
9th—P. Cranshaw, Preston	3.40
10th—G.J.D. Bruce, London	3.40

This lottery is run, as you know, with a view to providing our reserves with much needed cash each month, and I hope more of you will see fit to join in at £1 per month in an effort to protect your sport. Entry forms are available at our Taunton office and they will, in addition, be sent out from time to time with your *Wings!* magazine.

**WE NEED THE MONEY — SO JOIN NOW!**

Gambling, you may say, is just a sin.  
But by joining the lottery we  
all must win,  
The BHGA is for the good of us all,  
So come on you members and lets  
play ball  
And if you don't think it's worth it,  
just remember,  
*I won second prize in November.*

**Hugh Dunthorn,  
Aberdeenshire.**



IRISH DUEL HARNESS by Jenny Belford

## JANUARY 1980 Advertising Rates for *Wings!*

Single leaf insert	£100.00
Double page insert, stitched into magazine	£150.00
Back Cover	£120.00
Whole page	£100.00
Half page	£55.00
Quarter page	£32.00
Eighth page	£20.00
Sixteenth page	£12.50

Classified ads (non personal or BHGA)  
10p per word Minimum charge £2

10% discount for three adverts in different sections

10% discount for three adverts in different editions, paid in advance. All adverts must be accompanied by full payment

Publication dates are the 1st of each month, and all camera-ready artwork, with full payment, should reach me no later than five weeks before publication. Artwork that needs preparing should reach me at least 10 days earlier

**SILVIE HOWARD**  
Commercial Editor  
Upton Magna 365



# Goodbye, British Powered Hang Gliding Club . . .

# HULLO, British Minimum Aircraft Association.

The Powered Hang Gliding Club is no more. At the AGM of the old BPHGC, on Sunday, November 18th, attended by 46 people, of whom about 20 were full or associate members of the BPHGC, a new association was created.

All that remained of the old committee were three people. Ashley Doubtfire, the BHGA rep, Gerry Breen, Training Officer, and Steve Hunt, who liaised with CAA and was Technical Officer. Steve gave the year's report, in which it was admitted there had been a lack of communication between members and committee. Two resolutions were put to the meeting, and all voting was done by the original members. The first concerned a paper circulated by the CAA on proposed amendments to the Air Navigation Order, which would have the effect of excluding aircraft below 50kgs from normal aircraft regulations.

The meeting, after discussion, agreed to opt for an upper limit of 100kgs, and to change the reference to hang gliders in line with this (after all, who could launch a 100kgs aircraft by foot?).

A proposal was put that the club should cease to be a member club of the BHGA, which was carried by 9 votes to 8, with 3 abstentions, after a recount.

There was then a successful vote on the resolution that the club be renamed, the constitution amended, and a request be made to the BHGA to make arrangements to become an affiliate of the BHGA.

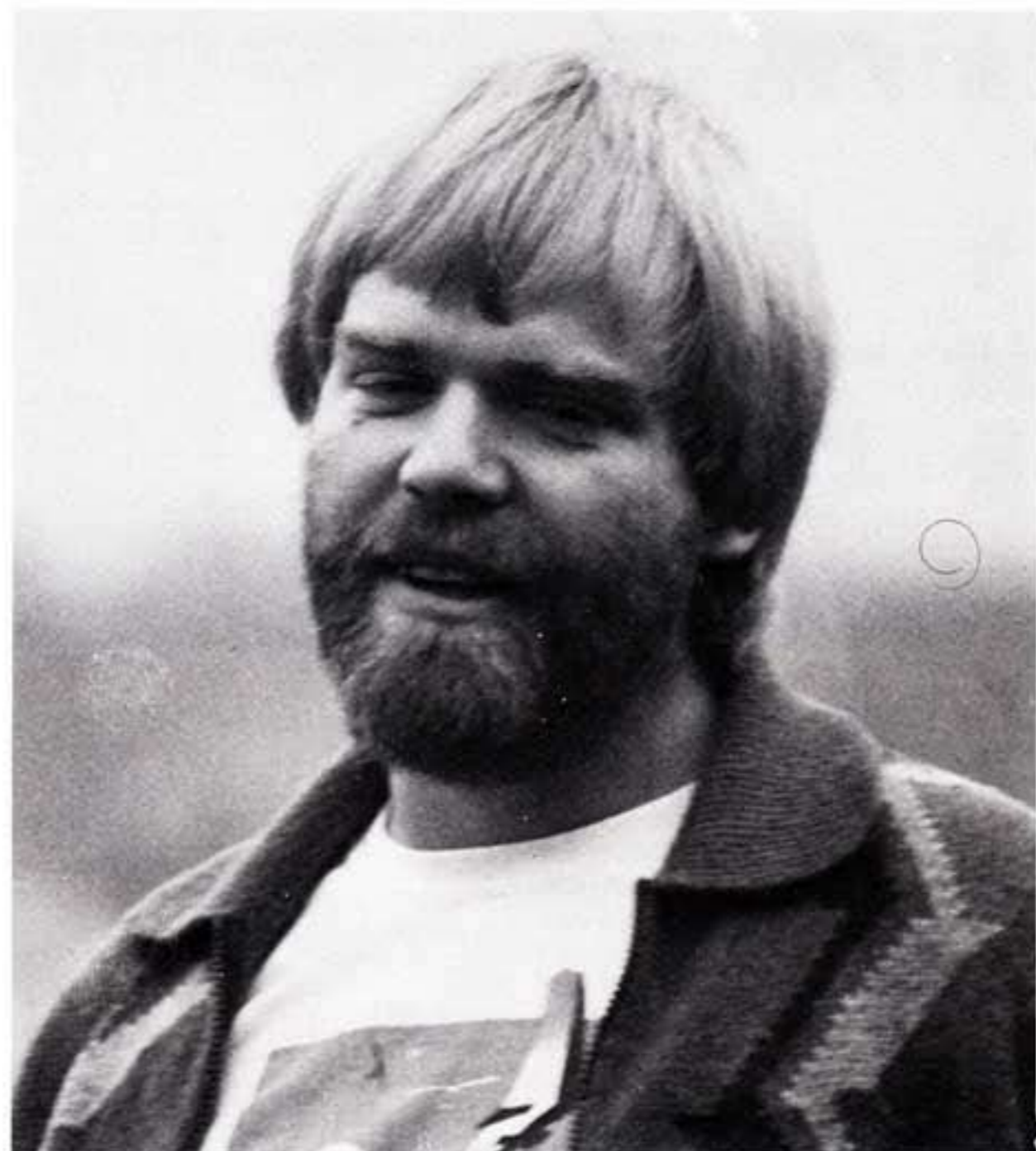
Anyone at the meeting who wanted to be a member of the new club then joined, paying £5 for a year's membership. The funds — £196 — from the old BPHGC, were also voted to the new association.

Officers were elected, as follows:  
*Chairman* — Steve Hunt.

*Committee* — Dave Kirk, Ashley Doubtfire, Brian Harrison, Paul Baker. Their responsibilities, including liaison with CAA, to be decided.

The committee was given the following brief:

1. To negotiate affiliation with the BHGA (at the moment there's no machinery in the BHGA constitution for "affiliation".)
2. To discuss with BHGA the best approach to CAA.



Steve Hunt — First Chairman, British Minimum Aircraft Association.

3. To represent to CAA and other bodies the interests of the new organisation, and to seek the delegation by the CAA of authority for the new organisation to control the flying activities of its members.

4. To set up internal systems to manage training, airworthiness, finance and other matters.

Dave Thomas volunteered to take on the job as newsletter editor.

A proposal was carried to call the new organisation *British Minimum Aircraft Association* — minimum cost, minimum weight, minimum regulation.

For consideration at BHGA AGM, March 1st, 1980. Proposed Constitutional Amendment, from Ashley Doubtfire.

Under CLUBS AND OTHER BODIES:

- (a) Member Clubs
- (b) Affiliated Clubs

addition as follows:  
(c) Affiliated Bodies

These shall be defined as those bodies which do not meet the requirements of member or affiliated clubs, but wish to be associated with the BHGA, due to overlapping functions.

## Wind SHEAR

### BEWARE

*Stalling:* You get layers of wind at different speeds and directions. One layer at 20-30 mph may drop to 5 mph within 12ft. or so. This is *Wind Shear*.

In the high wind, you may not be penetrating, just going down vertically. 12ft. later, you'll be in only 5 mph wind and stalled, dropping out of the sky.

When you turn, don't forget your stall speed rises. A 60° turn *doubles* your stall speed. See the pilots handbook for more information.

*LZ size:* Try to pick one big enough for you to get into!

*LZ slope:* It's difficult to judge. Use shadows, streams, roads wending their way round hills, etc. It may be best to land uphill, regardless of wind direction with some gliders.

*LZ crops:* Also difficult to judge how tall some crops are. It's disconcerting to "land" only to find you've another 4ft. to go! (Fancy landing in peas!). It's even worse if you think you've another 4ft. to go and plough in.

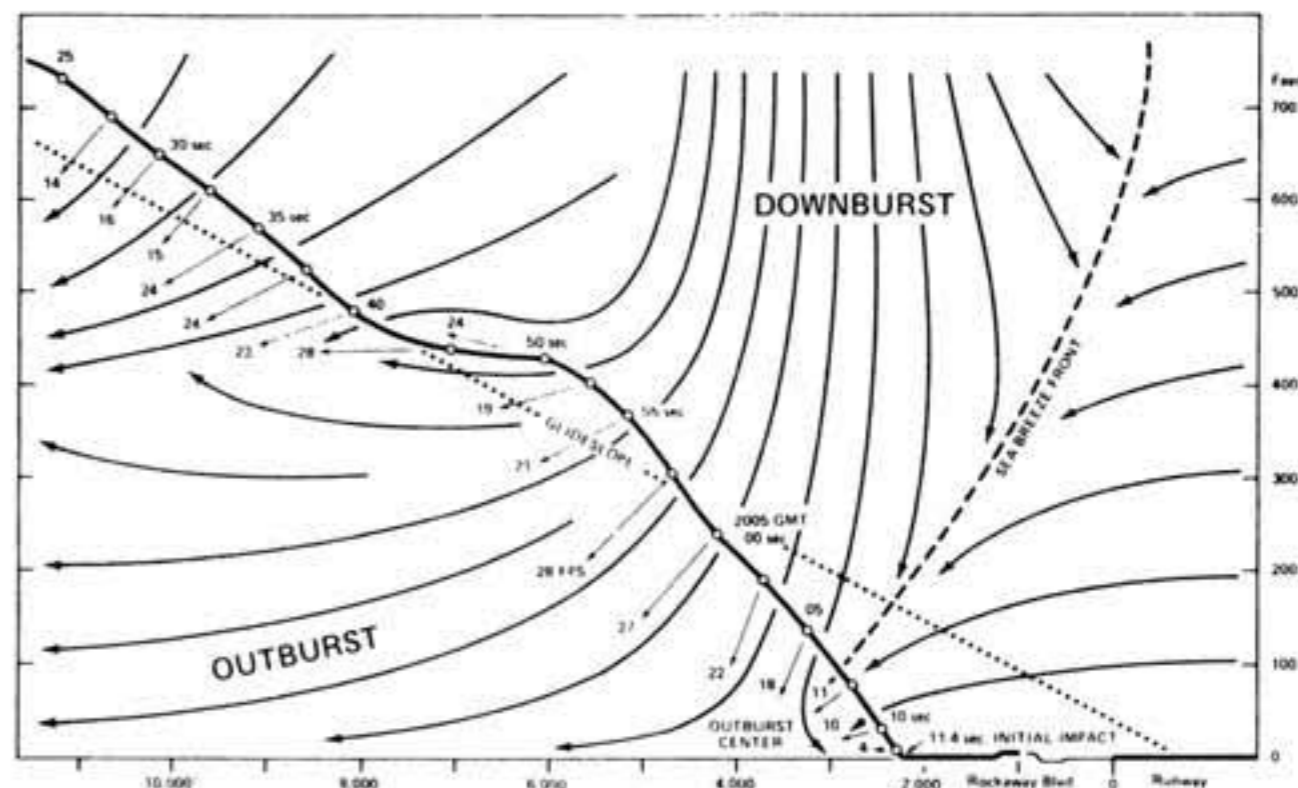
Do as little damage as possible, land by the edge of the crops and keep your glider off them as you come out.

*LZ surface:* Try to avoid fresh plough, you might twist an ankle. Similarly beware vineyards, rocky ground, etc.

*Rotors:* You get rotors downwind of: Trees and bushes, Building, walls and fences, people, animals, cars and lorries etc.

*Obstructions:* Watch out for: All the above, plus power cables, telegraph and railway lines, wire fences, vineyards and high poles.

**MIKE COLLIS**



Windshear is not just an academic question. The diagram above shows a horizontal cross-section of wind conditions which were a primary factor in the Easter Airlines Boeing 727 accident at Kennedy Airport on June 24, 1975 (source: Spearhead echo and downburst near the end of JFK Airport runway, New York City, by T. T. Fujita, SRMP Research Paper 137, University of Chicago, March 1976)

Photocopied from "Flight" 22nd September, (28F.P.5.41700 ft/min)

What price a hang glider in similar circumstances; members should always consider such a possibility (however remote) when planning their approach and landing.

# NEWS

## COMPETITION NEWS

There was a Competitions Committee Meeting November 24/25, 1979, in Newbury, Berkshire. A great many decisions were made about the 1980 Competition season, home and abroad.

### National League 1980

The following dates were agreed for the six League competitions:-

February 23/25 (Sat-Mon)  
 March 28/30 (Fri-Sun)  
 April 25/27 (Fri-Sun)  
 May 24/26 (Sat-Mon)  
 August 9/11 (Sat-Mon)  
 September 12/14 (Fri-Sun)

Provisionally John Fack, Graham Slater, Bob Harrison, Dave Squires, Trevor Birkbeck and Brian Milton have applied to run League competitions, but offers are invited. The League will pay £175 (an increase of £25) to each organiser, who must provide 3 trophies and the sites for a 3-day competition.

All League competition will be based on 1-on-5, aiming for 3 tests within each task. League scoring would be on task points only, rather than the old system of task, competition and league points. There will be no scoring by competitions, as in the previous three years, but pilots will be allowed to drop one task for every six completed by the League.

A formula to avoid the risk of mid-air collisions on open-distance cross-countries has been worked out, involving a recommended maximum of 20 fliers in the air on a ridge at one time, at the chief marshall's discretion. Maximum air-time in one flight on a ridge shall be one hour, with a half hour gap — depending on how many in the air — between flights. The committee accepted that this system might reduce the chances of breaking British or World records in competition flight, but safety would be increased.

### Overseas Competitions

It was agreed to plan for 10 overseas competitions in 1980. Individual competition members were delegated responsibility for forward planning:

Competition	Projected Team Size	Forward Planning
Brazilian Ch'ships, Rio de Janeiro Possibly late Feb/early March	8+2	Derek Evans
Russia — trade & competition trip Possibly May/June	8+2	Brian Milton
Bleriot Cup (Anglo-French Team XC Comp) Lachans Mountain, South of France. June?	8+2	David Squires
Japan — dry run for 1981 World Champs possibly early August	3	Derek Evans
European Champs, Kossen, Austria Rumoured late June possibly Aug/Sept	12+2	Roy Hill Tony Fuell(?)
Bishop XC, Calif. July 7/15	4+1	John Hudson
Grouse Mountain, Canada, July 20/24? + Swansea (Canada) XC	8+2 (2)	Bob Harrison
American Cup, October plus Guatamala (Nov.)	10+2 (5+1)	Derek Evans

It was provisionally decided not to send anyone to the US Masters (if we had an invitation) because Johnny Carr's trip netted him 20 minutes total of air time. It also clashed with League Final.

### Budget

Following the precedent established after the 1978 competition season, which worked successfully in 1979, the whole of the overseas and domestic competition programme for 1980 would be funded without drawing from membership subscriptions. Committee accepted that BHGA Central Funds might have to use some of the Competitions funds from time to time.

All budgets for competition were submitted before January 1st, 1980.

### World Championships

The 1981 World Championships will be in Japan. The British team sent there will have to spend a month in Japan to have any chance of taking championship place.

Provisionally, the 1983 World Championships are booked for Britain. Two sub-committees, each working independently, are looking at how we can cope with such championships, specifically SITES, NUMBERS, CLASSES, FINANCE and FEASIBILITY. The sub-committees will report at the first League, February 23/25, so a report can go on to BHGA Council and from there to CIVL.

The sub-committees are chaired, respectively, by John Fack, c/o WIND-CRAFT, Sion Lane Garage, Bristol, and Bob Harrison, c/o MAINAIR, Shawclough Road, Rochdale, Lancs. If you have any suggestions — aside from a short snappy rejection of the whole idea — please deal by letter with either of these two pilots.

### League Entry

The qualification for entry into the League in 1981 would be the same as 1980; that is, three flights, out of ridge lift, of 10 kms or better, would qualify the applicant for invitation to a League-Entry competition.

It was agreed it would be healthier for the League to give more attention to League-entry. The XC qualifiers must be made between October 1st, and August 1st 1980, and we will endeavour to run the Entry competition in August.

### XC League

The committee wholly endorsed the XC League proposed by Dave Harrison and Bill Banks-Jones.

Numerous other decisions were made at the meeting. When the minutes are available, I'll give you details.

## XC LEAGUE

Dave Harrison and Bill Banks-Jones, who live in Yorkshire, are going to run an XC League in 1980.

They propose: A monthly tabulation of pilot XC performance showing the distance of their best three flights in the calendar year, this to be published monthly in *Wings!* Flights to be made anywhere in Great Britain, at any time in the year, but qualifying flights to exceed a distance of 10kms.

Flights to be "clean", i.e. infringement of Air Law and/or damage to person or property — whether sustained by a third party or the pilot — would nullify the flight.

Witness to launch and landing will be required of each flight.

The competition will be open only to pilots meeting BHGA's requirements for XC flights (currently Pilot 2 or Wings).

Prizes to be awarded annually to individual pilots with the best long distance performance, and to the club

with the best three places in the individual table, the prize to be presented at the AGM.

**Aims:**  
 To create competition which is open to anyone who has the required rating, and to stimulate the development of XC skills.

To provide national recognition for good flying, which hasn't necessarily broken any records.

To provide a national XC progress information service.

To provide a target for good pilots after reaching pilot 2 standard.

The proposal for an XC League was put to BHGA Competitions Committee at its annual meeting, in Newbury, on November 26th, and accepted unanimously. Providing, it works, it could be used as a basis for National League Entry.

The address to send information on your XCs, from now on, is Dave Harrison, Mill Rigg, Cross Lane, North Frodingham, Drifffield, Yorkshire. Bill Banks-Jones, The Orchards, Church Fenton, Tadcaster, North Yorkshire.



Derek Evans, retiring BHGA Treasurer

## TREASURER AND COUNCIL MEMBER

Having done this job since March, 1976 the time has come for me to step down and I would like to hear from anyone qualified to take over these duties as soon as possible. My personal commitments are such that I cannot continue to give enough attention to this work but, for someone who is interested in guiding hang-gliding through its formative years, Treasurer/Councillor can be very rewarding.

Please contact either me or Chris Corston on the telephone.

**DEREK EVANS**

Tel: 0732 59995 or 0892 36026

**CHRIS CORSTON** Tel: 0823 88140

## COUNCIL MEETING OF 28/10/79

At it John Hunter became Council Member responsible for Airspace matters due to Mike Caston's resignation. David Squires accepted the job of keeping members informed about what Council are doing on behalf of members.

### COMPETITIONS ACCOUNT — 1979

	Expenditure £	Income £	£	£
World Championships	5,106.27	980.00	4,126.27	
American Cup	*6,222.58	4,022.50	2,200.08	
Bleriot	1,384.32	-	1,384.32	
Bishop X Country	3,307.61	1,481.70	1,825.91	
Guatemala	*1,410.01	190.48	1,219.53	
National League	1,183.79	1,565.81		382.02
Int: Draw I	714.50	2,777.05		2,062.55
Int: Draw II	* 800.78	2,674.02		1,873.24
Sports Council		8,817.00		8,817.00
T. Shirts	589.68	124.00		
Team Jackets	119.80			
Team Badges	227.13			
B.B.C. — League Final		345.00		
Donations		83.00		
Bank Interest		373.54		154.98
VAT Reclaims		166.05		
	21,066.47	23,600.15	<b>Balance</b>	2,533.68

\*Estimated figures

STOCKS HELD: 40 Team T Shirts  
 40 G. B. T Shirts  
 70 Team Badges  
 Team Members' Contributions Total £2,880

Note from Editor: None of the income came from Membership Subscriptions. It was generated from Sports Council, Two Draws, and the competing pilots themselves.

Derek Evans  
 26/11/79



## DAVID BEDDING

At the Council meeting of 28/10/79 his offer of help in the sites area was gratefully accepted. This will involve amongst other things contact with the Head offices of major land owning bodies.

## RECORD FLIGHT

### JO BINNS

A Record Goal Flight has been made by Jo Binns during the Cross Country Classic held in California USA back in the summer. Rick Wilson is well satisfied with the claim, and with the way in which the documents have been presented in support of the claim.

### Declaration of Goal Flight

Pilot: Joe Binns.

Date: 10th July, 1979.

Place of Take-off: Gunter Canyon, Bishop, California, USA.

Goal: Junction of Highway 10 and Highway 6 near Basalt, Nevada, USA.

Distance: 37.8 miles.

Type of Glider: Chargus Cyclone.

Start Time: 12.40 pm.

Time of Landing: 2.50 pm.

Official Observer at Take-off: Don Partridge, Organiser of the Owens Valley Cross Country Classic.

Witnesses to the Landing: Ray Clark, Huntington Beach, LA, California. Steven Stuchey, San Diego, California.

Photographic Evidence: Shot of the Glider at the Junction of Highway 10 and Highway 6, in shot are the Glider and the National Interstate Highway Marker 6 and 10, Nevada.

Congratulations, Joe, don't forget the five hours.

RICK WILSON



## THE CENTRAL FIGHTING FUND

This was formed to pay for legal battles to protect sites. Donations now total £1,136.00.

Council wish, on behalf of all members to thank and acknowledge further donations from the following:

George Cayley Sailing Club, D. Loxley, D. Wiseman, M. Wira, R. Newton, Devon and Somerset Condors H.G.C., Wessex H.G.C., Cumbria H.G.C., Angus H.G.C., D.J. Smith, B. Clifford, North Yorks H.G.C., Thames Valley H.G.C., Western Counties H.G.C., C.J.D. Corston and Northampton H.G.C.

## MAINAIR SPORTS NORTHERN TRADE FAIR

Mainair Sports recently hosted their annual trade fair and social evening at Rochdale. Over 150 people attended and thoroughly enjoyed the free pie and peas and socialising between members of some seven different Northern hang gliding clubs.

The evening featured a full display of the Company's wares, a video film of hang gliding, and Mainair's latest venture, Sailboarding.

John Hudson presents Mainair's Christmas Competition trophies to Richard Brown and Malcolm Dean.

Photograph by Derek Allen.



## WELFARE ADVISER

Liz Squires, wife of SSA Chairman David Squires, but in her own right a superb organiser, has taken on the job of WELFARE ADVISER for the BHGA. The job came out of a query from the wife of a hang glider pilot who had been left quadriplegic following an accident... could BHGA help, she asked? This is how Liz described her response...

While I do not feel that the BHGA should be responsible for setting aside funds to help those in need, I do feel that the BHGA should have a person available to offer advice, reassurance and general guidance as to what is available to them. I feel an appropriate title for the job (although I don't particularly like it!) would be that of Welfare Adviser.

I would anticipate this job to cover a wide range for those injured, disabled or bereaved in the sport of hang gliding. I would require some time to obtain all the information required and intend contacting social workers, occupational therapists, physiotherapists, social security officers, rehabilitation centres, holiday centres for the disabled and their families, spinal injury units, neurosurgical departments and the sport rehabilitation centre.

From within hang gliding, it will obviously be necessary to liaise with John Hunter, Clubs, those who have already been in situations of need, whether mental, physical, social or financial, and with the BHGA in general.

I do not intend the job to be regarded as morose in any way and feel there is a genuine need for someone to take on the task.

For those of you who do not know me, I have been involved with hang gliding for almost four years, was one of the founder members of our local club, serve on the SSA committee and although about to resign, have been Editor of 'Flying Scot' for two years. I also attend all the Leagues and usually help with their running.

I work as a District Nursing Sister and prior to my present job, I was a Sister in first of all, the Accident Wards and latterly in the Casualty

Dept. I have had working experience of both spinal and neurological injuries and now have contact with social workers etc. in the community.



## From GLIDER RIDER November 1979

"When the British arrived for last year's American Cup exhibiting a team spirit usually found in any sport but hang gliding, many thought them amusing. When they handily won the first Cup, some thought them lucky. This year they were just as "amusing" and just as "lucky". But they are also, irrefutably, the best hang gliding team in the world..."

## From telephone conversation with Bettina Gray

The First Pan American Hang Gliding Championships, including 4-man teams from the USA, Brazil and France, took place in Bogota, Columbia, from November 1st to 11th. The first reports I've had is that it was a disaster. It was organised by a judge at the 1978 American Cup, Ed Vasquez, who promised \$10,000 in prize money, and secured FAI endorsement for the competition. We were not sure the whole thing would work (we only went to Guatemala because the respected American pilot, Keith Nicholls, was organising it, and had put his reputation on the line), so we didn't send a British team. Interestingly enough, France the Team Champions at the last World Championships, were the winners, with Brazil 2nd, and the USA — including Joe Greblo, Jeff Scott, Rick Grigsby and Sterling Stoll in the team — were third. The problem was, there was no prize money. That meant everyone's budget went up the spout. One has heard reports of angry hang glider pilots combing Bogata looking for something of the organisers to sell...

## NON-MEMBER CLUBS

All College, University Clubs, etc. known to the BHGA Secretary were sent details of the new scheme for Club Registration during November. This is the method by which Club Public Liability Insurance is available to clubs that are not Member Clubs.

If your Club is in this category and no details were received please write to the Taunton Office for details.



WASPAIR, as most of you know, has gone into liquidation. A statement of the former company's affairs is in the public domain, and available, and certainly of interest to BHGA members. Briefly, unsecured creditors, including the BHGA, are owed over £98,000 and credits and debits are as follows:

Balances at Bank	£22,194.28
Pre-liquidation Accounts, deposit	£10,339.33
Debtors	£17,213.00
Stock	£4,600.00
Vehicle	£800.00
	£55,145.61
Estimated costs	£3,000.00
Net funds to complete liquidation	£52,145.61
Preferential creditors	
N.I.C.	£3,564.29
PAYE	£4,324.90
	£7,889.19
	£64,256.42
Unsecured creditors (including BHGA)	£98,118.63
DEFICIENCY	£53,862.21

# HOW TO GET A BETTER WEATHER FORECAST...

... now there will be less weather forecasters around. . .

The Met Service has to provide a service for all forms of aviation. The problem, as BHGA and BGA learnt last November, is that demand is growing all the time, while the service itself is shrinking. Individual staff can't cope, especially when pilots of all kinds — balloon, glider, hang glider, private and any other — phone in for just that *extra* piece of information. What is happening is that each forecaster — who, with back-up services, costs an astonishing £50,000 — is being paid for by commercial services, while the demand appears to be coming from groups, like ourselves, who don't make a direct payment . . .

I don't think we really *want* to make a payment. The problem we discussed was, what should we do for weather forecasts? A couple of options emerged . . .

1. There is an excellent pre-recorded service available, if you want to learn how to use it, for all flights below 10,000 feet. It's called ATAS. Look at the UK map, and you'll see it's divided into 20 areas. Four different

phone numbers are available to find out, in detail, the weather in each area. The numbers are:

Areas 10-16:  
Manchester (061) 499-1717 or West Drayton 42513

Areas 17-30:  
West Drayton 49262/3 or Manchester (061) 499-3131

The system operates between 0500 and midnight, it's pre-recorded, changing every 3 hours. A pilot's proforma is also shown, which you could use by covering with a plastic sheet, rubbing out information once you've used it, ready for another go. The recording lasts less than 3 minutes, and frankly, you will need practise in collecting information. Try the number in the evening first, when you've got time to spare, to learn how to collect the weather information. I found the first few times were confusing, until I sorted out what I really needed.

The significance of knowing the freezing level is that, once you learn at what height 0°C is, and what the

## Civil Aviation Authority

General Aviation Visual Flight Forecast Service

### PILOT'S PROFORMA

PERIOD OF VALIDITY		From .....	to .....	GMT	Date .....	/ .....	/ .....																
General Weather Situation .....																							
WARNINGS .....																							
FREEZING LEVEL (0°C)		Areas .....			Height (ft) AMSL .....																		
WEATHER	Area	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Category
																							CAVOK
																							O
																							D
																							M
																							X
UPPER WINDS		Area		Direction (deg T)		Speed (kt)																	
2500 ft		.....		.....		.....																	
5000 ft		.....		.....		.....																	
7500 ft		.....		.....		.....																	

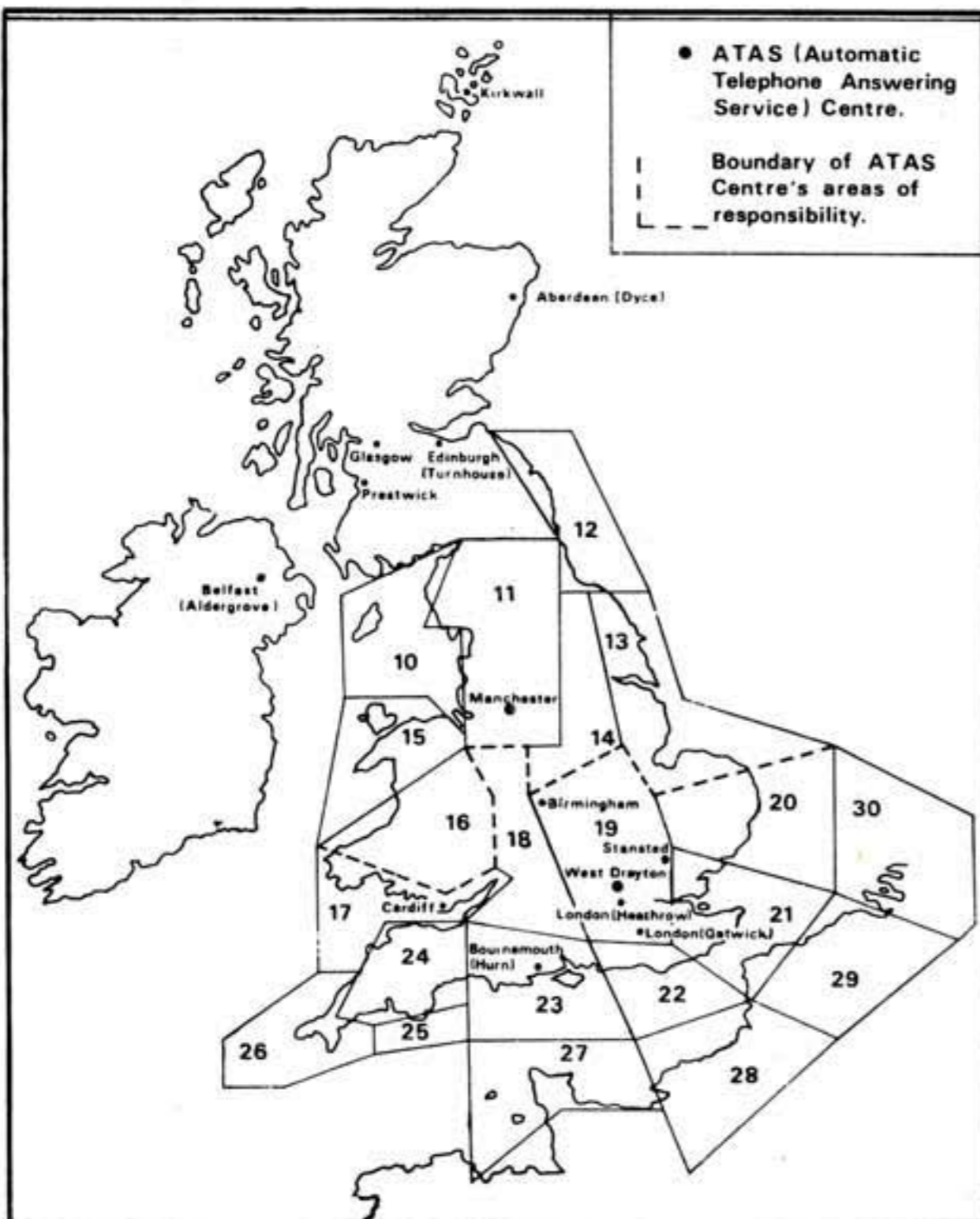
### EXPLANATION OF THE WEATHER CATEGORIES USED IN THIS FORECAST

Category	Visibility	and	Cloud Base (AMSL) (4/8 or more cover)	Other Factors
CAVOK	10 km or more	and	no cloud below 5000 ft and no cumulonimbus.	No precipitation, thunderstorm, shallow fog or low drifting snow.
O (Oscar)	8 km or more	and	2000 ft or more.	
D (Delta)	3 - 8 km 8 km or more	and	1000 ft or more or 1000 ft to 2000 ft.	
M (Mike)	1.6 - 3 km 3 km or more	and	800 ft or more or 500 ft to 1000 ft.	
X (X-Ray)	Less than 1.5 km	and/or	less than 500 ft.	

### DEFINITION OF ABBREVIATIONS USED

GRADU - Gradually becoming  
TEMPO - Temporarily  
INTER - Intermittent  
RAPID - Rapid or rapidly

Note: To convert km to nm multiply by 0.54



surface temperature is, you can learn immediately whether there will be thermals. A rough guide is to divide the surface temperature (in degrees centigrade) by 3 . . . if the result is more than the thousands of feet to 0°C, then there will be thermals, because there's a big enough change of temperature with height . . .

2. We're going to campaign, along with other small sports, aviation and sailing, for a more detailed weather forecast from the public services, particularly the BBC and ITV. Specifically, in the new year, we're going to try a co-ordinated campaign for three aims:

(a) To persuade the BBC to put on, between 08.45/55 every Saturday and Sunday morning, a really detailed weather forecast, including fine details on wind speeds and directions, and lapse rates.

(b) To persuade the "instant media" to tidy up weather forecasts to get special wind information, in more detail than it is giving at present.

(c) To isolate, in any one day, and publicise, reliable weather "slots" so that pilot and sailor can know when to tune in to get what he wants. At the moment, for example, there are weather slots at 06.55 and 07.55 Monday to Saturday, but these could be more formalised, with an extra minute of detailed weather, rather than the programme "trails" which dominate the slot at present.

The nature of the campaign still has to be worked out. It should involve, at the same time, a lot of letters from different disciplines going to The Times, coupled with the right questions from caring MPs, plus letters to the media chiefs explaining what we're asking for. A key point is that, as the forecasters can't provide the personal service they've previously given, then there's a public service which needs to be picked up by either BBC or ITV. We haven't worked out the date yet, but as soon as we do, I'll try and let you know through clubs secretaries, because it's the sort of campaign that will succeed better if the same noises are made all over the country.

I know that we'll get backing from CAA and the Met Services themselves. The problem is, showing public demand. Well, we're the public, and we just have to express our demand . . .

# SMALL ADS.

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.

All small ads should be sent to Lesley Bridges, Commercial Editor, Wings!, Yard House, Wentnor, Nr. Bishops Castle, Shropshire.

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

## SUPER SCORPION C.

Beautiful multi-colour sail in dacron. Excellent condition unused. £475 o.n.o. 'B' bar, prone and seated harnesses. Must sell. Telephone Copthorne (Sussex) 712384 or Haywards Heath 58472.

## WASP FALCON III.

Excellent condition, no prangs or hard landings. Ideal kite for beginner. £175. 01-656-3108.

## SPIRIT.

Large. Excellent condition. Rigs seated or prone. Complete with bag. £300 o.v.n.o. including seated and prone (new) harnesses. Tel. Helsby 4892.

## FALCON IVB.

Coloured sails. Wife forces sale! Hardly used. New prone harness. £250. o.n.o. Tel. 030-587-442 (Dorset) evenings.

## HIWAY CLOUDBASE.

v.g.c. recent 45 min. flight. Good cheap kite to get started with. £160. Richard Gooderick, Flat 6, 57 High Street, Henley in Arden, West Midlands.

## FLEXIFORM SKYLINE.

Medium. Suit pilot 10-12 stone, multi-coloured sail, good condition. £385. Tel. Peter, Leeds 551541 (home) or Leeds 34199 (work).

**EMU Large.** Red sail, with bag. Immaculate condition; never been crashed; flies beautifully. Must sell for genuine reason. £525 o.n.o. Tel. Loughborough 63535, evenings.

**GRYPHON III.** Late model with adjustable c.g. and pulley system. Red, blue and gold. Ideal kite for strong winter winds; flies easily while others sit on hill. £325. Howard Peteth, Swansea 25678 ext. 7059 or 667.

**HIWAY 240** for sale. Good condition, new bag. Ideal beginner's kite. £140 o.n.o. Tel. Mick, Malvern 64031.

Unique! — the only apt way of describing my **WASP 229 B3 Standard**. Will accept any 3 figure sum, even a 2 figure sum (pounds, not pence). Join the rush — phone Roy Butterfield, 026-287-230.

## McBROOM LYNX.

Good condition, stays up well. Includes seat. £220. Also Hiway prone harness. £25. Willis vario. £70. Both hardly used. Tel. 01 997 8570.

## FLEXIFORM SPIRIT.

Suit 8-12 st. pilot. Multi-coloured, pulley system, good flyer, no prangs. Hiway prone harness and roof rack. £350 o.n.o. Contact Keith on Keighley (0535) 602850 after 6 p.m.

## SUPER SCORPION C.

Brand new condition. Only flown a few moments, and never bent. £450. Hiway prone harness. £30. Tel. Birdham Sussex 0243 512310 daytime.

## LARGE MOONRAKER 78.

Perfect condition. No prangs. Must sell. £350 o.n.o. Contact Terry, Leiston 831027.

## CYCLONE brand new.

Test flown. White dacron with red leading edges. Tel. day 07062 4635; evenings 07062 5808.

## BIRDMAN FIREBIRD

**MKII.** Orange/brown sail, seated harness and bag. Excellent condition. Bargain at £110. Ring Stevenage 50410 after 8 p.m.

## TWO MOYES 5% Maxis

185 sq. ft. All orange or red/white/blue. Spare leading edges for orange. Excellent condition. £420 each. 01-460 7762.

## MOYES MINI EPC to

intermediate glider. Rainbow colours. Brand new. Excellent all-round glider £250. See Phil Matthewson or Alan James. 01-460 7762.

## CHEROKEE, virtually

brand new. Holds UK distance record, yet has superbly mellow handling. Why wait months for a new one when you can have mine at a saving now? Cheltenham (0242) 28989 evenings.

## MOONRAKER 78.

Excellent performer. Blue with red flash. Quick sale. Only £295. Tel. 073477 2423 evenings. Graham.

Brand new **FLEXIFORM SKYLINE**. £350. Another one that slipped through the net on close-down of Vulturelite. Phone Roger King, Brighton 554269.

## 20 I.T.T. matched pair UD

23 Thermistors, for sale individually or as a lot. Contact Tony Greenbank on 0535 65041.

## HIWAY SCORPION B.

The famous McQueen Jeans Scorpion. Dark blue leading edges and keel, rest white. Superb condition and meticulously maintained. Beautifully clean glider, small logo easily removable. £295. Kev Jordan 01-839-3456.

## SKYLINE. 6 months' old, in

'as new' condition. Light and extremely pleasant to fly. £375 o.n.o. as I need a new machine for 1980 league. Phone Richard Iddon, 0772 600582.

## SUPER SCORPION C. Late

model (Sept 79) with 166 Windmaster sail and improved performance. £550 o.n.o. Why sell so soon? I'm getting Vulcanised! Ian Trotter 031 552 7736.

## MIDAS SUPER E. KD. New

sail and many new tubes. Buy second hand with confidence. My perfect kite for £425 or less. Ring Marc on 0792 896735 and haggle (after 6).

## BARGAIN! Large pulley

system **SPIRIT**. Have bought a new glider so must sell. £200. No offers. Grange-over-Sands (04484) 4074.

## SUNSPOT. Large.

Excellent condition, bright colours. Plus Hiway seated harness and also pilot's helmet. £295. Phone 051 525 8134 (Graham) or 051 523 3041 (Malcolm).

## BLUE ZIP BAG

Containing White Helmet, blue F/suit, seated harness, gloves and W/meter left on Edge Top Hill, Peak District, 9th October. Information leading to recovery will be rewarded. Please phone Alec Yule, Hagley 884009.

## PHOENIX 6B in stars and

stripes. Excellent condition, never pranged. £350 including delivery anywhere. Write: Harry Dodwell, 896 Clarehill Park, Aghadowey, Co. Derry, N. Ireland. (Tel. Aghadowey 570).

## SST 100 B. White. Perfect

condition and particularly high performance. Offers to Dr. John Salmon, Farnborough (Kent) 54834.

**FALCON III.** Very special performer. White, gold, red. £230 includes bag, seated harness for beginner and lots of spares. Phone Brian Parkins, (0703) 894666, ext 218 (work) or contact Skysurfers (Southampton).

## VECTOR Medium.

Beautiful multicoloured sail. Quick sale wanted, hence bargain price of only £100. Phone Albert Whittaker on Burnley 25051, ext. 135 (day) or Padiham 71810 (evenings).

## The Imperial College Hang

Gliding Club wishes to purchase a second hand Super Scorpion and a Vortex. Please contact Al Dempsey, Tizard Hall, Princes Gardens, London SW7 1LU or phone 01 589 9018.

## MIDAS E. Long kell, triple

deflexors, multi-coloured sail. A beautiful flyer, must be seen. £240 o.n.o. Tel. Tom Ricketts on Huddersfield 39907 before Jan. 10th or Reading 81907 and leave tel. no.

## GRYPHON 160. Really

good glider. £400 no less. Johnny Carr Burgess Hill 42324.

## HIWAY SUPER

**SCORPION C-PLUS:** "the strong one" Smooth, fast, beautiful handling, well looked after glider. Easily knocked down (for flat-dwellers). Always stored inside. Approved by manufacturers for dual-flying. £420. Tony Fuell, 74 Eldred Avenue, Brighton. Tel: 502952.

## WASP GRYPHON III. As

seen on recent "Grandstand" BBC TV programme; fastest glider in XC event at Merthyr Common. Unusual blue-black-purple sail. Presently with slight accident damage. Owner needs to sell urgently; any offers considered. Write to Mr. Karoti, 108 Home Farm Road, Hanwell, Middlesex. Glider can be viewed any time in Brighton.

## RIDGE RIDER

**STANDARD:** Very good condition. Any offers considered. Apply Mr. Karoti, Address as above.

## VORTEX 120. Almost

brand new. Colourful dacron wing. £350 o.n.o. Tel. Haywards Heath 58472 or Copthorne (Sussex) 712384.

## VORTEX 120. Superb

condition, never bent, 1 year old but little flown. Seated harness; spare uprights, Dunstable fairings. £380. Tel. West Drayton 43262 (evenings).

**CHEROKEE 185.** Less than 12 months old. As new, very little air time. Pilot unable to devote as much time as this superb machine deserves. Can help deliver. Call 0484 664377 and leave number.

## MOONRAKER 77. Good

condition. Covered over 30 miles worth of cross-countries and has attained over 4,000 ft. First reasonable offer accepted. Also VEGA II A — good beginner's kite. Under £250. Offers. Tony, Reading 599909 (evenings).

## CHEROKEE Medium 200.

Multicolour sail, handles and flies well. £480 includes bag and velcro ties. Phone Cliff on Marlborough (0672) 54341.

## MITCHELL WING. Flown

twice but stored for last 6 months. Full set of plans available and various spares. Best offer over £550 secures. No time wasters please. Geoff, Kings Langley 62497.

## NICOPRESS swaging

tool, bench type. £75. Drum of 2.5mm stainless coated cable (7 x 7) as used on Emu's. £60. Mass of assorted seashore material (crimps etc.) £200. Phone Roger King, Brighton 554269.

## VULTURELITE EMU 170.

£385. Only flown a few times by myself in Grenoble as a demonstrator. It got missed when the factory closed down! Tel. Roger King, Brighton 554269.

## VORTEX 120. 3 months'

old, as new. Flown once at Rhossili. Beautiful ripple free sail. Colours keel out white, dark blue, mid blue, light blue and white. Pushpin control frame. £400. Tel. Hitchin 53396.

## WASP FALCON 3. Seated

harness, few spares, good condition. Gift at £150 but buying house so must sell. Dorking 86797.

## ATTENTION

Manufacturers and homebuilders. Design schemes or sketches turned into professionally looking engineering drawings of the highest standard. Any task considered. Apply in writing to: P. Martin c/o The Bungalow, Burley Hill, Allestree, Derbyshire.

Good home wanted for **COBRA 188**. Ideal for beginner. In very good condition; below average use, with seat and bag. No reasonable offer refused from interested novice. Tel. Woking (04862) 63494.

## MIDAS E owner with no

car is willing to share glider and or petrol costs in return for transport. Contact A. Engeham, 168 Holland Road, London W14.

## Large SPIRIT. Excellent

condition, hardly used. Dark blue, light blue, white. Bargain at £2.60 o.n.o. Tel. Don, Disley (Ches.) 5316.

## NEW PARACHUTES.

Strong, compact, low sink rate, single handed "Throw Away" deployment. Competitively priced. Phone or write for details. Skyhook Sailwings Ltd., Vale Mill, Chamber Road, Hollinwood, Oldham, Lancs. OL8 4PG. Telex 667849. Tel: 061-624 8351, 681-5045 or 5369.

## THE SOUTH WALES

**HANG-GLIDING SCHOOL** offers special courses to prospective instructors and training for Pilot One holders. Phone Ynysowen (0443) 690787.

## 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 further information.

## FLY THE MOUNTAINS FREE COACHING

Snowdon view. Cosy converted barn; sleeping loft, open fire. Electric mod cons, beautiful surroundings. Sleeps 4 + 2. Also simple, comfortable 4 berth caravan. Llanberis 707. Susan or Jan, Madog Parc, Brynrefail, Caernarvon, Gwynnedd.

## SITES GUIDES to most of

U.K. and Ireland: £2.75. For 6 or more: £1.85 each. BHGA membership required for UK orders. For clearance of overseas cheque, add £1.10, plus 15p per copy for overseas postage. Barrie Annette, 116 Colne Road, Twickenham, Middlesex, TW2 6QN.

Small ads must be limited to 35 words. Personal ads are free to BHGA members. Non-BHGA members or commercial small ads will be accepted at a cost of 8p per word. Send to the Commercial Editor, Lesley Bridges, with a crossed cheque or postal order for the correct amount (minimum charge £1) made payable to the British Hang Gliding Association.

# Vulcan

The ultimate glider for competition and cross-country work..

Hiway introduce the first glider ever to have gained its C of A before being released to the flying public.

Vulcan is the top performer in the Hiway range of hang gliders. High aspect ratio wedged to a low twist wing gives the penetration that the serious competition and cross-country pilot has always dreamed of. The cross boom is moved into the slower moving air closer to the sail and the leading edges are thus freed from this drag inducing structure. The absence of deflexors makes this the cleanest wing yet.

The hardware of the glider has been totally rethought in line with the demands of tomorrows pilot. Vulcan is even quicker to rig than previous Hiway models. A sliding centre box leaves the cross booms permanently attached to the leading edges and the nose catch has been re-designed to give quicker and surer attachment. A removable king post boss prevents tangled top wires and a re-designed 'A' frame with straight uprights means they can be easily and cheaply replaced.

A whole new barrage of safety devices is incorporated including, improved tip strut mounting, anti-luffing wires and a fool-proof hang strap system.

Vulcan is not only streets ahead in performance but retains the legendary handling that Hiway is known and trusted for.



**Hiway Hang Gliders Limited**  
Sirhowy Hill, Tredegar, Gwent NP2 4XP  
telephone : Tredegar (049 525) 4521

