

THE OFFICIAL MAGAZINE OF THE BHGA

Wings!

FEBRUARY 1981



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WINGS! may be obtained regularly by joining the BHGA, or on a subscription of £10pa in the UK. Those outside the UK are requested to send Sterling International Money Orders — £12 (surface mail) or £22 (airmail) for an annual subscription. Details of membership will be sent on request. IN ALL CASES WRITE TO TAUNTON. *Wings!* is published by the British Hang Gliding Association. The views expressed in it are not necessarily those of the BHGA Council, its Officers, Members or the Editor.

Contributions are welcome. Articles should be typewritten if possible. Photographs and cartoons should be accompanied by the appropriate captions, and any material which is to be returned should be accompanied by a stamped and addressed envelope.

The Editor reserves the right to edit contributions where necessary.

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). Please give five weeks notice for changes of address if possible. 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.



APARTHEID

Photo Mark Junak

There was a West wind, 15-20 mph, blowing on the ridge at Dunstable on Sunday, January 25th. The sailplanes from Britain's premier club, the **London GC**, were out in strength on the ridge, with airborne tugs pulling them into the air. Up in one corner, hang gliders were launching, even though all agreements between the two clubs now seem to be off. During the day, the local police — it's beyond belief — told the hang glider pilots they had 80 telephone calls of protest from sailplane pilots at hang gliders being in the air. Later, the police went down to the sailplane club, asking the hang gliders to stop flying for half an hour (which they did) to say *they* were disturbed at alleged dangerous flying by one of the sailplanes while hang gliders were in the air. The faint rumble, possibly so common on Dunstable these days that no one noticed... or maybe no one noticed anyway... was *the sound of the sailplane pioneers of that site revolving in their graves.*

For those that don't know Dunstable, you're referred to the Brothers in Law series in *WINGS!*, August 1980. Whatever hopeful note was sounded then by **Dennis Munn**, the club's acting chairman, there seems little hope now of a peaceful solution. That Sunday police took the names of some of the hang glider pilots on the site, as a possible prelude to prosecution under a bye-law brought in by the owner of Dunstable ridge, **Bedfordshire County Council.**

Under the bye-law, stewardship of the air was awarded by the Council to the long-established LGC. The sailplane pilots, or their club representatives, have long wanted to ban what they call "high penetration hang gliders" — Falcon 3 or better — and in any case, using their interpretation of air law, have tried to restrict hang gliders to a cage 100 feet high, and 150 feet out from the ridge. I have been at a Dunstable Club meeting addressed by representatives of the LGC, and the most charitable thing I can say about their attitude to us is... that I can understand why black people don't like **Apartheid.** ("Certainly you can fly, but not *our* air.") There is no negotiation between equal users of the air. There is only threat, and that threat is now being used to enforce a bye-law that I'm sure the legislators of Bedfordshire CC never thought would be used in the way it's happening now.

Until **Chris Ellison** — was he suffering from the delusion, one wonders, of thinking himself a human being? — lodged notice of six consecutive air misses while flying at Dunstable last August, the relations between LGC and DHGC were uneasy, but they existed. Chris's complaint put us beyond the pale. The LGC invoked the ban, and now the DHGC — law abiding people that they are, all of them, even human beings, capable of speech, laughter, negotiation, possibly even flight, in the company of officials from the LGC — the DHGC is forced to take the same step as the Ramblers took over footpaths in the 1930s and test that bye-law.

On their behalf, I'd like to say sorry to what must be a rather bewildered Bedfordshire CC for getting dragged into a mess like this. And I hope the Council, when all the dust has settled, doesn't put the power to ban or allow flying by any discipline — sailplane, model or hang glider — into the hands of one of them, because in the wrong hands that power can certainly corrupt.

Brian Milton

DAVE JONES

We are deeply sorry to report the death of Dave Jones in a microlight flying accident on Sunday 21st December. Dave damaged his aircraft during aerobatic manoeuvres and dived into the ground from about 200ft; he died almost immediately.

Dave joined London Ultralight in the summer of 1980, took on the responsibilities of sales and demonstrations of microlights. He quickly established a rapport with the Sky-trike which was second to none and his precise flying rarely failed to impress.

In Dave's death we suffer not only the loss of an able and efficient partner, but also a dear friend.

Dave Simpson
Clive Smith
Kay Simpson

London Ultralight Flight Centre

HANG GLIDING INSTRUCTORS ASSOCIATION

List of Registered Instructors

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Mike Adam (South Wales)
Mike Atkinson (Free Flight Devon)
Robert Bailey (Yorkshire)
Paul Baker (Powered only now)
Mich Barclay (Cornwall)
Roger Black (Free Flight Devon)
Derek Bond (Skyriders)
Jim Bowyer (now works for Hiway)
John Clark (Peak)
Mike Collis (HMS Dolphin)
Ian Curren (Windlord)
Phil Cutting (Free Flight, Biggin Hill)
Ashley Doubtfire (Birdman)
Howard Edwards (Dunstable)
Paul Farley (Welsh)
Gustav Fischnaller (Cairnwell)
Alistair Geldart (Peak)
Glenn Harvey (free lance, formerly with High School)
Vince Hallam* (runs own School, but no HIA rating beyond Instructor)
Malcolm Hawksworth (Peak District)
Alan Hetherington (Peak District)
Graham Hobson (Northern)
Peter Jackson (Northern)
Ewart Jones (Birdman Wales)
Jeannie Knight (Knight H.G.)
Tom Knight (Knight H.G.)
Trevor Meacham (Skysports)
Bob Pattinson (Hampshire)
Ken Prydderch (North Wales)
Ted Salisbury (Kent)
Graham Slater (Ultra Sports)
Richard Ware (Ultra Sports, Northern)
Kelvin Wilson (Free Flight, Biggin Hill)
Clive Brewitt (Windlord)
John Hollings (Whitby centre)

THE HARRISON XC LEAGUE

The 1980 XC league came to a very quiet close, which is not surprising considering the weather we've been having. Nevertheless Len Hull managed an 11.3 mile flight in wave during late December, although unfortunately it wasn't enough to better his position.

The top positions are as follows:-
1st Rob Bailey - 43.7 average
2nd Pete Hargreaves - 43.2 average
3rd Sandy Fairgrieve - 23.6 average
The club trophy goes to the Dales club who averaged 25.5 miles between their 4 best fliers. Second place goes to the Pennines with an average of 11.4 miles, but this would have been far higher if their air space had fewer restrictions. The remaining individual positions are as published in Jan *WINGS!*

The 1981 XC league is already open and will be run on roughly the same basis as last year. Entries for the 1982 National League will be taken directly from the top non-league pilots in the XC league - providing they wish to enter of course.

The only other major change is that you must inform me how your flights avoided any airspace. This will ensure all competitive XC pilots know for themselves exactly where any restrictions are.

There will be an article covering all aspects of this XC league in greater detail published in the spring. Meanwhile any entries should be sent to my new address.

Dave Harrison
85, West End Drive
Horsforth
Leeds LS18 5JR
Tel. (0532) 583599

NORTH YORKS SAILWING CLUB

- New Officers after 1980 AGM

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HANG GLIDER/ SAILPLANE

Mid-Air at Grenoble - Latest

Bernard Charles-Pellat, whose British-made Southdown Sigma hang glider was involved in a midair collision with a sailplane piloted by 17-year old Geneviève Remis is making an uneventful recovery after his escape from death reported in last month's *WINGS!*

More details have come to light since then, and *WINGS!* has obtained the photographs of the accident reproduced here. *Photo 1* shows Bernard shortly after take-off. *Photo 2* shows the Sigma still flying after its control bar had been neatly cut in two by the sailplane's fin as the aircraft passed underneath the hang glider. The impact smashed Bernard's hands, and ripped his parachute, in its outer bag away from the harness. Even the Sigma's manufacturers expressed amazement that it had continued to fly. The structure was held together only by the nose assembly. In the photo, Bernard has just retrieved his parachute by pulling it up on the bridle. Apparently, his hands were too badly damaged for him to be able to open the pack with them, and he had to use his teeth! If the glider had folded, he would never have had enough time to do that.

Photo 3 shows the parachute deployment. The tangling of the shroud lines can clearly be seen. Nevertheless, it landed him in the trees below the launch point - and only 5 metres away from the edge of another 200-foot cliff! The area was so difficult to get to that a helicopter rescue was required. *Photo 4* Bernard chipped a vertebra in his back when he landed in the trees (a very painful thing), but is now out of hospital and walking about in a corset.

And Geneviève? Having baled out of her sailplane, which had inverted itself, she landed on top of a local hotel, receiving a bruised bottom! *WINGS!* does not know whether the two pilots involved have met up since the accident, but it should be an interesting occasion...

Tony Fuell

RAF MORAY EAGLES XC COMPETITION

The Moray Eagles club are holding a cross country competition, during the period 14-16 May 1981, in the Moray Firth area.

Entry is open to all serving members of H.M. Forces who are of P2/advanced PI standard.

Competitors will be limited to a maximum of 30 pilots and will be competing for a three-man and individual trophies.

On receipt of £5 entry fee, the Moray Eagles will send entry forms and further information. Cheques should be made payable to "Nonpas R.A.F. Lossiemouth".

Entries should be sent to Comp. Coordinator



Sgt. Pete Osborn (MCSF) Moray Eagles Hang Gliding Club, R.A.F. Lossiemouth, Moray, Scotland.

The organisers regret the enforcing of a pilot grading, but all the sites likely to be used are difficult (above 1000ft). There will be flights over forests and rivers with small landing fields. If further clarification is required regarding grading, please contact Sgt. Pete Osborn R.A.F. Lossie. Ex. 398, or J/T Tom Hardie at home on 034383-683.



POWER BHGA STAND BACK

Some feelings on Howard Edward's article in December *WINGS!*

There is a very thin dividing line in airspeed and climb rate – and general cross-country capability – between one of Howard's prone trikes and an Eagle. Both flex-wing and weight shift – if you'd argue this, it just proves that its arguability is a statement of its thin dividing line!

Pro's and cons re. BHGA regulating powered flex-wings.

Against – If BHGA was to regulate, it would have to be prepared to enforce the same level of training as the BMAA is preparing in Air Law, Navigation, Engine and Airframe maintenance, Circuit procedure etc. If this is possible, it would still be an added, large responsibility for our association which the BMAA is pledged to cover as a matter of course. There is no question in my mind that the same knowledge and airmanship must be inherent in the pilot of one of Howard's machines as a Pterodactyl pilot. This is indisputable.

For – Cross-country hang glider pilots have to know their Air Law thoroughly anyway, so why can't a P.2 qualify immediately as a holder of a BMAA Certificate of Competence? The lack of hassle is obviously the main thing in favour of a decision to try for BHGA regulation of this type of aircraft; in other words a service to the Powered hang glider pilot which would allow a progression straight to power without the need for joining a new association. Time has, to a certain extent, told us that hang gliding and power are not too easily combined on most hang gliding sites.

Conclusion – We must bear in mind that Howard's machine is the perfect example of a "powered hang glider", in that it has less of a drag coefficient than a seated trike – and it does, because of its prone pilot position appeal more to the confirmed hang glider pilot, or at least someone who has attended one of Howard's prone courses.

Because of his sites, he is able – in fact compelled to use for the most part, very shallow hills for his training, and usually (I may be wrong here) will come over to Coombe Gibbet or travel quite a distance if Dunstable is not flyable, for the P.1 qualification flights. So he has a distinct drive, both in enthusiasm and

finance to give his customers airtime more locally. Hence, I understand his interest in getting his people off on the prone trike. It's a great concept – although I have seen some horrible difficulties (not unlike the fun I had at Wellesbourne with my own Prone undercarriage) keeping straight on the take-off run!

Personally I am not in favour of his proposal. I think there needs to be a very great future for the prone trike for it to be at all valid. I also think that at present he is the only one with this type of equipment. He will have to fight very hard to have his way. I think most of the General Aviation Branch (C.A.A.) will think the same way as I do. I do not mind that his views go against everything I have overseen on Council – that could be progression: however it would seem that three years of gradual development from Brian Milton's duty as Power Council Member, through to mine – encouraging the formation of the separate British Powered Hang Gliding Club and then my set up in Marlborough of the First Inaugural Meeting of the British Minimum Aircraft Association – it would seem that a lot of thought, discussion and time has gone into these changes. In other words there has to be a very, very good case in favour of contradicting all that.

Ashley Doubtfire
Birdman Flight Training School
Thrupton Airport Andover, Hants

XC COMPETITION 4,000 Swiss Francs PRIZE

The Swiss have opened the window on the XC "Open du Saleve", in which hang glider pilots are invited to cover the greatest possible distance, starting from the Saleve, using any type of non-propelled wing. The window closes on September 30th, 1982, having opened on January 1st, 1981. Registration fee is 20.00 Swiss francs. First prize is a silver cup, all the enrolment fees, with a guaranteed minimum of 1000.00 SFrs, plus other prizes worth 1800.00 SFrs. There's a second and third prize of a cup apiece, and everyone who flies more than 25km will receive a bronze certificate. More than 30km earns a silver certificate, and more than 50km a gold certificate. The judges, minimum of 6, from the Delta Club Geneva, will require a detailed report on an official form; they'll calculate distance in a straight line from T/O to landing; they'd like photographs to accompany the account, and if you don't provide photographs, they want "tangible proof"; they want one witness, at least, to take-off, and at least two witnesses to landing, and the witnesses must be available to the judges. The decision of the judges is FINAL.

So if you're off on holiday to Switzerland in the next couple of years, there's something profitable with which to pass away the time. Beats eating cheese or window-shopping for wooden cuckoo clocks.

EDITORIAL FROM JAN 1981 "SOAR POINT"

The magazine of the Mercian Club

Just lately my flying has been, well, the only word adequate begins with C and ends with rap. I just haven't been able to get it together. Eventually I made up my mind, this was a job for SUPER F.T.O.

I sought him out, and after a deal of small talk, I swallowed hard and came out with it.

"Super F.T.O. I've got a problem, a *personal* problem." With one gesture he disengaged the clinging blonde and banished her out of earshot.

"What sort of problem?" he said.

"Well" I mumbled "I just don't seem to be able to do it any more"

His eyebrows raised quizzically "Do *what* any more?"

"You know, IT" I gestured with both hands.

"I see, and how long has this been going on?"

"Months" I confessed abjectly.

"Left it a bit late coming to see me haven't you?"

"Yes, Super F.T.O." I admitted "But I've been so ashamed. No one, not even my family knows. You won't – I mean there's no reason for anyone...."

"Don't worry" he said consolingly "Your secret's as safe as the confessional. Us F.T.O.s have a strict moral code"

"Thank you, thank you Roger"

He pretended not to notice the familiarity.

"Now what have you done about it?"

"Everything" I replied "I've even thought of going to U.S.A."

"Hmm, well Unable to Soarers Anonymous is a worthy organisation, but I don't think things are quite that bad yet"

"You mean – there's hope?" I quavered.

"You're going through a bad patch, don't worry. I'll be watching your next flights. We'll soon have you soaring again"

The relief, my glider felt 20lb lighter. I can't say that Super F.T.O. has solved my problem but at least it is in the open now and we can face it *together*. I feel for the first time in



months we shall soon be able to solve the almost unmentionable problem. I'm glad I didn't bother with quack remedies. I'm glad I went to SUPER F.T.O.

The above is an only slightly embellished account of a real life drama. I find that since going prone I just haven't been able to soar like I used to in fact this year the only two soaring days I've had have been at Rhossili and at Bossington, both coastal sites where the lift band is so wide that even I couldn't miss it.

Talking about it with fellow members the other evening I find that I am by no means alone. It is quite a common problem. Why should we be surprised? For tens of thousands of years mankind has been judging height and distance, but from an upright stance. Lie down and all those centuries of perception and judgement go for a chop, for some of us that is. Not only that but the prone body seems more sensitive to ups and downs, everything becomes much more dramatic. Happy is the flier who makes the transition without trouble. Others just have to work at it, but we don't have to suffer alone. Get the morale building strength of the F.T.O. round you. That's what he's there for and a trouble shared is worth two in the bush, or something like that.

Rex Grogan

DARTMOOR NATIONAL PARK

The Western Counties HGC would like to warn flyers that it is illegal to drive more than 15 yards off tarmac roads on Dartmoor National Park.

In a recent incident, a land-rover attempting to drive XC to our northerly site put the tenure of this site in jeopardy.

Also it is illegal, except in emergencies, to take off or land a powered hang glider within the National Park.

Would all visitors please remember to contact the Western Counties Hang Gliding Club, before flying on Dartmoor. **Roger Black, Chairman** telephone 0752 663032

OBSERVER STATUS

When the Pilot Rating System was introduced all Observers were asked to obtain their Pilot Two rating if they wished to continue observing. To date, over half of our 350 Observers have gained this rating. To the others – time is running out!! The Training Officer has written to all BHGA Member Clubs' secretaries and, as a result of the lists that they return to him there will be an updated Observer list published in *WINGS!* early in 1981.

Bob Harrison
BHGA Training Officer



IMITATION SINCERE FLATTERY BUT...

Dear Sir,
I am writing to express my concern with the growing and in some quarters accepted practice of copying the latest successful glider. Last year was the year of the Atlas "look-alikes" but not "go-alikes". This year will be the turn of the U.P. Comet.

The way forward in the quest for greater performance, without losing good handling, is getting harder all the time. Seat of the pants designing has in all probability reached the end of the road and future REAL advancement in hang glider design will be much more of a wind tunnel and computer job involving composite materials as in the ASG23. How many manufacturers will be able to invest in real development work, as opposed to the present day ripping-off and mere cosmetic work, when they know full well that within weeks of the introduction of a new glider showing a genuine advancement, the competition will be stealing the fruits of his investment? This must be of great concern for the average size hang glider producer who needs a long production run to recoup his development work that may well have cost him thousands of pounds.

There is another aspect to all this. The manufacturer who has not carried out the development work leading up to the production of a new glider has not gained the knowledge created and as a result has even less to offer in the future. Having myself been closely involved with a hang glider manufacturer*, I know this to be the case.

Those flyers who think the manufacturer offering them a cheaper copy is doing them a favour should think again. Too much is being taken out of hang gliding by the production of "look-alikes". Support the innovators to ensure the advancement of our sport. I am due to take delivery early in this New Year of the real thing and hope that in so doing, in a small way through Airwave Gliders, some of my hard earned money is going back into future development work. Think on.

Richard Kenward
Aylesbury, Bucks

* Richard was involved with Chargus, the only big British manufacturer not to enter the January manufacturers meet.

SITUATION VACANT FOR FOUNT OF ALL KNOWLEDGE

Dear Sir,
Would it be possible for WINGS! to have an answering of queries service? Whilst I realise that most BHGA affiliated Clubs can answer most queries from members, those of us who do not have a Club nearby, or who are thinking of taking up the sport and would like to know more before actually making the decision, could then write in and get an answer to any query about our sport.

Perhaps this could be a source of income to the BHGA by charging a reasonable fee for questions answered and possibly, indirectly, could increase membership.

Robert Powell Jones
Upper Assam, India

Unfortunately, this is a practical impossibility for the present editorial staff. However, if any suitable experienced member would like to take this job on, please get in touch with me - S.P.

FROM OUR BOVINE CORRESPONDENT

Dear Sir,
Ruminating among my issues of WINGS! this week, the horrendousness of the Mill Hill state of affairs has at last percolated the nonk brain as I assimilate - I'm a slow reader - the contents of the October letter headed "Mill Hill Malarkey". If a BHGA pilot tangles with a homing Cherokee, it's a bad scene all round and if, when this happens, the red's on the roof, the glider pilot will almost certainly end up with the onus of the consequences.

But Mr Drexell's description of the murderous kite and his highlighting of the indiscriminate mixing of kite and toy flying with real flying is something else again! These juveniles and other model owners can't get hurt or killed and they are a threat. There is enough of Mill Hill to go round and a commonsense separation of the sports is the only remedy. With all nonkish deference.....

Bernard Clifford
Kew, Surrey

P.S. I think the SOI's dive that Mr Drexell saw was initiated by a kite, model or toy and the SOI, mindful of the "cause" as Mr Drexell calls it of the BHGA, managed to restrain himself from launching its owner off the hill - or down the slope!

HANG - THE CONSEQUENCES

Dear Sir,
I would like to bring to the attention

of all pilots the dangers involved in using hang gliding equipment that is not specifically designed for hang gliding use. It may be obvious to the more experienced pilots but I believe many newcomers to our sport do not appreciate these dangers. In particular, I would like to highlight the risks inherent in using carabiners. In July 1980's Drachenflieger magazine I read this article: On the 18th of May, 1980, Peter Ostler, a German pilot, was flying in a light wind at Rottach Egan. He made a radical 180° turn and apparently his carabiner snapped. He deployed his parachute successfully but the tragedy was that the bridle strap for his parachute came out of his broken carabiner. He fell 500 feet to his death. Ironically, his parachute landed only a few feet away from his body. What is most disturbing is that other pilots on the hill had made a pre-flight check and they said his carabiner showed no sign of damage. Subsequent investigation revealed that the carabiner should have had 2200kg breaking strain. However, it was at least two years old and probably much older. Two years earlier, another German, Herbert Hoeness, died in similar circumstances. With these two accidents in mind, I would suggest that pilots adopt at least some of the following recommendations:

1. You should buy the best carabiner possible (beware of Japanese models).
2. You should renew it at least every two years.
3. You should renew it after a crash-landing and, further, I would argue it may be necessary to replace it after encountering heavy turbulence. Recently, the screw gate on my carabiner jammed tight after flying in violent turbulence and it needed a pair of molegrips to unscrew it. A micrometer measurement revealed that it had actually stretched!
4. You could use two carabiners - one attached to one hang strap and another attached to a slightly longer strap.
5. For those pilots with a parachute, undo the stitches on the bridle strap and then feed it through the loop on the hang strap (the loop through which the carabiner normally goes). Then bring it back on itself and have it sewn on securely so that the two loops are interlocking. Feed both loops through the carabiner. In the event of your carabiner failing, you would still be attached to your parachute. Remember, never get complacent, always inspect your glider, your harness, the carabiner and hang straps before every flight - it could save your life.

Tony Delaney
Pennine Club

ADVICE TO THE PROLETARIAT

Dear Sir,
Never before in history has man's dream of flight been within reach of the average working man. This is now a reality. However, nothing comes for free and to fly one must first seek some very basic knowledge or pay the price in broken bones or in death. Most of us don't send children onto the main roads to learn to ride a bike and the hazards in flying are just as great. You wouldn't jump off our cliffs without a kite (it's a 600ft drop) but just as important is another piece of equipment, the ability to fly the thing.

A school will teach you the basics - how to get up and down with least risk to yourself and those around you. When you finish out the school, you won't be a Carr or a Calvert. You won't even be a Les Horne (whoever he is). You should leave with the realisation that hang gliding isn't as easy as you thought and you have a lot of work to do in the future. You see, I know how much practice and work the top boys have to put in to get there but they will all say the same "it's been worth it". I've been at it for eight years or so but still don't know the half of it. Starting off is the easy part but it is also the most dangerous because what you don't know will hurt you. The real learning starts when you leave the schools, when we, the regular pilots, take over to help you along but you must start at the beginning, at the schools, and most of the effort must come from you.

If you do get off the ground without instruction, don't bother coming to my sites for a while as you will probably have skipped books like those with "rules of the air". You'll probably wind up killing somebody. You see, inexperience in unavoidable but mix it with total incompetence and it spells only one thing - DISASTER.

Finally, I have no connection with any schools or the like, except that they are responsible for putting novices into the often somewhat cluttered airspace and we hope they have done their jobs properly. Hang gliding tuition isn't cheap but the instructors need to earn a crust and for them it's a long cold winter. If you really can't afford the lessons, which would be regrettable, the best thing is to leave the sport alone until you can. I've dragged too many broken bodies off to the hospital in the past. Let's not have any more for the sake of a few quid, the sport doesn't need it.

Les Horne
Dover & Folkestone HGC

ICARUS ALLSORTS

..... anyone looking for a Member of Parliament to take up your case? Think at least twice about the 25 stone (350lb) Member for Rochdale, Liberal **Cyril Smith**, who must be getting a little tired of all the bon mots about his weight, especially the references to hang gliding. Cyril could almost be guaranteed to do us all a good turn if only to shaft the journalists who are prone, as the **Daily Express** did on January 23rd, to use such clever witticisms as "Roy Jenkins has done about as much for the working class as Cyril Smith has done for hang gliding".....

..... you'll have to take the following story as a compliment, according to **Bettina Gray**, OK? Her dog, **Martin Luther King**, of whom she thought the world, as she does of most animals, died recently after 18 years of life. Bettina decided on a replacement, a male 3 month old sporting French poodle, that's not the little tyke we see on the end of strings, but the real thing originally used as a sort of hunting terrier. What better, Bettina thought, than that she should settle on a name famous in the hang gliding world for her dog? She settled on **Robert Bailey**..... drinks are on you Bob.....



Robert Bailey — photo Mark Junak

..... more from the politically slippery slopes of the USA on the fate of **Hang Gliding Magazine**. It was widely predicted that the appointment as head of the editorial board last year of **Lauren Emerson** would mean the present editor **Gil Dodgen** would move on to pastures new. That hasn't happened, though, 'cos Gil remains and Lauren leaves. One reason is said to be the large number of candidates queueing up for the job, which is paid, and full-time. No one emerged as the most obvious and likely candidate, and Gil survives with more news and colour than ever before.....

..... That "aggressive wee fellow" **Rich Pfeiffer** recently spent four hours in handcuffs after disturbing what passes in America for the cricket pitch at Lords, the **Roseball Football Game** in Pasadena, California. Rich, whose love for the UP Comet matches that for his record-breaking wife **Page**, was keen to show the assembled multitudes that they were sadly misguided in believing in the sanctity of their silly old football game. He took off from a nearby hill and did three 360s over the stadium, and was immediately handcuffed after landing on a golf course next door. His friend and fellow luminary, **Chris Price**, either chickened out or decided that discretion was the better part of valour..... Pfeiffer, according to the Allsorts reporter, has been charged with "hazardous behaviour over a crowd," and "assault with a deadly weapon".....



Mike de Glanville — Photo Mark Junak

..... hear there's a big scrap going on in France over the trembling body of top agent **Mike de Glanville**, the diminutive and retiring Champion Anglais de France. Two gigantic capitalistic hang gliding multi-nationals, **Pacific Wings** and **Hiway** have been sending their arch hit-men down to Lachens to lurk at the de Glanville cottage and frighten the family half to death. Mike, who has been a Hiway agent for years, but has been known to favour the Pacific Wings **Vampire** which he flew at the 1980 American Cup, is in the middle of a classical tug-of-love - or is it tug-of-money? - between the two companies. A sombre and grave PW president, **Andre Chayrou**, was seen by Icarus spies at Mike's place near the end of January, but the British hit back with a visit a few days later by the equally sombre-and-grave Hiway obergruppenfuhrer **John Ievers**.... which will win the de Glanville hand? ... watch this space.....



Andrew Hill — Photo Mark Junak

.....17 year old **Andrew Hill**, son of BHGA Boss **Roy Hill**, is obviously starting early on the celebrity trail. The latest issue of the Royal Aeronautical Society's magazine, **AEROSPACE**, has a pic of Andrew with HRH Prince Phillip, at a reception for six young winners of flying scholarships...that's conventional flying, with wheels, an engine and a glass hood over yer 'ead. Andrew, who's the youngest pilot in the National League, should soon be the proud owner of a private pilots license and be able to test out for the rest of us whether **Bob Calvert's** comments on the soaring ability of Cessnas are really true.....

..... in response to a gentle arm-lock and two or three knees in the back, the Editor resolved to leave air-worthiness alone this month, especially after a promise from BHGA Chairman **Roy Hill**, that the membership would actually see (wonder of wonders) the fabulous and legendary Test-Vehicle at the AGM on March 7/8. But it's not possible to contain one's irritation at seeing, reprinted in a club magazine - thank you, **Peak HGA** newsletter for scooping **WINGS!** - a working picture of the Test Vehicle with a hang glider being tested. Why hasn't **WINGS!** had such a photograph? We learn from the January edition of **OEM Design Magazine** that "the aerodynamic loadings at various structure/support points are measured by AJB Associates Strainset force-sensing studs which were chosen for their small size and internal gauging down a small hole in the centre of the stud, which gives protection from rain, abrasion, accidental knocks, etc..." The knocks one feels like handing out, getting news of the Test vehicle in this cack-handed way, would not be accidental.... OK, OK, *ease off* on the arm-lock.....



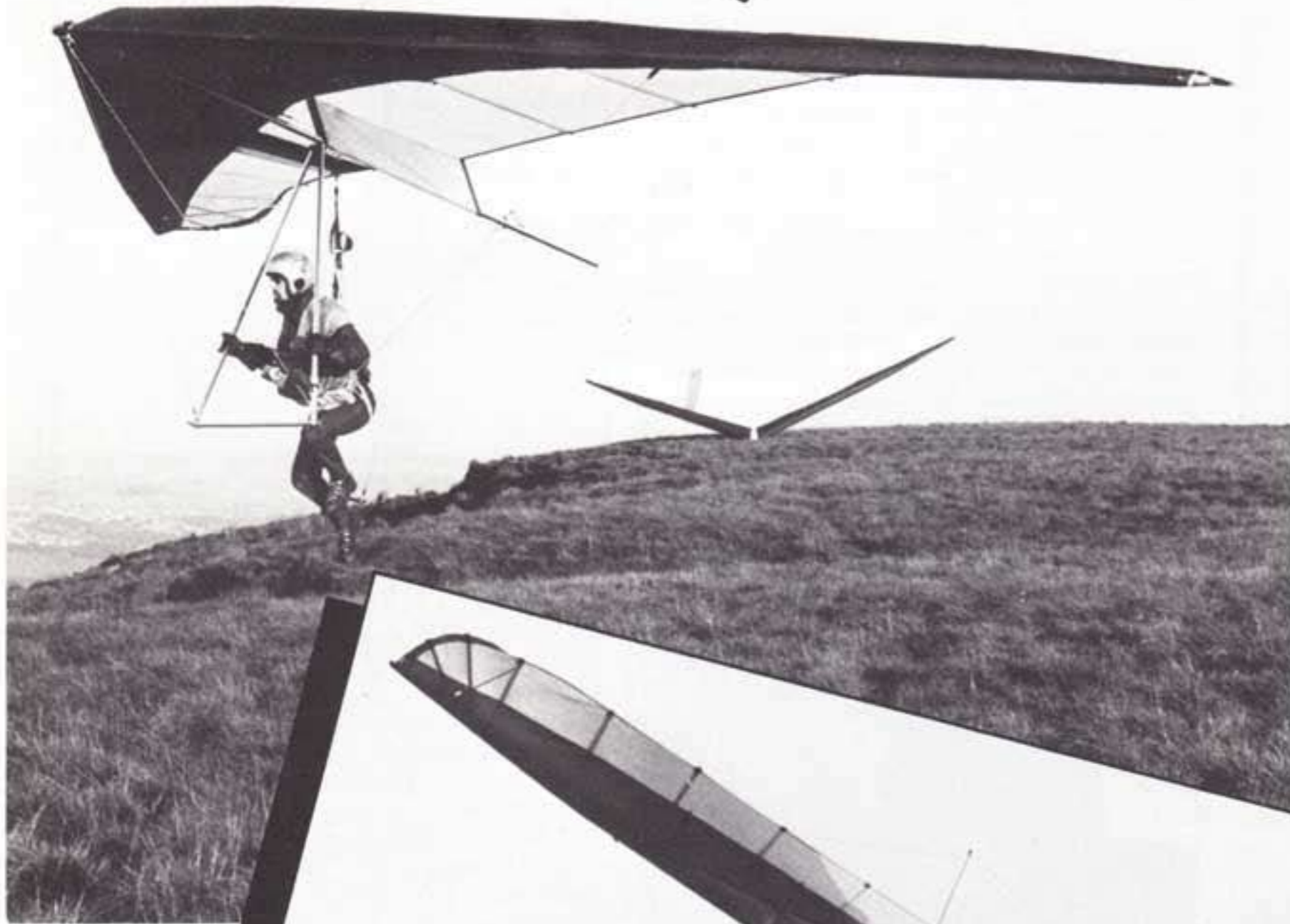
From UPS and DOWNS — Dunstable HGC

.....wonderful barney going on in New Zealand at the moment, where they're trying to set up a competition "League" system in a country which is two big islands, with 75% of the pilots on one island, and 25% on the other. **Paddy Munroe**, a New Zealander who frequented Southern HGC hills, and therefore occasionally saw the British League from a great distance, is apparently helping New Zealand to get a similar system, but there is - shall we say - a certain amount of disagreement about how to do it. Indeed, even *if* to do it. One writer, **Bill Degen**, after two pages of violent surgery with a hand-axe, ends with a call for a competition which will "increase friendship and contact with pilots from other areas while still raising funds for the team and giving competition experience without the continuing hassles of *winning*....."

... **WINGS!** photographer **Mark Junak** will miss the first League competition because the lucky beggar has landed the sort of instant sponsorship deal we all dream about. After dispatching scores of letters to everyone who might be interested, Mark landed **Rollei (UK)** to sponsor him on a trip to Brazil, **Rio de Janeiro** no less, from February 16 to March 15, as part of a project for a college degree. Rollei, he says, are becoming involved in hang gliding because they want to be associated with a "modern and adventurous sport"...

Demon!

Demon wins Manufacturers Comp.
Unbeaten in sink rate tasks
First and second in speed runs



Whichever way you look at it, this is the machine to take you well into the eighties. Designed for cross-country gliding or Skytriking, Demon is the obvious choice.



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

**THIS GLIDER HAS
NO BRITISH C. OF A.**

MANUFACTURERS MEET



The Hiway Demon won the Manufacturer's Competition in South Wales on Sat./Sun., January 10/11, 1981, after a close battle with Solar Wings Typhoon, with a late burst from Southdown Lightning. The Typhoon and Lightning tied for a second place, followed by the Airwave Comet, La Mouette X-Ray, and a tied sixth place for Skyhook's Sabre and the three Flexiform machines.

The competition consisted of three tasks; pure sink rate, a speed run in very marginal conditions, and a speed-range test that was perhaps too much of a test of pilot skill. All those who were there, including the seven manufacturers sporting enough to put their reputations on the line, agreed that it was a good series of tests, that everyone learned a great deal about the new 5th Generation machines, and the superiority established at the American Cup by the Comet is now no more... we have at least the equal of it.

The origins of January's competition lie in the American Cup though we have - back in 1976 - run a similar competition called **The Birdman**, again won by Hiway. The Birdman put a premium on pilot skill to emphasise clearly how a 5th generation glider would beat a 4th generation one.

BHGA Competitions Committee wanted a manufacturers competition pretty soon after coming back from Tennessee, and from talks we'd had earlier in 1980, we knew the manufacturers also wanted one. We'd originally seen it as confined to just British manufacturers, or members of the BHGMF... in the event, and I'm glad they did so, La Mouette sent a team, on paper - with **Gerard Thevenot, Renaud Guy** and **Graham Hobson** - the strongest team of all. All the major British manufacturers also sent teams, except **Chargus**, who I understand are concentrating on power in 1981, rather than hang gliders. In any competition with 7 competitors, there are 6 losers, so manufacturers risked a great deal in being there... each of them gained something from the tasks, each had something to commend them, even if 6 of them didn't win. As Tony Fuell says in his article, there was not a great deal of difference between the best machines of each type.

We chose South Wales because we knew it, and **Martin Hann** was quite happy - representing the local club - to OK our use of sites. **Chris Johnson**, from Hiway, smoothed through a lot of the arrangements, including a block booking of the Dragon Hotel. Manufacturers put up £15 per pilot, and nominated teams of 3; in all, there were 20 on the day, as **Len Gabriels**, one of the pioneers of hang gliding in Britain, couldn't hack the 800 foot climb up Hay Bluff with a glider on his back, and I only found out just before the first task began.

We chose early January for the competition, despite the risks with weather, because we wanted to concentrate the minds of the manufacturers early, so that, whatever they learned, they could put the modifications into their new models in time for the opening of the National League and the big Spring market. On that reasoning, there may be another manufacturers' competition towards the end of summer to see who's learned what... if the manufacturers consent. Most of the good that came out of the competition would have happened anyway, even if it hadn't been run, because of all the concentrated research manufacturers put in to produce machines to fly in it.

The first day of competition was a blow-out. It sometimes became nearly right enough to fly, so that pilots and their supporters were kept at the top of the hill, or close by the bottom, much of the day. There was some free-flying, but nothing that encouraged competition weather. That evening, pos-

sibly the biggest social occasion of the hang gliding winter took place in the hotel. All the luminaries of the BHGA, past and present, were there, including three National Chairmen - **Reggie Spooner** and **Pat King** from the past, and **Roy Hill**, the present chairman - and pilots, like **Ray Sigrist**, whose departure from normal sites to watch what was happening caused amazed whispers...

THE COMPETITION

We rushed off to Hay Bluff on Sunday, to an 800 foot ridge north of Abergavenny in the Black Mountains, with one side facing northwest, another facing north east, and a hacking climb of about half an hour with your kite on your back. Conditions were very marginal, and no one wanted a going-down task, because of that walk. **Derek Evans** and I decided to wait for enough wind to enable soaring, while we experimented with different tasks just in case the conditions did improve. Just before 1 o'clock, it became (just) soarable. We went for a sink-rate task, but judged in a way that hadn't been done before.

Task One - Sink Rate

Pilots went off in heats in groups of 3. That's 7 heats, and each manufacturer had one pilot take off first. There was a maximum of 30 seconds between each take-off, and the heat was given 3 minutes to gain height. At the end of that period, a hooter sounded, and the pilots were given 1 more minute, in a generous area bounded by 3 judges, to "sit" on each other, play "top of the stack". When that minute period was up, the hooter sounded again, and the pilots were ranked by the judges, and given 900, 600, and 300 points each, based on whether they were top, middle or bottom of the stack at the precise moment the last hooter sounded.

The three judges were **Hubert Aupetit**, the editor of the French hang gliding magazine, **Vol Libre**, who had flown over especially to report the competition; **Derek Evans**, treasurer of the Competitions Committee; and **John Hudson**, owner of **Mainair**, and another member of the BHGA Competitions Committee. All three are men of the highest integrity, whose word would not be doubted by any pilot. As it happened there was only one small dispute in the scoring, the heat in which **Andrew Wilson** on the Comet tied with **Keith Reynolds** on the Lightning. Two judges had it a tie. The third thought it might have just gone Keith's way. When Keith landed, he confirmed that, at the last hooter, he and Andrew were dead level.

The Demon won all three of its heats, as did the Typhoon, with a tie between the Comet and Lightning. Unfortunately no Demon met a Typhoon. We also didn't make any allowance for pilot weight, nor wing loading, which was crucial to this task. The Comet team, for example, had **Robert Bailey** in it, a highly skilled pilot, but a heavy man. He normally flies an extra large glider, but there's only one size Comet, and that's too small, in such a task, to allow him to be competitive. We pretty well knew that he would lose when he came up against **Graham Slater** on a Demon, and **Bob Calvert** on a Lightning. Hiway had one bye, along with Flexiform, because **Len** was not flying. The radically new Flexi Sealander showed up quite well in the task; though it does look a bit like a cross between a Gryphon and the old Mcbroom Cobra, it's much faster and has better sink. What was a surprise was the performance of the La Mouette **X-Ray**, the successor to the Atlas (the production model may be called the SuperAtlas). This came third in all three tasks, and Gerard Thevenot is obviously going back to work on it.

It's worth saying here that, however much one tried to eliminate pilot skill, it still came into the task, and those with competition experience did better than those without. It was, after all, a com-

petition, needing all the experience necessary to cope with the wind-up of such an event. The only way around that is to run a large number of tasks, which is, of course, the way the National League works.

TASK 1 Sink rate

Typhoon	Johnny Carr	900
Flexi Sealander	Geoff Ball	600
X-Ray	Graham Hobson	300
Lightning	Keith Reynolds	900
Comet	Andrew Wilson	900
Flexi ESP	Bob Harrison	300
Demon	Jo Binns	900
Flexi-Hilander	Mike Hurtleley	600
Sabre	Len Gabriels	DnFly
Typhoon	Trevor Birkbeck	900
Lightning	Mick Maher	600
X-Ray	Gerard Thevenot	300
Typhoon	Keith Cockroft	900
Comet	Jim Brown	600
Sabre	John Clark	300
Demon	Graham Slater	900
Lightning	Bob Calvert	600
Comet	Robert Bailey	300
Demon	Alan James	900
Sabre	Mark Silvester	600
X-Ray	Renaud Guy	300

Task One

Typhoon	2700
Demon	2700
Lightning	2100
Comet	1800
Flexi	1500
X-Ray	900
Sabre (2 pilots)	900

Task Two - Speed Run

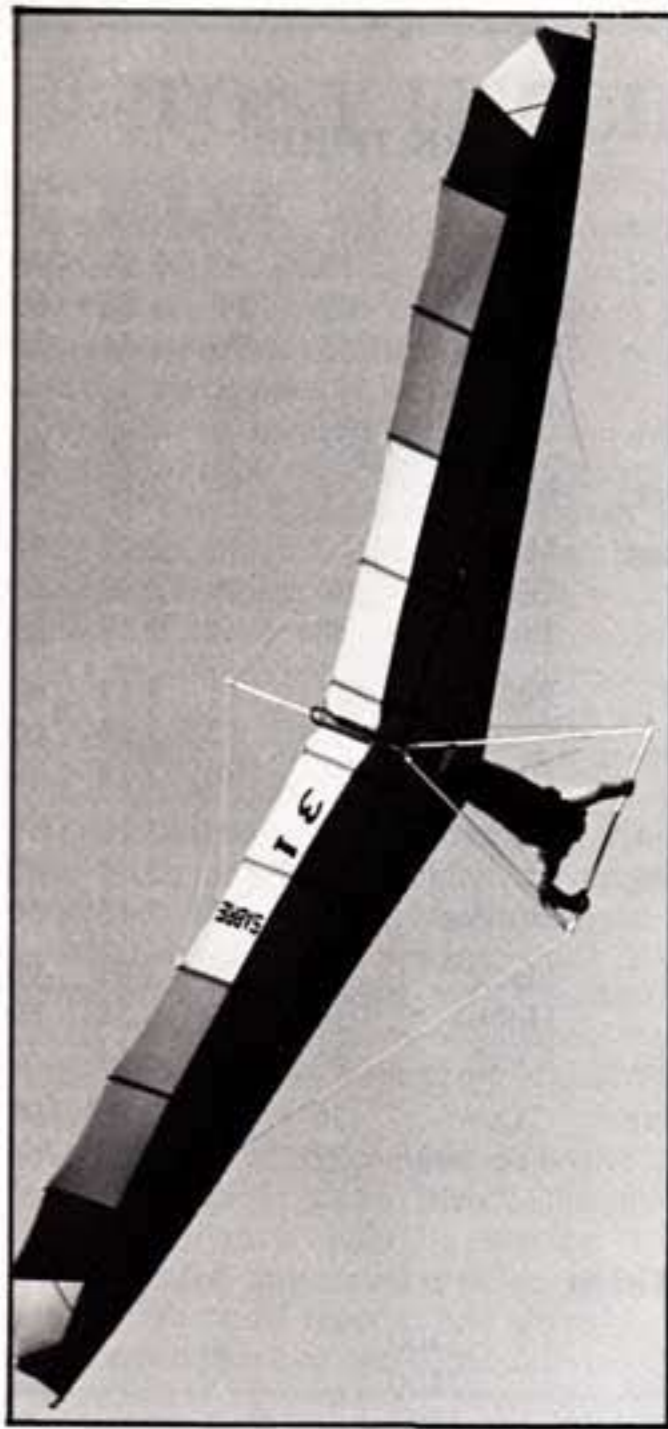
We wanted a speed task, but we didn't want to send the kites down. Throughout the first task, there were more than a dozen free-fliers in the air whenever it got good, and the wind began to switch off the NE face on to the NW one. The second task, involving **Pat King** and **Bob Mackay** as marshals about half a mile away, was T/O, speed to the end, 180° turn, speed back, but go past the finish gate above the top of the ridge, and land on top to score better than 3rd. (If two or more pilots went down, the task would have been decided on duration. No one went down.)

Again, in this task, Demon and Typhoon tied for first place, with two 1sts and one 2nd apiece. Andrew Wilson was a winner again, this time without a tie, as was Johnny Carr (Typhoon), Keith Cockroft (Typhoon), Keith Reynolds (Lightning), Alan James (Demon - but only one opponent), Mark Silvester (Sabre) and Graham Slater (Demon) - with the fastest time of all.

The key to winning was not just having a good hang glider, but how you took off and turned, and how you made your turn at the far end of the run. Some pilots turned slowly and carefully in the marginal conditions, afraid to lose the weak ridge lift, and lost precious seconds... when you look at the results and see how close it was between most of the contestants, you can see how much the turn mattered. And as the turn was pilot skill, that was a variable that affected the results...

Task Three - Speed Range

The last task we chose, worried about oncoming darkness, was a "downer"; speed/range, which was speed away from the hill across a gate, then dura-

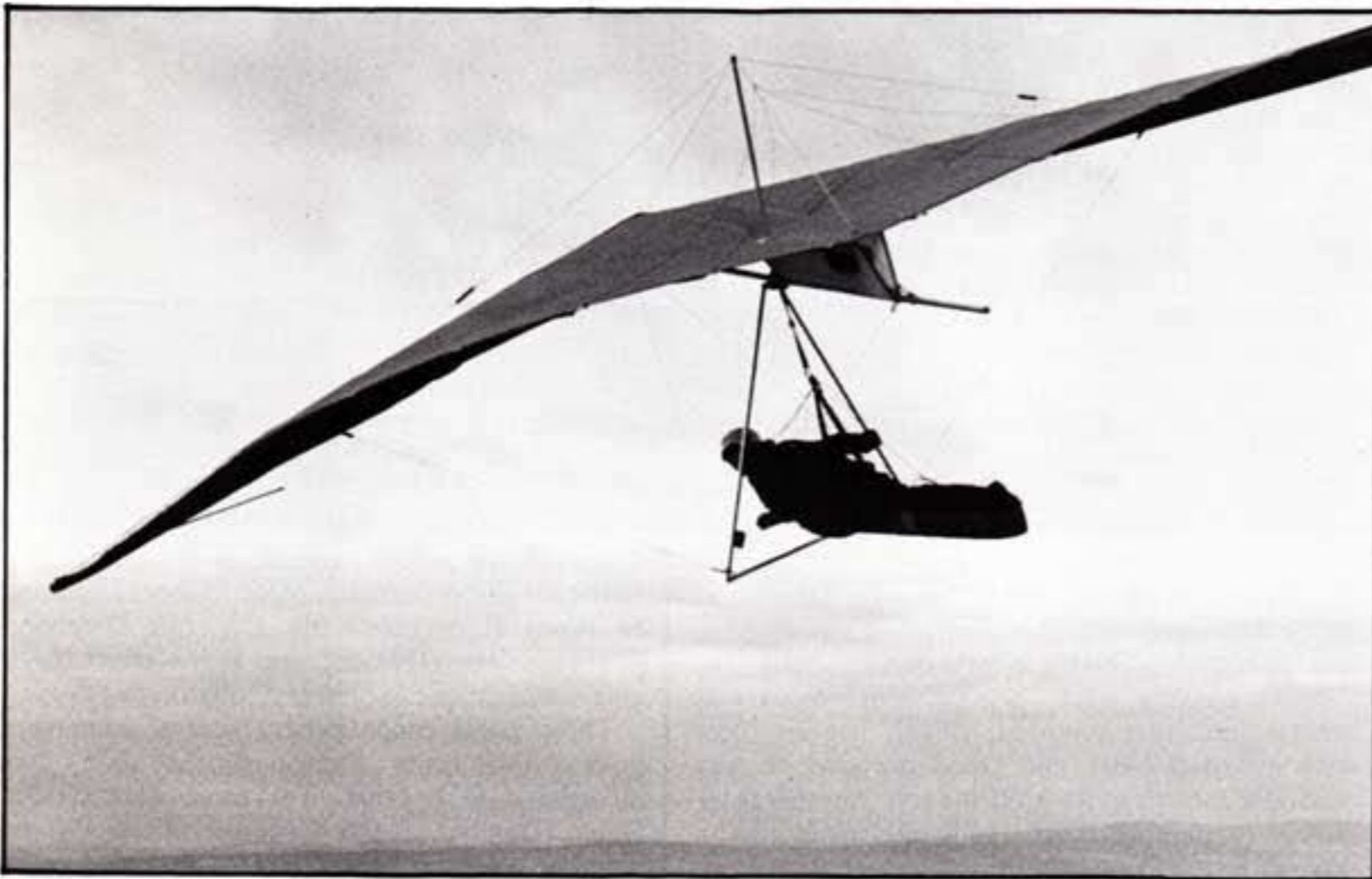


Above — Skyhook Sabre, Mark Silvester



Right — Southdown Lightning, Mick Maher

Below — Hiway Demon, Jo Binns



tion until landing. The score was on the ratio, slow time over fast time, the higher the ratio — obviously — the higher the score. It was a task we haven't run in the League for some time, and to be honest, we didn't realise exactly how much skill there is in it.

The pilot has to balance his speed against his height. Bar down to his knees might give him a good speed time, but leave him with a poor duration. What he wants is the "optimum", best speed against best duration. In the event, if, after completing the speed, pilots immediately turned right and went towards the base of the NE ridge, there was an appreciable difference between their score, and

other pilots who didn't. It was highly frustrating having to sit and watch it all and see the misjudgments and not do anything about it.

In this task, Hiway were again the top manufacturer, but sharing with Southdown Lightnings, rather than Typhoons, which placed 4th after the X-Rays. There was also a mistake in the briefing, in which one whole task landed out of the area I had set aside for landing, and a Typhoon pilot, Keith Cockcroft, also landed out, with an advantage over his competitors for doing so, in that he could ground-skim for longer. Hubert Aupetit later worked out that had Keith landed 14 seconds

TASK TWO Speed

		Time	Points
Typhoon	Carr	1.50	900
X-Ray	Hobson	1.54	300
Lightning	Calvert	1.52	600
Typhoon	Birkbeck	2.01	600
Comet	Wilson	1.54	900
Sabre	Clark	2.03	300
Typhoon	Cockcroft	1.55	900
Demon	Binns	1.58	600
Flexi-Hilander	Hurtley	2.25	300
X-Ray	Thevenot	1.55	600
Lightning	Reynolds	1.50	900
Comet	Brown	1.55	600
X-Ray	Guy	1.51	600
Sabre	Gabriels	Did not fly	
Demon	James	1.49	900
Flexi-Sealander	Ball	2.06	300
Comet	Bailey	2.00	600
Sabre	Silvester	1.54	900
Lightning	Maher	1.55	600
Demon	Slater	1.47	900
Flexi ESP	Harrison	4.00	300

Task Two

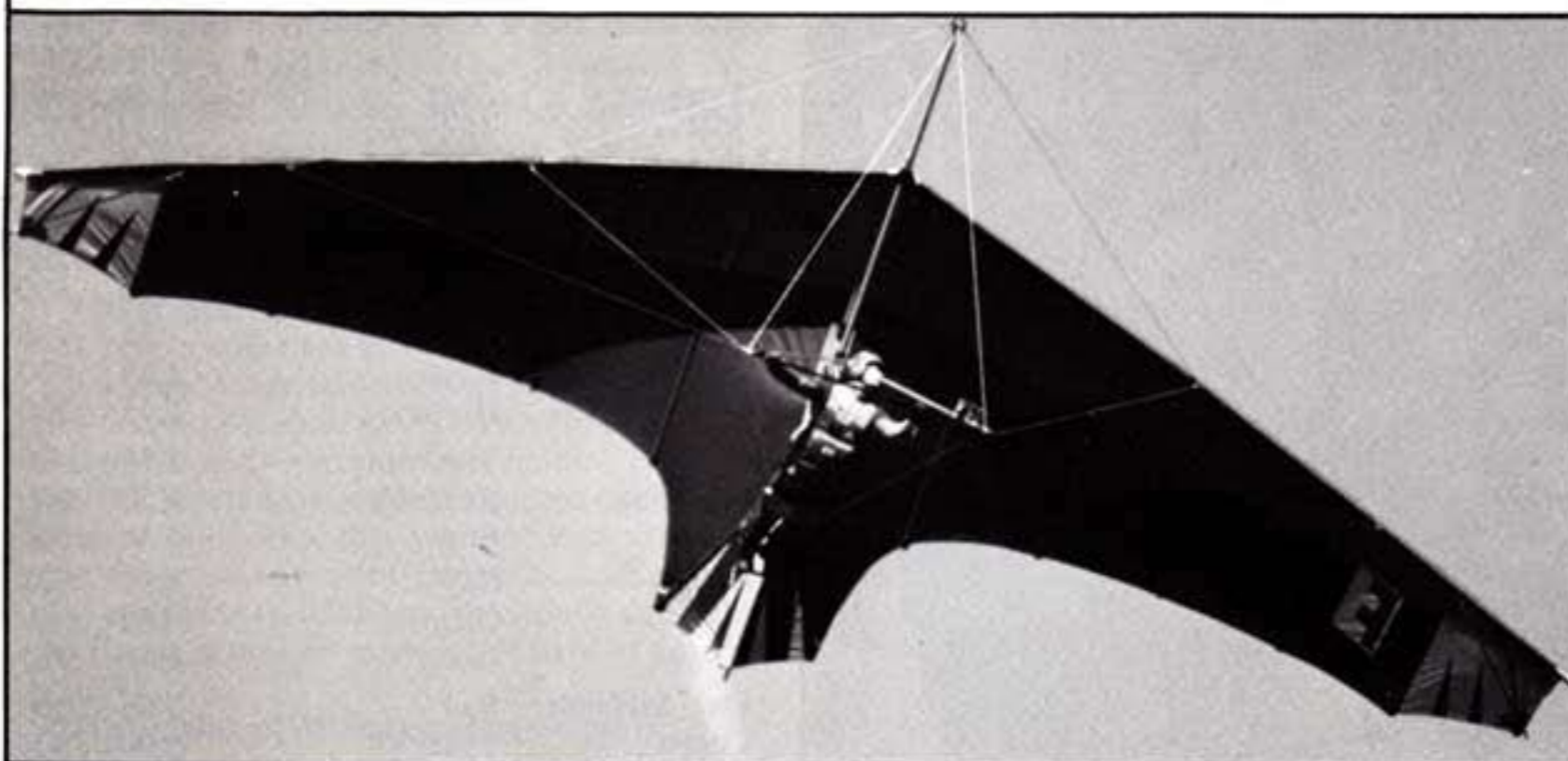
Typhoon	2400
Demon	2400
Comet	2100
Lightning	2100
X-Ray	1500
Sabre (2 pilots)	1200
Flexi	900

Running Total

Typhoon	5100
Demon	5100
Lightning	4200
Comet	3900
X-Ray	2400
Flexi	2400
Sabre (2 pilots)	2100

Thanks to **Joan Lane**, battling that debilitating illness of yours to go out in the wind and the cold and sit around all day listening to the cussing that's got to offend the ears of a former nun. Thanks to **Mike Atkinson**, for his van, his coffee and soup, for 19 seats somewhere inside the green monster when we wanted to get out of the wind, for going to the far end to marshall when we needed one... and for not, this time, debugging anyone. Thanks to **Bob Mackay** and **Pat King**, for going to the ends of the ridge not reached by Mike to marshall the tasks, for sitting nurse mending pylon markers no one wanted to go round. Thanks to **Ian Butcher** for the efficient way you used that hooter and for not stuffing it somewhere at the frustration of seeing 18 gliders in the air and you on the ground marshalling. Thanks to **Tony Fuell** and **Steve Goad** for staying on your feet (most of the time) and while doing so to amuse the rest of us with your wit. Thanks, **Steve**, for not breaking my leg, and I won't take a rain cheque if you don't mind. Thanks to all the manufacturers (yet again). Thanks to **Hubert Aupetit** and **John Hudson** for their superb judging. Thanks to **Reggie Spooner** who can't ever be as cold as he looks (and if he is he has our sympathy). Thanks to **Chris Johnson** and **Alison** for all their arranging and beds and hospitality for millions, loaves and fish stuff. There have got to be others, and I'll curl around the edges when I see this in print and then suddenly remember a name I forgot... but thanks to **Derek** and **Audrey Evans**, for the soup and organisation and more soup and cheerfulness and just the general way everything comes together when you're there...

HUGHIE'S NEW THINGY



When B.M. asked me to elaborate on the thinking behind Flexiforms revolutionary Sea-Lander wing, I was more than slightly amused, because, as Len Gabriels pointed out, birds have been this shape for years and it seems to work well for them. So, in a nutshell, the Sea-Lander is an attempt to simulate the configuration that works so well for our feathered friends.

After taking a hard look at the current crop of gliders I came to the conclusion that if gliders continued to get heavier and more complex, pilots would become shorter, and Stoke Mandeville would get busier. I also felt that with everybody copying everybody else, and the Comet in particular, Flexiform stood a better chance of success with something more original.

The trouble with enclosing cross tubes within a sail is that inspection is awkward and therefore likely to be neglected. This I feel is undesirable, especially in view of Dr Dunstan Hadley's call for safer gliders. There have already been instances of cross tube failures in the current generation of gliders, usually caused by heavy nose down landings or simply dropping the nose into a strong wind. Careful engineering can and will eliminate these early problems, but meanwhile we at Flexiform decided to go on the pioneering trail.

We set out to incorporate some new design features in a wing that hopefully would appeal to the individualist who likes something different. We wanted speed and a good sink rate (that goes without saying), simplicity with ease of rigging and ease of inspection, a substantial reduction in weight without loss of strength, and a new shape that would use information from two experienced aerodynamicists (modesty precludes me from divulging their names.)

This simple mandate constituted the basis for the development of the Sea-Lander.

Careful investigation and discussion with Bob Calvert about canards led me to believe that the canard is the best way to achieve pitch positiveness in a machine with a wide nose angle. The problem with canards is they tend to interfere with the air flow over the main wing, unless they can be positioned slightly above the wing. This would require additional metalwork and rigging associated with the bowsprit and therefore added complexity.

Adding a tail to the existing sail seemed a good way to overcome these problems while still giving the required pitch stability.

An added bonus was likely to be an almost fail safe dive recovery potential, via the use of leech lines.

We came to the conclusion that if the tail was reflexed we would need very little washout at the tips, therefore a flatter sail with a lower angle of attack would result, giving, in theory, less drag and the potential of improved speed performance.

So, with these ideas in mind, my partner Mike, myself and test pillock, sorry, pilot, extraordinaire Geoff Ball, proceeded to argue the pros and cons of various sail plans until a useful and attractive shape was evolved and laid. A sail was cut and married up to a bowsprit airframe. The whole thing was juggled around until the three of us were satisfied it would fly reasonably well, but above all safely.

Locks were fitted to our doors and vows of secrecy taken while we waited for suitable weather to test fly our new bird.

During a slight lapse of security, Graham Hobson slipped past the guards and gained a full frontal view of the Sea-Lander, but an injection of an amnesia-inducing drug (which incidentally he doesn't remember) was administered and our secret was intact at least for the time being.

There followed a period of 5 weeks appallingly poor flying weather, during which we managed only 70 minutes airtime, and even that was in very rough conditions. Who was it who coined the phrase, the smoother winds of winter?

Anyway, on the first available occasion, Geoff Ball had been suitably tranquilised and clipped into the glider. A series of bunny hops were attempted, with the result that the combined system of glider and pilot unexpectedly took off and proceeded to soar, some 30 feet above the ground. Our surprise stemmed from the fact that we were on flat ground above Rivington. So, after Geoff had regained his wits, he brought the wing in for a perfect landing.

Much hugging, back slapping, arm waving and general jubilation followed, (thank heaven there were no spectators), and Geoff declared he was confident enough to fly it off the top. Another tranquiliser (double whisky)* was administered and he was off to climb rapidly to 300 ft over Rivington, top landing shortly afterwards to complain of nasty turbulence and aching arms... the hang point was too far back.

So, it became obvious the tail was working even better than expected and was providing pitch positiveness.

Hang point repositioned. Geoff lobs off again. Trim, he shouts down, is about right and handling is a dream. After a few gentle turns, he leans it into a slow 360 which is duly completed without incident.

After a few more manoeuvres we realise we are on the right lines and the result was shown and flown quite successfully at the Manufacturers' Competition.

TASK THREE

		Fast	Slow	Ratio	Pts
Sabre	Silvester	33	97	2.94	900
Flexi	Ball	43	68	1.58	600
Comet	Bailey	55	79	1.44	300
Comet	Wilson	34	117	3.44	900
Demon	James	38	125	3.29	600
Typhoon	Birkbeck	35	99	2.83	300
Lightning	Maher	40	110	2.75	900
X-Ray	Guy	40	99	2.48	600
Comet	Brown	38	91	2.39	300
Demon	Binns	35	111	3.17	900
Sabre	Clark	35	82	2.34	600
Flexi	Harrison	45	98	2.18	300
Typhoon	Cockroft	37	115	3.11	900
Lightning	Reynolds	40	110	2.75	600
Flexi	Hurtley	46	98	2.13	300
Demon	Slater	33	129	3.91	900
X-Ray	Hobson	36	129	3.58	600
Typhoon	Carr	35	124	3.54	300
Lightning	Calvert	36	101	2.81	900
X-Ray	Thevenot	38	96	2.53	600
Sabre	Gabriels				

Task Three

Demon	2400
Lightning	2400
X-Ray	1800
Typhoon	1500
Comet	1500
Sabre (2 pilots)	1500
Flexi	1200

TOTAL 3 TASKS

Hiway Demon	7500
Solar Typhoon	6600
Southdown Lightning	6600
Airwave Comet	5400
La Mouette X-Ray	4200
Skyhook Sabre (2 pilots)	3600
Flexiform Various	3600

earlier than he did, he would still have won the task, though it would have been closer. After a meeting between representatives of the two manufacturers involved, the dispute was put aside, and the result stood.

No manufacturer stood out clear winner in this task, with top scores from Mark Silvester (Sabre), Andrew Wilson (Comet), Mick Maher (Lightning), Jo Binns (Demon), Keith Cockroft (Typhoon), Graham Slater (Demon), and Bob Calvert (Lightning - against one opponent, though).

Three pilots made perfect scores, winning all three of their heats... obviously they didn't come up against each other. The three were Graham Slater (Demon), Keith Cockroft (Typhoon) and Andrew Wilson (Comet). Hiway, as I said earlier, emerged as the winning team with a total of seven 1st places, and two 2nds (though they had two heats, by sheer chance only, in which there was only Hiway and one other opponent). Former BHGA Chairman Reggie Spooner presented a special trophy, plus a £50 cheque, to the winning team, and a cheque for £25 each to the two runners-up, Solar and Southdown.

Before you leap to conclusions about the results, and without taking away from Hiway their excellent victory, go and talk to those who were there, and try and match off the new CXB kites against each other before you buy. I've flown three of the 7 types that were there, and liked them all...

TONY FUELL

The competition was based on Crickhowell, Powys, in South Wales, and was scheduled to take place over two days. This didn't happen quite as planned. Saturday's weather consisted of a stiff, freezing, NE wind gusting between 25 and 40 mph.

When the competitors gathered at the *Blaenavon* site, most of them carried their gliders to the top (it wasn't very far!). Some of them, obviously believing in the manufacturers claims for the swiftness of the machinery, actually rigged up and took off. A number of those who did, rapidly wished they hadn't, as with the bar stuffed to their toes, and nailed to one spot, they sweated through all the lift, sink, rotating air, zigzagging air and upside-down air that nature could chuck at them.

Trevor Birkbeck had a better idea. He sent his glider up to test the conditions without him – obviously not liking it much, his glider made a rather careless landing several hundred yards downwind, writing off a leading edge. *NB – this type of accident is becoming much more common with rigid-batten gliders. If you leave yours rigged, PLEASE tie it down!*

And the rest of the competitors settled down to play dat ole' waitin' game. Early in the afternoon it seemed as if they might be winning. The wind swung a tad, moderated a tad, and seeing as how the 'Guardian' reporter had arrived by then, it wasn't too difficult to get Chris Johnson to wind-

TASK ONE

This was a pure "sink-rate" task, run on the NE face of the hill in very light conditions. Each pilot in a heat was sent off at 30-second intervals and they were all allowed to gain height together. After 3 minutes, a one-minute warning hooter was sounded, and at the end of that minute the relative heights of the competitors were assessed by a trio of judges spaced out along 200 yards of ridge.

Given the light conditions, and the fact that it was only in the later heats that thermal activity was beginning to make itself felt, this task was not only appreciated by pilots – (the "top-of-the-stack" competition goes on EVERY weekend on EVERY site) – it also offered a fair assessment of the sink rate of the machines.

Pilots were, naturally, doing everything they could to improve their chances, and the Bailey/Calvert duo enlivened matters considerably by removing most of their outer clothing! As the air temperature was well below zero, this represented weight-saving carried to extreme lengths, and they were both pretty glad to get it over with and cover up again (so were we!).

Matters were also made interesting for the competitors by the free-flyers who were cluttering up the sky, and the sailplanes which were whizzing back and forth at ridge level. After some anguished pleas, the problem abated slightly, and competitors in the later rounds got slightly better air.

Team honours in this round were evenly divided between the **Demon** (3/3 victories) and the

Task 1

Sink Rate – gain maximum height in 3 minutes

Typhoon	BEAT	Flexi Sealander X-Ray	<i>Good win</i>
Typhoon	BEAT	Lightning X-Ray	<i>Good win</i>
Typhoon	BEAT	Comet Sabre	<i>Expected win</i>
Demon	BEAT	Flexi Hilander	<i>Marginal win</i>
Demon	BEAT	Lightning Comet	<i>Very good win</i>
Demon	BEAT	Sabre X-Ray	<i>Good win</i>
Lightning Comet	DEAD HEAT	Flexi	<i>Draw</i>

Conclusions

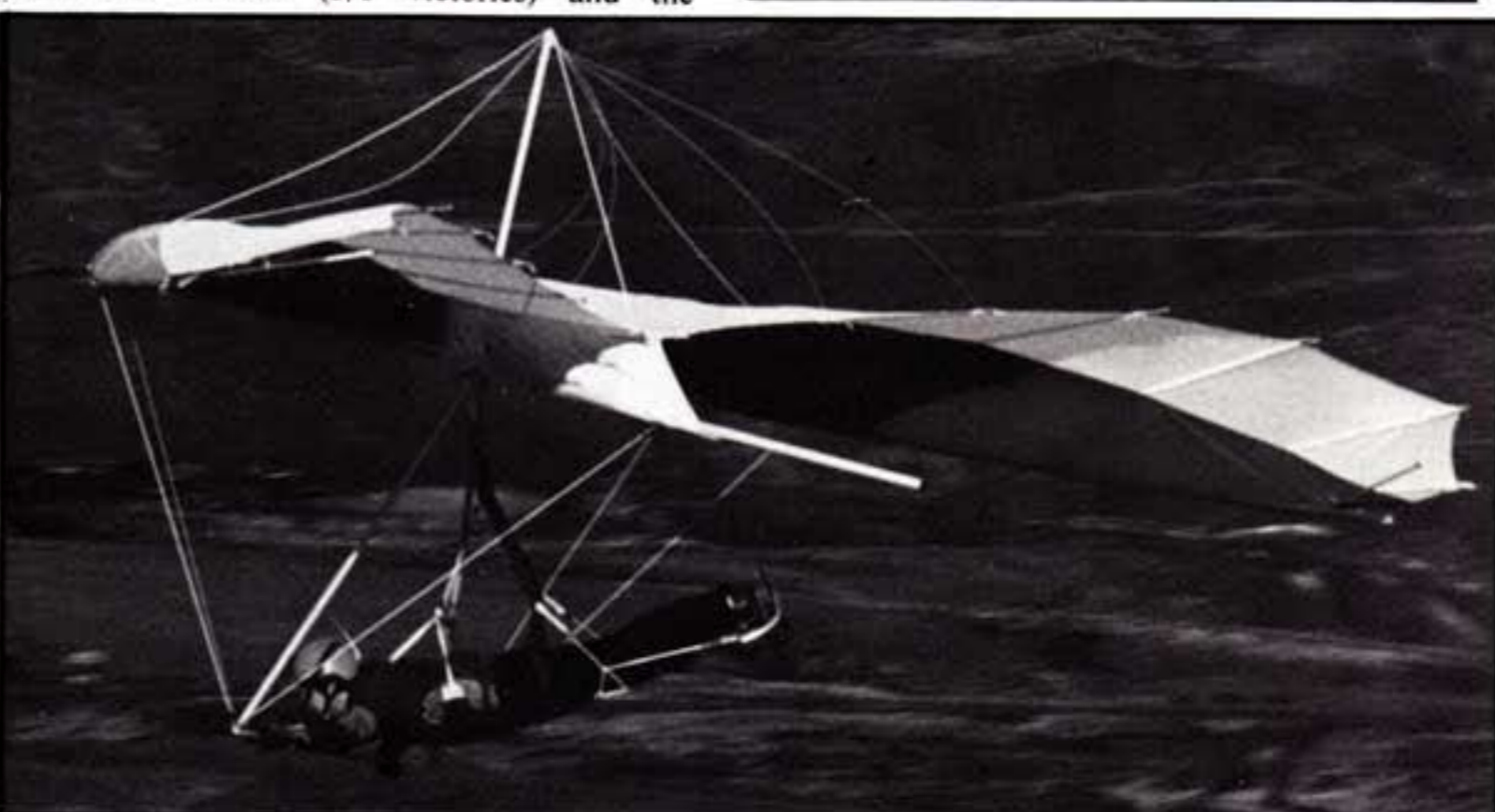
Domination by 2 kites – unfortunately, no contest between these 2.

Scores

Demon	2700	1 heat in which only 1 opponent
Typhoon	2700	
Lightning Comet	1800	
Flexi	1500	1 heat in which only 1 opponent
Sabre	900	1 pilot did not fly
X-Ray	900	significantly poor



Lightning on T/O — Photo Mark Junak



Andrew Wilson and Comet — Photo Mark Junak

dummy a task. Unfortunately it turned out to be another "touch-your-toes-and-pray" situation so after Chris had returned to terra firma, earning himself undying fame, and a blotchy photo in Monday's 'Guardian', the competition was abandoned for the day.

During the evening most of the competitors got fairly abandoned. They were outnumbered about two-to-one by hangers-on, BHGA notables, sundry League pilots and others who'd just come along to see what was going on, who also drank a great deal of beer. Peace finally settled over Crickhowell at about 2.30am when Steve Goad was finally persuaded to go to bed. Everyone was up bright and early for the next day though – a good weather forecast turned out to be spot-on, and everyone went straight off to Hay Bluff, which overlooks the beautiful Wye Valley at the northern end of the Black Mountain.

The usual problems of getting pilots, equipment and kites to the top of the hill occupied the next couple of hours. But by about 11.30, enough people were up, rigged, and flying to enable a task to be laid out. So, at last, the event got under way.

Typhoon (also with 3/3). The HIWAY team had the slightly easier time of it since SKYHOOK'S Len Gabriels dropped out of his heat, leaving Jo Binns (Demon) against Mike Hurlley (Hilander). But one can't take anything away from Graham Slater (Demon) who took on the semi-nude Calvert (Lightning) and Bailey (Comet), and "ate" them both. Neither can one ever discount Johnny Carr – who stuck his Typhoon into an almost non-existent blob and wound it round and round and up and up to lunch on Geoff Ball (Sealander) and Graham Hobson (X-Ray), giving a very audible commentary as he did so!

The Lightning of Keith Reynolds and the Comet of Andrew Wilson shared a first place, in what was, (surprisingly) the only "drawn" match. **Flexiform** and **Lightning** tied for "second-place" honours with 2/3 each. A big surprise was the poor showing of the **La Mouette** team in this task, with three, third placings. Certain members of this team (understandably) weren't very happy about having to fly in such close proximity to the free-flyers and the sailplanes, and this may have had something to do with it.

TASK TWO

Shortly before the second task got under way the wind moved off the NE face to blow on the corner of the Bluff. Both faces of the hill started to work and given that the NW face offers a much longer "beat" for speed runs, the competition was moved the necessary few yards.

Bob Mackay and Pat King were sent off about $\frac{1}{2}$ a mile along the ridge-top to mark the turning-point. Then the pilots were sent off in heats, again with 30-second intervals between them, to fly down to the marker, make a 180° turn and fly back. As Brian Milton said in his article on the American Cup, this type of task doesn't make enormous demands on anyone's intellect, but is beginning to dominate international competitions. Our poor performance in the "ridge-races" was one reason we lost the American Cup, and it was encouraging to see that home-grown machines dominated this task.

As the wind was still pretty light, some careful flying was necessary in order to stay in the lift band while maintaining a reasonable speed along the ridge. It was not simply a matter of "stuffing" the

bar past your ankles and hanging on. Competitors had to pass above eye-level at the finish-point in order to score, and most pilot's return legs were flown nearer their min-sink speed than their maximum all-out capability.

DEMONS and **TYPHOONS** shared the points honours (2,400 pts) equally in this round. The flying conditions were pretty consistent over most of the task however, making it possible to do inter-heat comparisons. The **HIWAYS** took top placing both on the absolute, and on the aggregate time scoring.

Task 2

Ridge Face – light wind, fairly stable

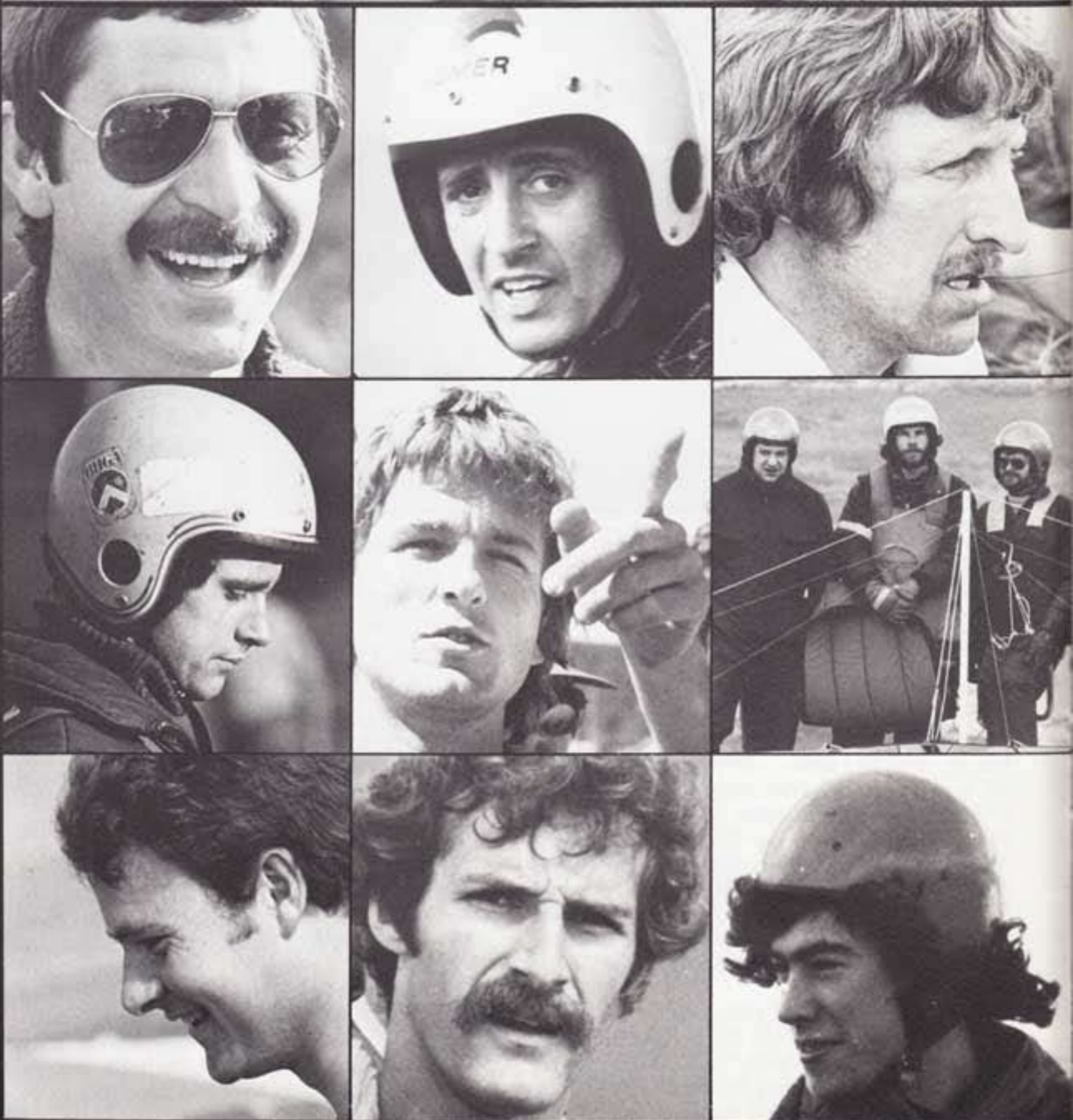
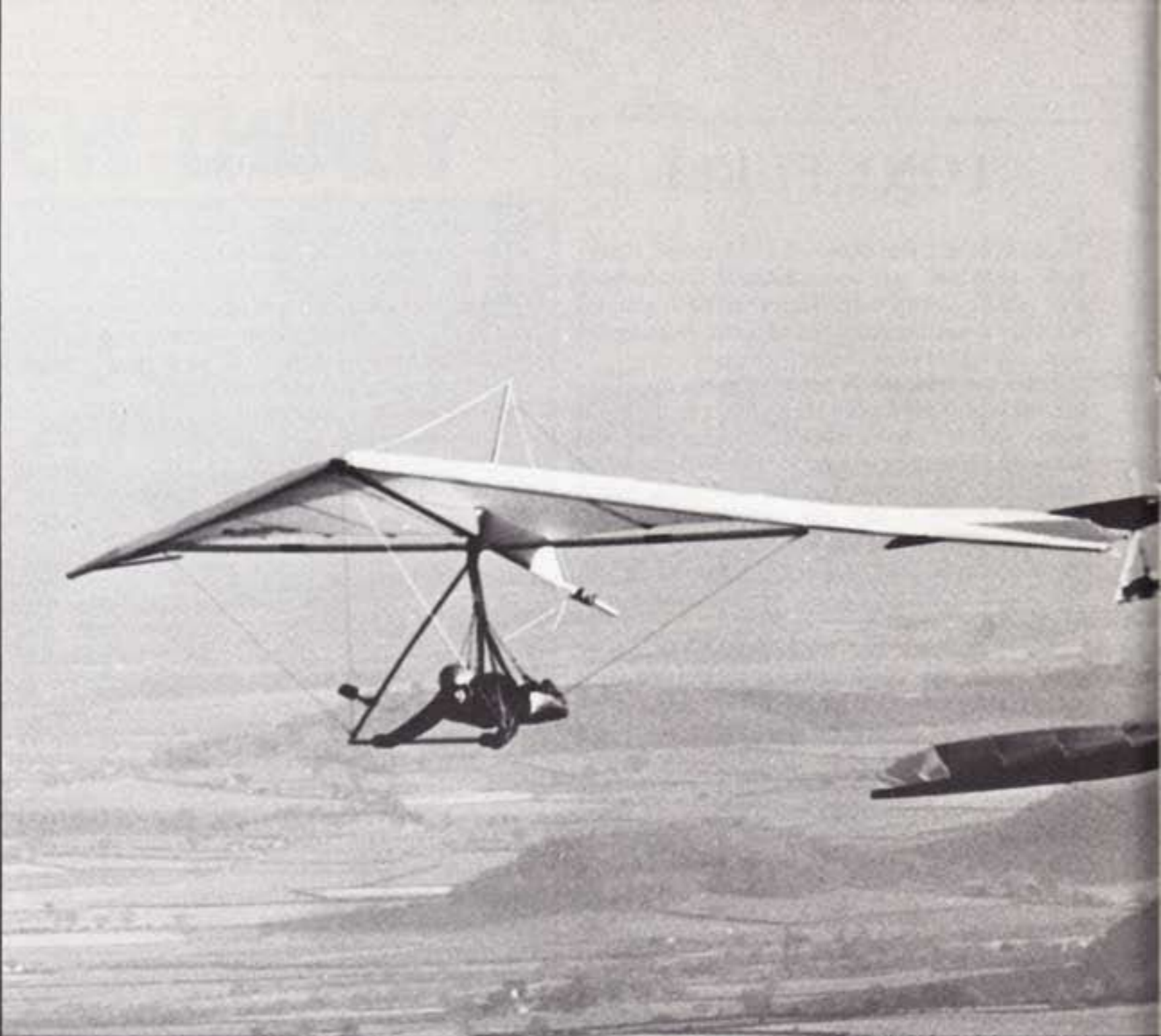
				Margins
1.50	Typhoon	BEAT	Lightning	2 secs
			X-Ray	4 secs
1.55	Typhoon	BEAT	Demon	3 secs
			Flexi Highlander	27 secs
1.49	Demon	BEAT	X-Ray	2 secs
1.47	Demon	BEAT	Lightning	7 secs
			Flexi ESP	2m 5 secs
1.54	Comet	BEAT	Typhoon	7 secs
			Sabre	9 secs
1.50	Lightning	BEAT	X-Ray	5 secs
			Comet	5 secs
1.54	Sabre	BEAT	Comet	6 secs
			Flexi	12 secs

Times

1.47	Demon (Slater)
1.49	Demon (James)
1.50	Typhoon (Carr)
1.50	Lightning (Reynolds)
1.51	X-Ray (Guy)
1.52	Lightning (Calvert)
1.54	Comet and X-Ray and Sabre
1.55	Typhoon and X-Ray and Comet and Lightning
1.58	Demon
2.00	Comet
2.01	Typhoon
2.03	Sabre
4.00	Flexi (below ridge = 2 m 3 secs*)
2.06	Flexi
2.25	Flexi

Aggregate times

Demon	4.54	11 sec range
Typhoon	5.06	11 sec range
Lightning	4.57	5 sec range
Comet	5.09	6 sec range
X-Ray	4.60	4 sec range
Sabre		9 sec range
Flexi	6.34*	22 sec range



Top — NE Face, Hay Bluff, Sink-Rate Task
 2nd Line, l-r Chris Johnson, Mick Maher, Johnny Carr,
 Keith Reynolds, Geoff Ball, Ian Trotter.
 3rd line, Keith Cockcroft, Hubert Aupetit, HIWAY
 TEAM (Geoff Shine, Jo Binns, John Ievers, Graham
 Slater, B.J. Harrison, Alan James) Joan Lane, Audrey Evans.
 4th line, Graham Hobson, Gerard Thevenot, Bill Payne,
 Derek Evans, Bob Calvert, Bob Mackay.



Annual General Meeting and Conference

Saturday 7th March and Sunday 8th March 1981

Warwick University, Near Coventry

Hosts: The Mercian Club

Message from the Chairman

Dear Colleagues,

Do you care about Hang Gliding and its future? Do you care *enough* to come to the *AGM*? It's more important this year than ever before that we have your views. Hang Gliding has come of age and new gliders are showing their potential for XC's. We need to have the experience and professionalism to cope with this challenge. Our gliders must be airworthy and we must show our fellow aviators that we are responsible enough to share airspace with them. *But* we must not lose our inherent freedoms. Some other Aviation Sports have become bogged down with bureaucracy. This must not happen to our Sport. We need your contribution and support at the *AGM*. **Please be there.** If you can't make it and have something to say drop a note to me at:

68 Besselsleigh Road,
Abingdon, Oxon OX13 6DX

I will do my best to see that your views are made known at the Meeting.
Roy Hill

Programme

Saturday 7th March Conference

12.00 pm BAR and DISPLAY OF GLIDERS AND EQUIPMENT.

2.00 pm CONFERENCE OPENS

Candidates standing for election will introduce themselves.

3.00 pm DISCUSSIONS TO ESTABLISH POLICY GUIDELINES.

This is an opportunity for all to have their say, to put forward their ideas to influence decisions that will be made by the Council on behalf of all in UK Hang Gliding over the next year. The Conference splits up into several discussion groups and recommendations and proposals that result will be discussed and voted on at the *AGM* the following day.

Subjects so far scheduled are as follows:

Support for Clubs.

A recommendation from the Delegates Conference that BHGA Flying Members, ordinarily resident in the UK, should pay more for BHGA membership if, after being a member for one year, they do not join a Club.

Sites and Airspace.

Training, Pilot Rating and Club Instructors.

Airworthiness and Design Approval.

Wings!

Competitions

Accidents

6.00 pm INFORMAL SOCIAL EVENING (Venue to be announced at the Conference)

Films brought by members will be shown including the one of *Drop Testing in Switzerland*. During the evening members will be able to renew old acquaintances.

Sunday 8th March AGM

10.00 am AGM OPENS and Nominations for the Council close.

10.15 am CHAIRMAN'S REPORT, TREASURER'S REPORT, REPORTS ON DISCUSSIONS AND CONCLUSIONS REACHED.

CANDIDATES FOR ELECTION TO COUNCIL will be able to introduce themselves and explain their ideas and policies.

12.30 pm LUNCH AND BAR

A further opportunity for members to talk informally and to see displays of gliders and equipment.

LUNCH WILL BE AVAILABLE AT NOMINAL COST

2.00 pm AGM RESUMES — VOTING to elect new Council Members and on Proposals. Members cast their votes by the use of the voting papers contained in this insert.

6.00 pm FINISH

Fall Back Dates

If the Country is brought to a standstill by heavy snow, a petrol strike or something similar and the *AGM* could not be held. If you think there is a likelihood that the *AGM* cannot be held on the 7th and 8th March please ring the Taunton Office (0823) 88140 on Friday 6th before 5.00 pm to check (we will tell you what is happening. Unless of course the snow is so bad that we can't get into the office!)

If we have to Cancel

Please ring the Taunton Office on Friday 13th March before 5.00 pm to find out what other dates and venue have been arranged. A later Meeting would not take place before the 21st and 22nd March.

Council Vacancies and Candidates

Under the BHGA Constitution the Treasurer and one third of the elected Council Members must retire each year. Percy Moss will stand for re-election as Treasurer. John Hunter is retiring after three years as a Council Member and will not seek re-election. At the time of going to press it was not known which other two Council Members would retire.

Ted Frater, the BHGA Airspace Co-ordinator and member of the Wessex Club is a candidate for election to Council.

A Council Member's Duties

To be responsible for one or more of the Association's fields of activity and have time to devote to this as well as the necessary energy, ability and enthusiasm. We need members on Council who can provide leadership to co-ordinate the efforts of members to run and advance hang gliding for all rather than those who wish to represent a specialist or local interest.

How to Stand or Nominate a Candidate for Election

Members wishing to stand for election or to nominate a candidate must send, or hand, written nominations to the Secretary before 10.00 am on Sunday 8th March. It will be in the candidates' interests to get nominations to the Secretary, as soon as possible. The proposed candidate must agree, in writing, to serve if elected, and the nomination must be seconded, in writing by another member. Every candidate and his/her proposer will be able to address the meeting prior to the elections.

Voting

We will again be using the Single Transferable Vote system. This means you can list candidates in your order of choice and your preferences are all taken into consideration. All other proposals to be put to the vote will require yes/no decision. *Yes*, if you agree with a proposal; *No*, if you disagree.

How to get your Vote at the AGM

1. Be there.

2. If you cannot attend and belong to a Member Club, entrust your votes to the representative your club will be sending to the AGM. IN WHICH CASE HAND THIS INSERT CONTAINING VOTING SLIPS TO YOUR CLUB SECRETARY OR REPRESENTATIVE BEFORE THE AGM. IF YOU LEAVE THE VOTING SLIPS BLANK YOUR REPRESENTATIVE WILL BE ABLE TO FILL THEM IN AT THE AGM FOR VOTING. THE MORE SLIPS HE/SHE HAS THE GREATER WILL BE YOUR CLUB'S INFLUENCE ON THE DECISIONS TAKEN.

3. By post, post your completed voting slips to: The Secretary, 167a Cheddon Road, Taunton, Somerset.

To arrive by the 5th March.

Those of you voting by post and those wishing to have an up-to-date list of candidates prior to the AGM should ring BHGA Offices Taunton (0823) 88140 between 25th February and 3rd March during office hours, preferably in the afternoons. Family members will be sent voting slips by post during February.

Topics for Discussion









Should be notified to the BHGA Secretary by Monday 2nd March. So that they can sorted easily, please send a SEPARATE SHEET OF PAPER FOR EACH with a brief outline of your views and ideas. The person leading the discussion can then make known these submitted views.

Proposals (to vote by post on proposals write "yes" or "no" on slips with corresponding number)


Formal proposals that members want to submit may be sent to the


VOTING PAPERS FOR B.H.G.A. 1981 A.G.M. Single transferable votes in elections for Council Members and Treasurer. You have ONE vote. Use your vote by entering the name of your first preference, and if desired, the name of your second preference and so on until you are indifferent. The sequence of your preference is crucial. You should continue to express preferences only as long as you are able to place successive candidates in order. A later preference is considered only if an earlier preference has a surplus above the quota required for election, or is excluded because of insufficient support. Under no circumstances can a later preference count against an earlier preference. Votes on proposals — write "YES" if you agree with the proposal, write "NO" if you disagree.


USE BLOCK CAPITALS, TEAR OR CUT ALONG DOTTED LINES. SCISSORS MAY BE USEFUL!


Order of Preference	Voting Paper for the Election of COUNCIL MEMBERS		Order of Preference	Voting Paper for the Election of TREASURER	
1			1		
2			2		
3			3		
4			4		
5			5		
6			 PROPOSAL 19		
7					
8			 PROPOSAL 20		
9					
10			 PROPOSAL 21		
11					
12			 PROPOSAL 22		
13					
14			 PROPOSAL 23		
15					
16			 PROPOSAL 24		
18					


IF YOU CANNOT ATTEND YOURSELF BUT BELONG TO A MEMBER CLUB YOU MAY GIVE THIS INSERT TO THE REPRESENTATIVE THAT YOUR CLUB SENDS TO THE AGM. HE/SHE WILL THEN BE ABLE TO VOTE FOR YOU.


 PROPOSAL 1


 PROPOSAL 2


 PROPOSAL 3


 PROPOSAL 4


 PROPOSAL 5


 PROPOSAL 6


 PROPOSAL 7


 PROPOSAL 8


 PROPOSAL 9


 PROPOSAL 10


 PROPOSAL 11


 PROPOSAL 12


 PROPOSAL 13

 PROPOSAL 14

 PROPOSAL 15

 PROPOSAL 16

 PROPOSAL 17

 PROPOSAL 18

Secretary at the Taunton Office preferably by Monday 2nd March*.

Proposals submitted at the time of writing were as follows:

1. The Council propose that:

"BHGA Membership Subscriptions are increased with effect from the 1st May 1981 as listed".

Individual Flying Membership	from £12.00 to £15.00
Individual Non Flying membership	from £10.00 to £12.00
Family Membership (both flying)	from £15.00 to £18.00
Family Membership (one flying one non flying)	from £14.00 to £17.00
Family Membership (both non flying)	from £12.00 to £14.00

2. The BHGA Master Public Liability Insurance Policy (which covers all Members, Member Clubs, Registered Clubs and BHGA Officials) is renewed on 1st July each year. To cover the situation in the event of a large increase in the premium the Council propose that:

"This AGM empowers the Council to further increase membership subscriptions, by an amount that would cover a substantial increase in the premium payable for the Association's Public Liability Insurance Policy, without the need to call an Extraordinary General Meeting".

3. That a change be made to the BHGA Constitution under VOTING AT THE ASSOCIATION'S MEETING there shall be a third paragraph added

(iii) shall be by individual members holding voting slips given to them by other members who cannot attend".

Proposed by Marc Asquith

Seconded by Mick Tomlinson

4. As a member the Secretary feels that an amendment to the above might be required as follows:

(iii) Shall be by individual members in membership classes (a) (b) (c) and (d) holding voting slips given to them by other members who cannot attend"

AND that a further paragraph be added to the same section thus:

(iv) Individual members in membership class (e) shall be entitled to vote if they are Affiliate Members who belong to an Affiliated Club Registered with the BHGA"

5. If the original proposal for the change to the Constitution is carried or it and the amended proposal are defeated the Secretary will propose and ask for seconders for the following proposal:

"That under VOTING AT THE ASSOCIATION'S MEETING there shall be a third paragraph added;

(iii) "Individual members in membership class (e) shall be entitled to vote if they are Affiliate Members who belong to an Affiliated Club Registered with the BHGA".

Overnight Accommodation

For a list of Guest Houses and Hotels send an SAE with 11½p or 14p stamp to:

The Coventry Information Centre
36 Broadgate, Coventry.

The telephone number in case you forget to write is
Coventry (0203) 20084 or 51717

Those wishing to camp or stay overnight in camper vans or caravans should make their own arrangements with sites in the area. *There are no facilities for staying overnight on University premises Indoors or Outdoors.*

Film Evening

All attending are requested to bring edited hang gliding films, especially new ones. Standard 8, Super 8 (Silent and Sound), 16mm (Optical Strip Sound) Projectors and Screens are available.

If you want any other information please contact:

Rod Bird
5 Station Avenue, Warwick
Telephone: Warwick (0926) 496314

Trade Display

Hang glider manufacturers, Registered Schools and Equipment suppliers will again provide a major feature of the week-end.

Second-hand Glider Mart

Members wishing to sell their second-hand gliders are welcome to display them in the extensive grounds close to the Conference Centre. There is no need to book just report to the Mercian member responsible when you arrive.

Children

Members bringing children must make their own arrangements for their supervision so that they do not disturb the Meeting.

The Mercian Club

Council wish to thank the Mercian Club, in advance, for help at the Meeting and for their usual superb sign posting job. *Because of overcrowding problems at both Mercian sites the Club regrets that Edge Hill and Meon Hill will be closed over the AGM week-end.*

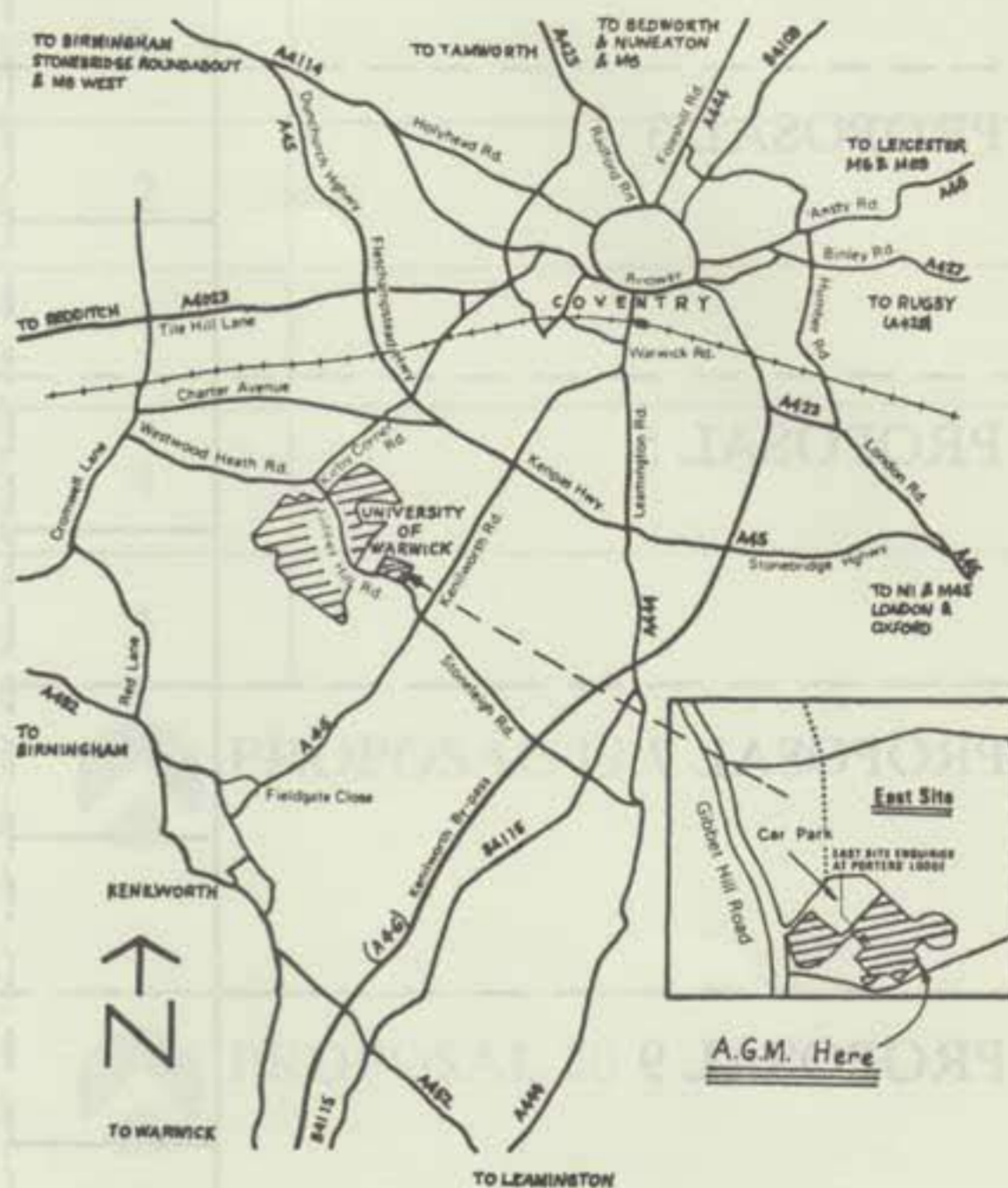
*So that they can be included in the agendas that will be prepared for the Meeting.

Information for Member Club Representatives

Will Member Club representatives please contact the Secretary at Warwick on Sunday 8th March before 2.00 pm to obtain Validation Slips to allow them to present more than one vote. This is to ensure that only Member Clubs get a block vote.

Note to all members

Members are reminded that they cannot vote at the AGM without a voting slip. Do not ask for voting slips to be issued at the Hall because you have lost yours. You will only be able to obtain a voting slip at the meeting in exchange for a membership application form with fee and before 2.00 pm on Sunday 8th March.



The University is situated three miles south of Coventry and 1½ miles north of Kenilworth, in Gibbet Hill Road off the Kenilworth — Coventry section of the A46.



Graham Slater was individually fastest around the course (1m 47s), closely followed by Allan James (1m 49s). The best **TYPHOON** was Johnny Carr, at 1.50.

The **DEMON** is clearly the winner on all counts, coming out not only equal with the **TYPHOON** in the placings (2 firsts and 1 second-place), but gaining the two individually fastest times, the lowest team-aggregate time, and the best average time. **TYPHOONS**, while getting equal points to the **DEMON** team, were beaten by both the **LIGHTNINGS** and the **X-RAYS** on team-aggregate and average times. Only an exceptionally fast 1m 30s run by Johnny Carr gave them third-equal individual fastest time, along with Keith Reynolds on a Lightning.

LA MOUETTE seem to have been unlucky with the draw. Flying with beautiful accuracy their pilots turned in some very fast and consistent individual times, to get the third fastest team average time, but only 1,500 points (one second-equal; one second and third-place). The **LIGHTNING** team also produced some very good and consistent individual times, but could only manage 2,100 points (1 first; 2 second-places). They were second fastest team overall, though.

Unfortunately, the pressure of the *WINGS!* print deadline didn't allow me to do a full statistical analysis on the speed results. I feel that the conditions were sufficiently similar across most of the heats to make this an interesting exercise. (See Derek Evan's doodles)

What is noticeable is that, if you drop the **FLIXIFORM** team's results out (*one member went below the ridge, and had to scratch back up again; the other two machines are not double-surface*); there is an amazing consistency in the speed results turned in by the double-surface CFX gliders. Only a 16-second difference on an overall average of 1m 57s separated the fastest CFX from the slowest. While not wishing to take anything away from the winning teams, it will be interesting to see whether any statistical significance attaches to the results achieved by any particular glider in this task.

TASK THREE

As the shadows of evening lengthened, a weak front crossed the sky very slowly, bringing with it a certain amount of cloud, which seemed to kill off what little thermal activity there was. With the numerous free-flyers hanging on for grim death to every square inch of ridge space, and bearing in mind the need to work out the results, hold the prize giving and get everyone on their way home, a "downhill" task was set.

The format chosen was the old "speed-range" test, as used in several of the early League competitions. Competitors took off, flew straight out away from the hill (as fast as they could) until they crossed a line. They then had to maximise their duration until landing in a given area. The second figure was then divided by the first to give a ratio. Due to a slight briefing confusion during the running of the task, some groups of pilots landed on a spot, others just landed in the general vicinity of the landing marshal. The relative scores weren't seriously affected, and a hurried meeting of officials and team representatives in the gathering gloom agreed that the scores should stand.

Unfortunately, this discrepancy destroys the value of the ratios as a basis for statistical analysis. A considerable degree of pilot skill also affected the results, and careful positioning of the glider after crossing the mid-point line paid dividends in maxing the "duration" part of the task.

The results were somewhat inconclusive. The list of "firsts" achieved covers - **SABRE**, **LIGHTNING** (twice), **DEMON** (twice), **TYPHOON** and **COMET**. The best you could say



is that no clear superiority of one glider over another was demonstrated. With everyone now at the bottom of the hill, and the light gone, the competition ended there. A very relieved Geoff Shine collected the trophy and a cheque for £50 from Reggie Spooner, on behalf of HIWAY, and the DEMON team. The TYPHOON and LIGHTNING teams shared second place, and a cheque for £25.

Task 3

Speed Range – speed to pylon, followed by max duration
– duration time *divided* by speed time
= **SCORE**

Demon	BEAT	Sabre Flexi
Demon	BEAT	X-Ray Typhoon
Lightning	BEAT	X-Ray Comet
Lightning	BEAT	X-Ray
Typhoon	BEAT	Lightning Flexi
Comet	BEAT	Demon Typhoon
Sabre	BEAT	Flexi Comet

Aggregate Scores

Demon	10.37
Typhoon	9.48
X-Ray	8.59
Lightning	8.31
Comet	7.27
Flexi	5.89
Sabre	2.28 (2)

Aggregate Speed Times

Demon	33
	35
	38
	<u>106</u> secs
Sabre	33
	46
	(2) <u>79</u>
Lightning	36
	40
	<u>40</u>
	<u>116</u>
X-Ray	36
	38
	40
	<u>114</u>
Typhoon	35
	35
	<u>37</u>
	<u>107</u>
Flexi	43
	45
	46
	<u>134</u>
Comet	34
	38
	<u>55</u>
	<u>127</u>

Demon, Typhoon, X-Ray, Lightning lead again.

Aggregate Duration Times

Demon	129 *
	111
	125
	<u>365</u>
Sabre	97
	82
	(2) <u>179</u>
Lightning	110
	110
	101
	<u>321</u>
X-Ray	99
	129 *
	96
	<u>324</u>
Typhoon	99
	115 *
	124 *
	<u>338</u>
Flexi	68
	98
	98
	<u>264</u>
Comet	79
	117
	91
	<u>287</u>

* these landed 'out' and therefore had longer flights.

Demon, Typhoon, X-Ray, Lightning lead again.

CONCLUSIONS

There is no doubt in anyone's mind that this event was a highly significant one. The commercial repercussions were being felt by the winners the morning after the competition, and will no doubt increase as time goes by as the effect of the reporting in *WINGS!*, *VOL LIBRE*, *GLIDER RIDER*, etc spreads around the world.

There is equally no doubt that the event was a meaningful one, even though it only occupied one day – and a mid winter day at that. Maxing-out light conditions duplicates what most pilots want out of their gliders, and ability to fly fast while maintaining both glide angle and sink rate has benefits in both XC performance and general flying safety.

The DEMON team, playing on their home ground won a worthy victory. But the other teams were not very far behind. Particularly creditable performances were turned in by the SOLAR TYPHOON and SOUTHDOWN LIGHTNING teams. The Southdown management might be criticised for spending all day playing with its powered 'trike' irritating the local flyers, and leaving their pilots to struggle away unaided at the top of the hill where their commercial future for 1981 was being decided. The constant presence of a big group of Hiway's management, dealers and workers at the hill-top undoubtedly contributed a lot to the morale of the team. The same goes for Solar Wings management, all 3 of whom were there.

Distance from their home base affected some of the other teams. Particularly the LA MOUETTE team who put in a big effort to reach Britain to take part, and who must be very sick about losing in front of Hubert Aupetit the feature-writer for *VOL*

LIBRE, who will report the event in his magazine. Gerard Thevenot is a brilliant pilot, and a hot designer too, so look for some big improvements shortly in the X-RAY, badly needed as an Atlas replacement.

COMET were affected by unfamiliarity with the site, and had team problems. Bob Bailey, while on the surface a considerable "catch" as a team pilot was much too large and heavy for the glider he flew. Significantly, his best position (2nd) came in the speed task: he just couldn't get competitive in the other events. He needs a big glider. Andrew Wilson, with three "firsts", showed what could be done by a lighter pilot who knows how to get the best out of this remarkable glider.

SKYHOOK's Mark Sylvester showed that the SABRE could be a very competitive ship. He didn't unfortunately, get much support from the rest of the team, although 3,600 points from two flyers is equivalent to 5,400 from three – equivalent to the COMET.....

FLEXIFORM, though showing one technically interesting glider, the SEALANDER suffered from a bad choice of machines – did we really need it proving that a HILANDER – a good glider in its day, the equal of the Atlas and the Mega – isn't now any sort of a proposition against the CFX ships? Space doesn't permit me to go into much technical detail about their bowsprit "tailed" machine. It aroused a lot of interest, (and some headshaking), although it seemed to fly well.

Another way of looking at scores

Task 1 – no alternative scoring methods

Demon	1	Typhoon	1	Lightning	3
Comet	4	X-Ray	7		

Task 2 – score using aggregate times for each team on assumption conditions changed very little

Demon	1	Lightning	2	X-Ray	3
Typhoon	4	Comet	5		

Task 3 – should have been scored on aggregate scores

Demon	1	Typhoon	2	X-Ray	3
Lightning	4	Comet	5		

Totals

Demon	3	(1)
Typhoon	7	(=2)
Lightning	9	(=2)
X-Ray	13	(5)
Comet	14	(4)

AND FINALLY...

As I said last month, the new CFX concept is about to revolutionise hang gliding. Good sink rate, speed, good handling, and the ability to go places when the wind gets up are what it will be about in 1981. No doubt minor improvements will be made to all the types after the January event, and if you're considering buying a glider in 1981, don't assume that one make is necessarily superior to another on the basis of only one competition.

From the basis of some very close observation, I'd still say that there is very little to choose in general desirability between the Demon, the Typhoon, the Lightning, the Sabre or the Comet. No doubt when Thevenot gets the X-Ray better sorted, it will be fully competitive too. Flexiform won't be left behind either.

In this bewildering variety of choice, the buyer needs to keep a wary eye on the deal he's being offered. Can the large manufacturers keep up their quality across large production runs of these demanding sails? Will the results of this competition salvage Hiway's manufacturing reputation? How will the 1981 League affect development? All this, and more, in future *WINGS!*

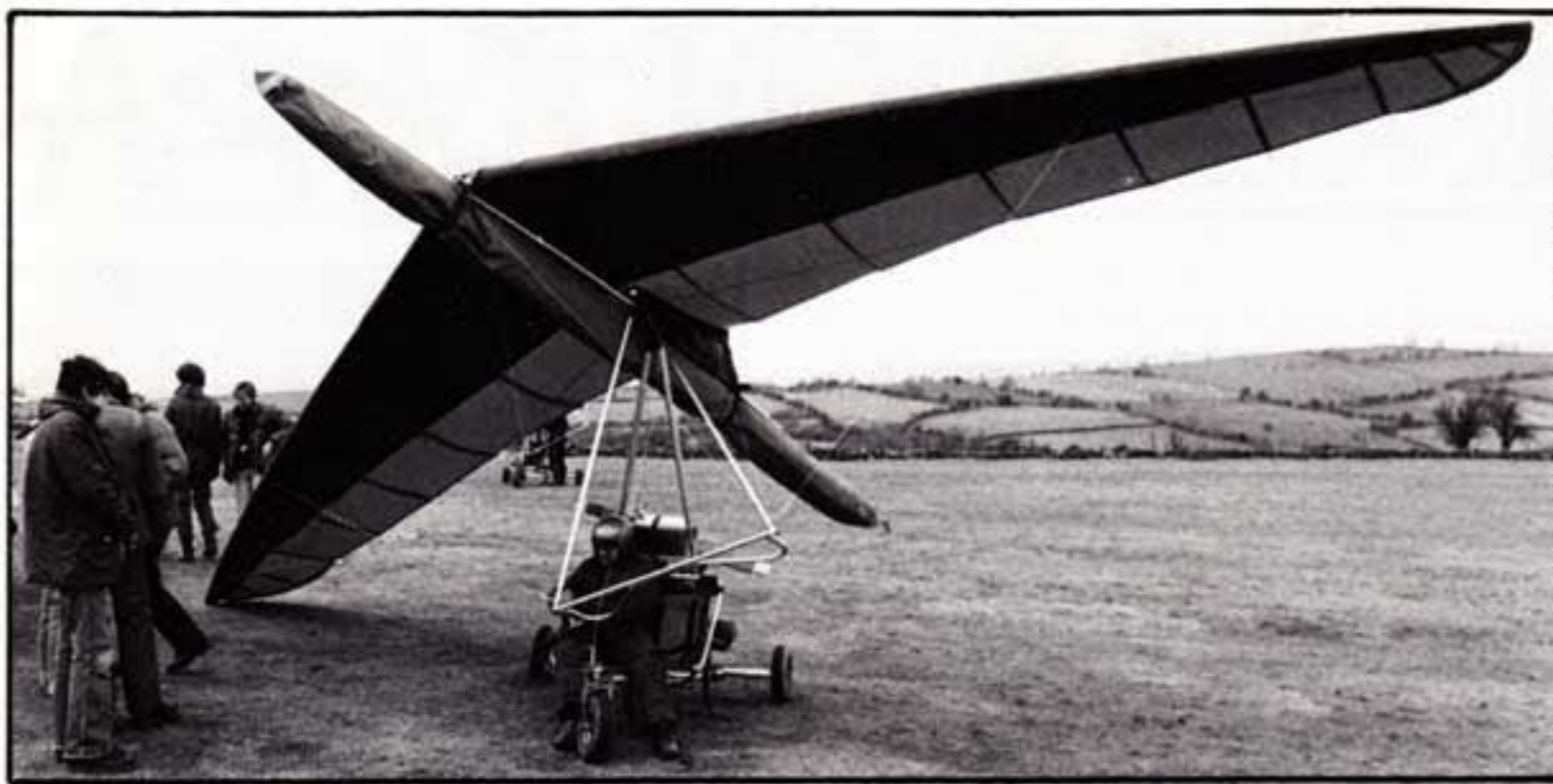


Photo Mark Jurak
Trike Transport for Hiway

Noel Whittals View

Yes, the Comet really did herald the next generation of hang gliders: crossbooms now float, double surfaces rule, leading edges are stiffened, battens are thicker on the ground than arrows at Agincourt, and the resulting flying machine goes very fast indeed.

I suspect that it also presents production problems the manufacturers could well have done without, and weighs heavier on the shoulder than we would really like. But human nature being what it is, we will no doubt accept such considerations merely as the price of progress.

Far developed from the "ragwing Rogallo", these fast 1981 aircraft have the potential to cross country as never before. For pure ridge soaring I doubt if they are much more fun than our older models, but an interesting prospect is that we are just beginning to reach the speed range where there is the possibility of connecting with major wave lift. I hope that the first pilot who manages that is wearing his thermal undies.

Elsewhere in this *WINGS!* there will be detailed analyses of the competition results of the individual manufacturers. From these results it is certain that some readers will draw conclusions that one glider is better than another. Fair enough, provided it is borne in mind that the competition was won after only about ten minutes total competitive airtime per pilot, and at the end of the day nobody knew who had won until the final sums were done — in the air no single make was obviously dominant. The contest was close, hard, more-or-less fair and what was being demonstrated were fine degrees of excellence, not "good" or "bad".

That is not to detract from the Hiway triumph. They won, and it is good to have seen the Demon develop from its disappointing first showing at Chattanooga into a glider which can come out on top of the world's best.

We should reflect also on the sporting courage of the manufacturers themselves. In many ways it is remarkable that this competition happens at all, as it may be argued that in a contest like this there will be six losers and only one winner. Long may the industry support this event as a showcase for their wares. Provided that you, the glider-buying public, read the results and then take into account all the other influences like spares availability, the integrity of the local dealer and good old fashioned personal prejudice before you place your order, then the Manufacturers Competition should be assured of becoming a regular high-light on the Winter Calendar.

P.S. I don't know what the marshals got beyond a round of applause, but whatever it was, they received less than they deserved: nobody should be allowed to get that cold and still operate pens and stopwatches!

John Hudson's View

Perhaps it was the appalling weather of November/December which gave such an edge to the Manufacturers meet, or maybe the intense competition between manufacturers, each depending on the latest model for survival. I prefer to think it was down to the pilots who, suffering from airtime withdrawal symptoms, feeling the lack of a really competitive British Ship and being bored out of their heads by a weather-grounded Christmas, met in Wales intent to do battle.

The weeks before the event were amazing. Suddenly everyone was feeding greedy telephones, trying to make a team. People like **Bob Calvert** and **Graham Hobson** were burning rear ends trying to sort things out. The neat 10 place rule meant that the 7 manufacturers could only have one pilot each from the top 10, and believe me the top ten places in the League are all held by pushy aggressive guys. As it was, all the main stars made a place for themselves, and grabbed a wing to try to accumulate air-time between the Gales of the New Year.

Most of us met on Friday evening in a pleasant pub in Crickhowell and the atmosphere in the bar was electric. Let no one be kidded about the aggressive Hang Glider Pilot, this loner, this one-off individual. Perhaps he is, but more social an animal would be hard to find. Alcohol flowed freely and place was illuminated with laughing faces, excited voices and good natured wind-ups. The Comets were going to burn the Typhoons, the Lightning flash passed the Sabres and Hilanders, and the Demon was going to smoke them all!

The next day was an anti-climax as 40mph winds streaked across launch allowing little airtime. The wind-ups intensified as a new Typhoon went for a flight on its own, a La Mouette X-Ray collapsed as a strong wind forced the nose hard to the ground, and **Andrew Wilson** THREW a Comet all over the sky in horrific conditions. Will he live? we all asked. Subtle comments from one manufacturers team as to how he was doing O.K., and this is great and nice flying, and wasn't that gust stall at 90° bank very sweet?...and aside to each other "if he keeps this up it'll be one less to fly against!" Andrew did survive and the answer we'd all gathered for had to wait until Sunday.

Saturday night was a repeat of Friday, helped along by good food, good wine, a 3 hour showing of the 1980 American Cup, good ale and excellent company.

Trevor Birkbeck dragged us out of our pits at 7am on Sunday in order to get an hours free flying before the competition, but the usual civilised organisation of **Brian Milton** and **Derek Evans**, didn't give us a site until 9am. Then it was a mad

dash to Hay Bluff, to be faced with a 700ft climb on top on slight hangovers and greasy eggs. As usual, **Bob Calvert** extended the wings on his boots and flew to the top, whilst the more sedentary of us crawled up, sweating blood and being subjected to repetitive doses of second-hand breakfasts. I arrived at the top to find the lift just dying and a few gliders on the way down. As usual, **Big G** took notice of our competition and gave us his usual dose of useless competition weather, before getting bored and allowing us periods of light soaring conditions. A min-sink task was called and the pressure was on. I've not experienced such an atmosphere on a hill for a long time.

Most of the team members were League pilots, conditioned to opposing each other continually, each one fighting to beat the next. In this event they were encircled by a ring of determination, welded into a triple-headed team, fiercely proud of their association with the manufacturer, pleased to be flying his wing and in no mood to hear critical comments about their flying buddies or the manufacturers products. It was extremely refreshing to hear the comments and see the results. Usually reticent about flying techniques, each team member was giving all to his mates to help them win.

As described elsewhere two more tasks were run, each one as fair as is possible in this sort of event. Some of the flying was brilliant even though the masses of free flyers must have hindered the pilots. Hay Bluff was crowded and as the lift came, wings arose and you could see grass. Not much sky though, as fast and slow ships intertwined trying to get the best lift and longest times. Over-crowding was a definite problem and somehow the aggression which is in all of us came very near to the surface as pilots broke all air rules with selfish attitudes which will definitely result in mid-air collisions and death in the future. A very simple standard ridge circuit would have eliminated many of the problems.

The final task put the competitors on the deck near the cars and after an hours calculation the winner was announced.

Hiway won, but more than that, Hang Gliding won. I think the individuality of the League has destroyed much of the old loyalty which pilots had towards manufacturers. Of late, when a manufacturer was struggling, League pilots dropped him dead. But perhaps this event may bring back some of the old closeness, and maybe manufacturers will be given a little more support when things are not going too well.

In any case, I think it's guaranteed that the manufacturers team competition will be an integral part of the competitions circuit from now on. I look forward to next year.



ICARUS ALL SORTS EXTRA

... nice to see that former BHGA Training Officer **Keith Cockcroft** has got his hunger back, after years of laid-back flying. Keith came top of the Class 2 selection for the World Championships back in 1976, and was top British pilot in that class in the subsequent event. But choosing the glider to fly -- eventually he settled on a Phoenix 6B -- gave him a lot of problems, which seemed to take the edge off his hunger. He spent years in the League with the apparent ambition of mere survival, until last summer, when he spent a lot of time in Owens Valley flying against **Eric Raymond**. Leaving the BHGA job took a great weight off his shoulders -- it's now on **Bob Harrison**'s back, Gawd bless 'im -- and Keith actually looked as if he wanted to win the manufacturers' meet, as the other pilots remarked in surprise. Maybe it was, as another manufacturer said privately, a shrewd move on **Solar**'s part to hire Keith as a travelling representative, doing the same job as **Keith Nichols** once did for Electra-Flyer ...



Bob Harrison — Photo Mark Junak

... boss of La Mouette, **Gerard Thevenot**, left the manufacturers' meet all thoughtful after his new **X-Ray** didn't show very well. It's in the middle of winter, and it must be granted that there's more time yet to find a successor to the fabulously successful **Atlas**, but the British manufacturers have been searching for a way for nearly two years to nullify the myth of the **Atlas**, and it's possible South Wales did it for them. But the **X-Ray** was, as all La Mouette gliders are, beautifully built, and Gerard will be looking to the L/D competition near Dieppe on February 15th, in which **Mike de Glanville** is expected to fly a **Demon**, to come back again into contention. Don't write anyone off is the most prudent advice one can give ...

... **Len Gabriels** gave the organiser enough warning that he couldn't sprint up hills with gliders on his back the way younger pilots do ... it's a pity the raw results don't show **Skyhook**'s performance as it really was. If Len had flown, and had made only three 3rd places, **Skyhook** would have beaten **La Mouette**, and if Len had reflected the performance of the other two **Skyhook** pilots, his **Sabre** would have equalled the **Airwave Comet**. His promising young pilot, **Mark Silvester**, made two 1st places and a 2nd place on his **Sabre**, against good opposition too, so **Skyhook** is in there and pitching with the other manufacturers when it comes to attracting pilots to the 5th generation machines ...

... any prizes for naming the manufacturer, or should he be called former manufacturer, who told all and sundry in South Wales that there were only three real hang gliding designers in Britain, and the other two were **Ian Grayland** and **Bill Payne**? As Saturday merged into Sunday, this same gentleman was reported to be shedding names from his "only real designer" list until there was only one left, and there are -- I'm afraid -- no prizes at all for guessing the sole survivor. But I did hear that, if he put his mind to it, if he really cared to do it, if we pushed him too far, if ... well, in two years he'd be heading the biggest manufacturers in Europe, and then watch his proverbial smoke ...

... one new name, at least, has emerged as a star from the manufacturers' meet. **Hiway**, very pleased to win, are also realistic that they hadn't been able to translate **Bob England**'s original design into sail even a week before the meet. **Bill Payne** was brought down from Brighton to re-set the whole sail, and after burning seven ends of every candle they had, **Hiway** got the **Demon** right for the day. From the point of view of British hang gliding, it's a good thing that **Hiway**, our biggest manufacturer, didn't get a chopper on its neck at the meet, because it was risking more than most, if not all, of the other manufacturers there. If **Hiway** had to go back to the drawing board for a drastic re-design, it could have frightened the hang gliding suppliers who are still nervous after the moonlight flit of **Waspair** ...

... **Bob England** wasn't there to see his design leap into winning position at the meet. He spent a week in hospital after an operation to an injured shoulder, and had to be brought the news in his sickbed. No doubt it help his recuperation, and he's said now to be wandering around with a faint grin and his arm in a sling while his friends wonder if he'll be ready in time for the opening of the National League at the end of February ...



Hughie McGovern

... the most radical looking new machine at the meeting was **Flexi-Forms ESP**, flown by **Geoff Ball**. It's cross-boomless, with a nose angle of more than 140°, which is possible because of the reflex built into the big tail. It's not quite as fast, yet, as the more conventional **CXB** machines, but **Bob Calvert**, who flew it after the meet, raved about its handling, saying it was as good as a **Superscorpion**, and its sink rate was excellent. Between the manufacturers meet and the first League competition, **Flexi's Hughie McGovern** will be casting the runes for good weather to develop the **ESP**, at the same time refining the **CXB** successor to the **Hilander**, called -- provisionally? -- **Sea-Lander** ...



"STACKED" — Photo Mark Junak

... not sure how any one would like being described as the "Spittle of a Black God", but **Ian Butcher** tells me that's how the Navaho Indians of North America define a **Comet**. The Navahos also believe Comets are the creators of stars, and carry the seed of the Black God to the darkest part of the sky. In the Amazon, the offspring of **UP** by **Brock** and **Haggard**, out of **Airwave**, are believed by the **Tukano** tribe to be signs of celestial sex, and that from their union, fertiliser falls to the Earth as dew. The only faint gleam of hope in the whole mythology is the news that, with every passage of Comets near the sun, they are stripped of their surface layer, parts of which volatilise and are blown away by a **Solar** wind ... but then, as **Lyall Watson** says in his book **Lifetide** ... "Comets are the nearest thing to nothing that anything can be and still be something" ... watch that "celestial sex" though, because I can see a certain amount of grumbling coming from pilots who get drenched in the resulting dew ...

... after spending a lonely few weeks perched on the pinnacles of power, **Hiway** boss **John Ievers** has admitted former floor manager **Geoff Shine** to the corridors of power as a company director. **Geoff** has been with the company since its days as a Brighton cottage industry, before it moved to its plush premises in Wales, and has been through the nail-biting drama of finding a new ship to succeed the **Superscorpion**. Now he's in there with the decision-making as **Hiway** look like they've hit a winner with the **Demon** ...

... a name to watch this year in competition flying is **Andrew Wilson** from the Isle of Wight, one of 18 pilots fighting for a place in the 1981 National League. Some of the top League pilots consider he's a bit wild in the air, but a few League tasks will calm him down. He looks though a formidable contender within the League, and he should bring results for the **Airwave Comet** team ...

Trikes & Thermals



Over the last few months several trike fliers have mentioned that they were reluctant to go out in bumpy and thermic conditions because it was so difficult to control their trikes. This made me give the problem a lot of thought, as I have been quite satisfied with my own set up.

Recently I had a unique opportunity to compare different powered trikes in varying wind conditions over a period of a few weeks. For the purpose of this article we will call the medium sized glider with deep leading edge pockets and high lift profiled battens with no deflexer or tip to control frame wires – Kite 'A', and the 36ft span machine with a single deflexer, tip to control frame wire, and low profiled battens – Kite 'B'.

POWER OFF

Kite 'A' was purchased from a manufacturer on the understanding that it was suitable for power, and being aware of its reputation as a performer we thought it a good buy. Kite 'B' was already in use at the School, and Steve and myself had done many hours of power flying on this kite. So quite naturally we presumed that a more efficient wing would give us even more performance. Both machines were rigged for free flying on a day of varying wind speeds at a 200ft ridge. Kite 'A' amazed us by its ability to climb on anything. Although I thought its handling was a little on the heavy side, its penetration was adequate. Kite 'B' remained 50ft below on normal ridge lift, but the penetration was better. With both machines at the same height Kite 'B' had approxi-

mately 4 mph more penetration. Kite 'A' seemed to ride the bumps slightly earlier than 'B'. Both kites were flown and checked throughout that day.

POWER ON

A few weeks later we fitted kite 'A' with a power trike ready for testing on our nursery slopes. The conditions were quite gusty, moderate to fresh winds. Kite 'B' we knew from experience would handle these conditions quite well. I expected kite 'A' to have a better climb rate and a slower penetration speed. I was in the air within 3 metres from a flat field. The climb rate was really good but the handling I could only describe as diabolical – it handled like an old standard. I would fly the machine into a gust and the nose came up violently. I would then take the bar to my waist and after a short delay the machine reacted and dived, and after a further delay, it recovered. The roll was also heavy and unpredictable. Sometimes I had all my weight shift, and the thrust line locked over, to get any response. I relaxed my grip, thinking I was over-reacting to the situation, but the only way things could be improved was by going on to tick-over. Also the kite was not making any headway. Steve, who has flown for many hours on powered hang gliders, tried the machine with even worse results, as he is 2 stone lighter. We then discussed the problem but could not form any opinion as to why this should be.

Two days later we had the opportunity to try both hang gliders and power units together. Conditions were light to moderate, slightly bumpy. Kite

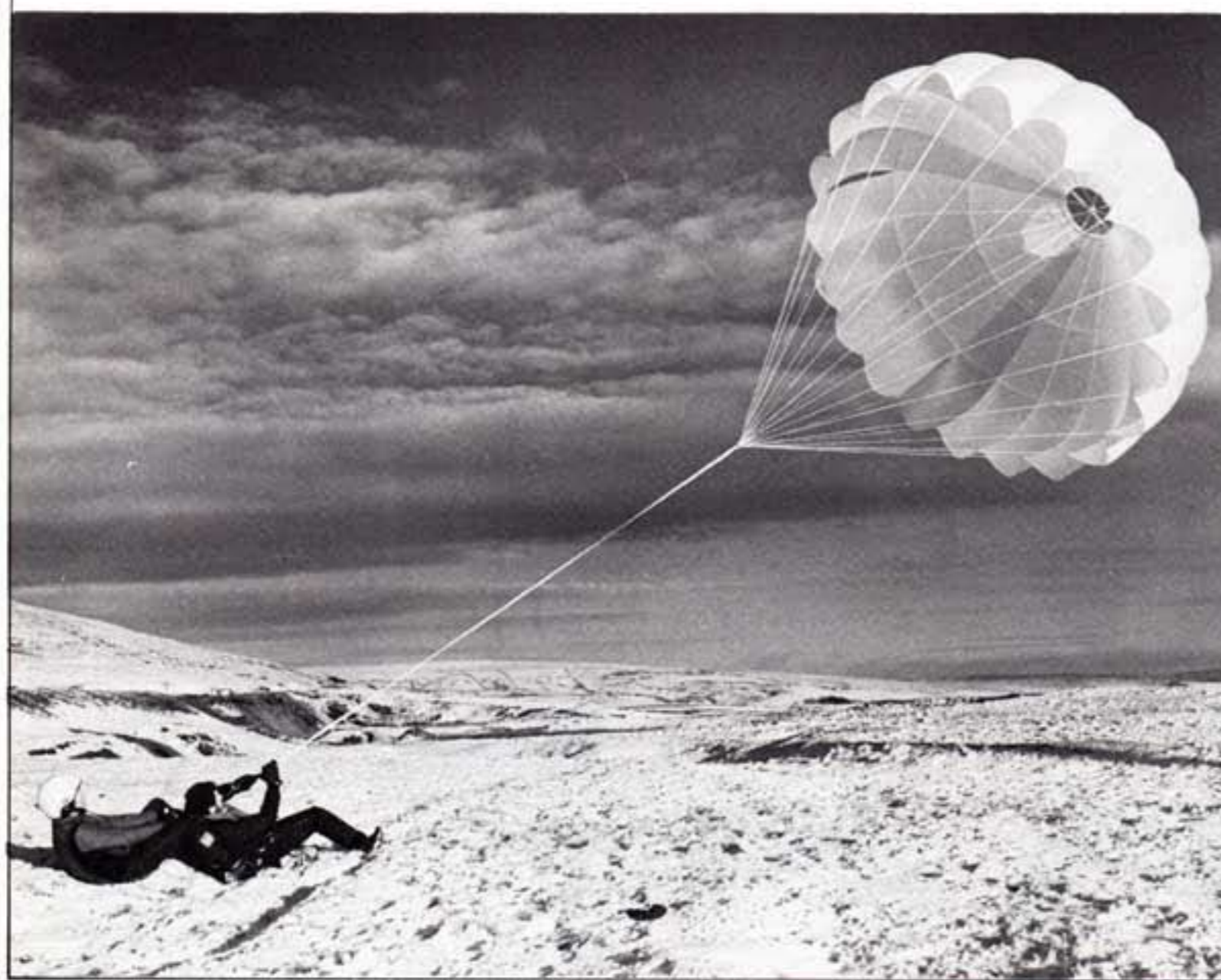
'A's climb rate was impressive when the air was relatively smooth, and the machines handling improved, although nowhere near kite 'B's standard. Kite 'B' had its usual performance, reasonable climb and good penetration.

CONCLUSION

In light or steady winds Kite 'A' appeared to have a lot more performance, but for all-round flying, Kite 'B' took the honours.

Reasons – I am no aspiring aerodynamisist or mathematician, but these are my observations: When Kite 'A' was pushed into a gust under power the normally tight sail billowed to such an extent that the centre of pressure moved well forwards, washout increased, the high profiled battens reacted to the gust and caused a violent pitch upwards. Also the outer section of the leading edge flexed *upwards*, as well as *inwards*, causing the machine to become autostable for that amount of time, so roll control was severely dampened. Kite 'B', with a single deflexer, and tip-to-control-frame wire, was little affected by these conditions. The low profile battens also assisted in cutting through the gust. This machine has also been fitted with a floating cross-boom, so it handles even better. The point I am trying to make is, just because your hot ship and trike go up like a rocket on steady wind days, this doesn't mean they are the right combination for good all-round performance. There may be more to triking than some of you realise. Lets have your comments – and come on, you mathematicians and aerodynamisists, prove me right or wrong.

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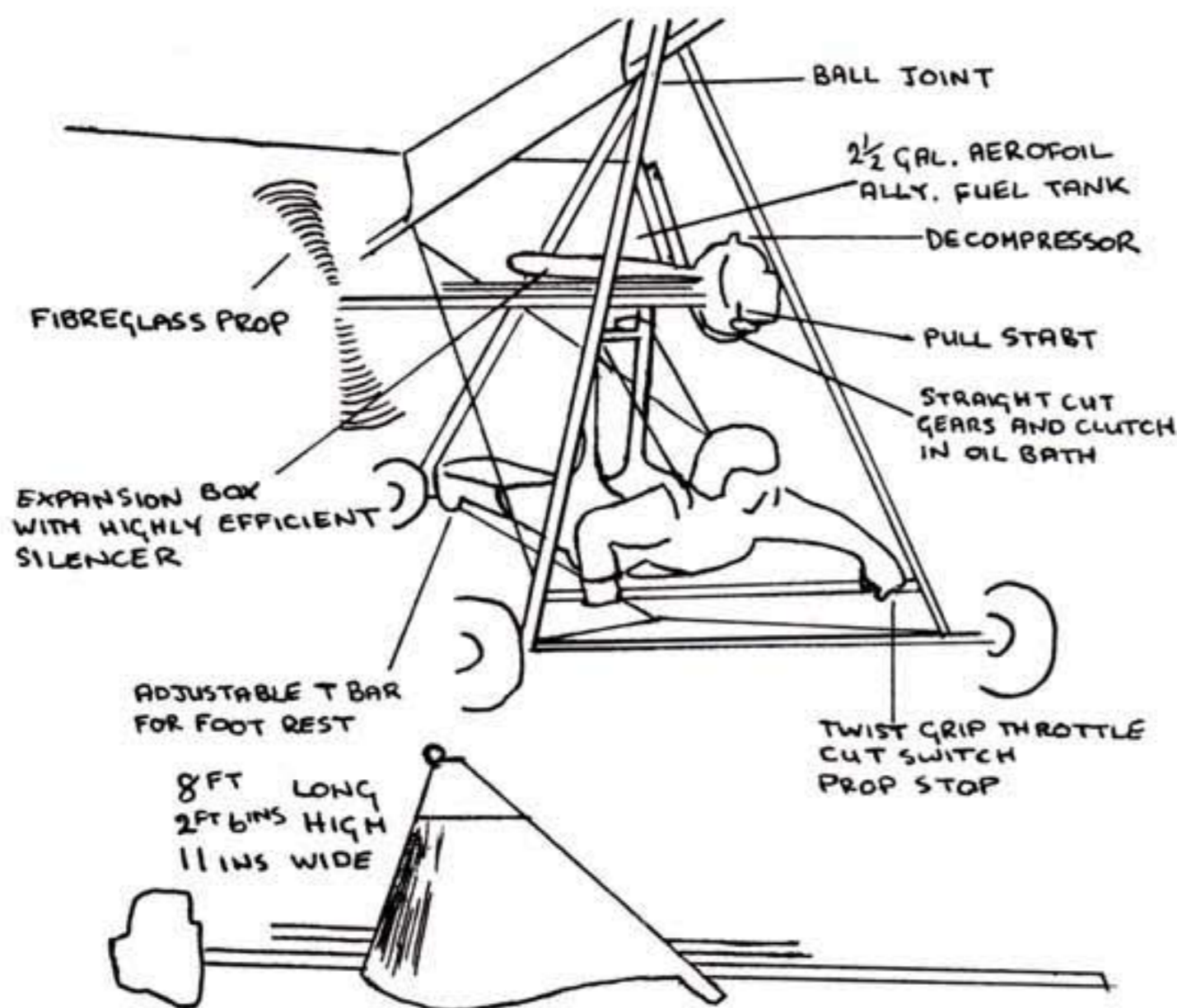
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TURBULENCE ISN'T NICE

by Ian Trotter

Bill Cowell's an old buddy of mine. When I rolled up to the Lothian HGC in 1976, having seen the Harker film and asking hundreds of questions, it was Bill who told me that flying hang gliders was better than sex. I'm not saying he was right, but he's not uninformed!

Bill's characteristically unselfpitying piece in November Wings! therefore made me rather sad, for his crash was avoidable. The issue arrived while I was preparing some accident reports for publication, one of which involved a tuck and break-up. More than half of these accidents, including the tuck, were, as Bill's, attributable at least in part to lack of airspeed. And don't turn the page thinking "Bore, bore, another article on stalls" – it ain't.

The prime cause of Bill's accident is evident in one phrase:

"when the vario started squawking like a maniac I pushed out to grab the lift".

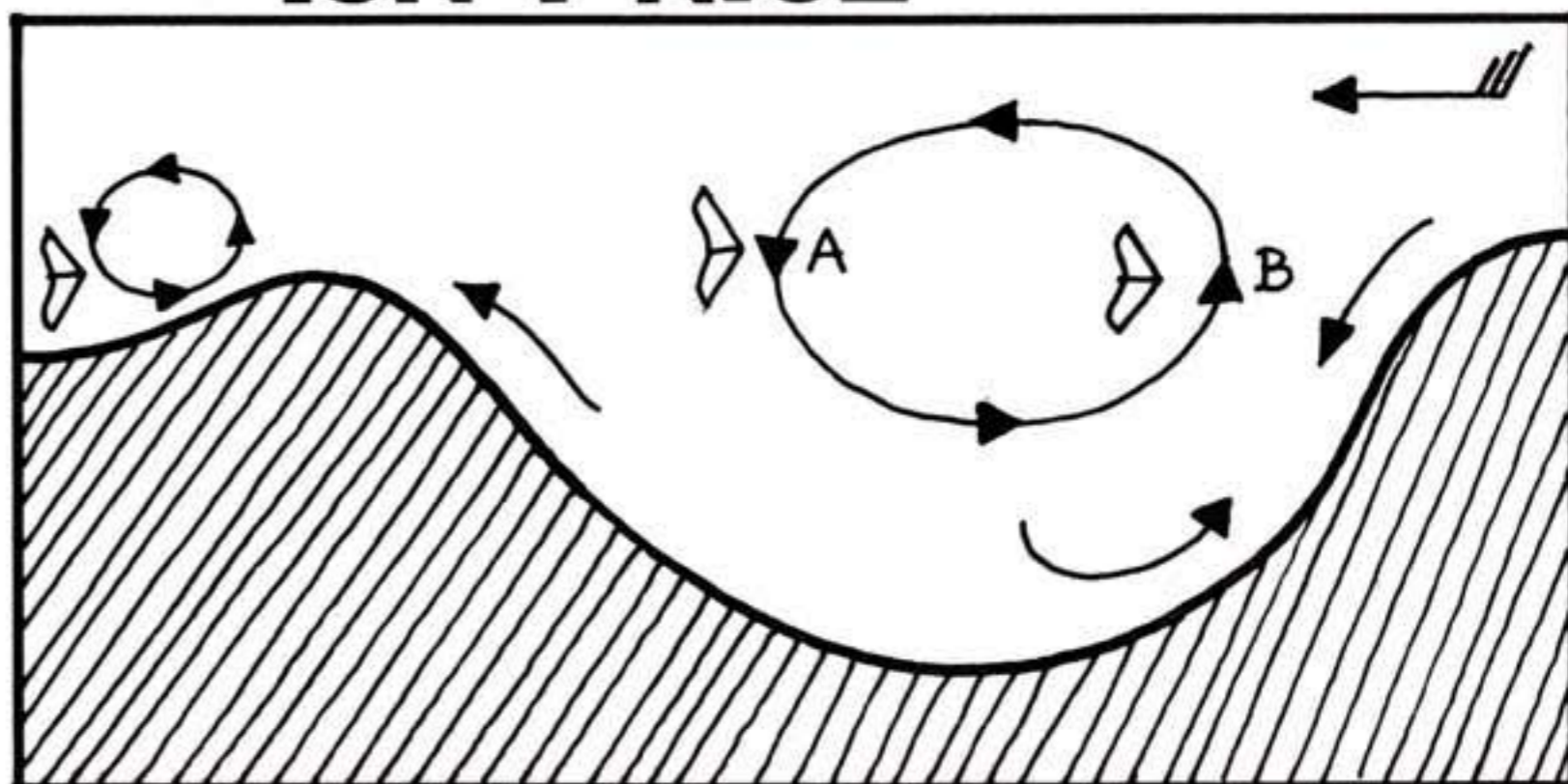
THERMAL NASTIES

At Hillend in May 1980, the same day as great things were being done from the Dales, I saw a piece of paper rising at about 8 knots relative to me, so I headed the Vulcan towards it rather faster than best L/D. The glider pitched up to about 60°, rotated 90° and then pitched down to about 50°. Things returned to normal and I landed for a calming cigarette and thought about it. The thermal was probably slightly bigger than the glider, and all I did on the way up was give gentle restraint against the glider's pitch-up. On the way down I did nothing. I didn't have time to react to roll/yaw for it was all over in two seconds. The airspeed was fine, and pretty steady, all the way through and there was no deflation or weightlessness. The vario was probably off-scale, but I was too busy to notice. If I'd entered more slowly, or "pushed out to grab the lift", even in a highly pitch-stable machine like the Vulcan, I'd have been in real trouble.

Maniacal varicos mean highly turbulent conditions, which mean trouble, and the response should be to stay in control, *not* to grab the lift. Turbulence sometimes means lift, and strong lift often means turbulence. If the lift's that strong, you're going to climb like a rocket anyway if you stay in it, so there's no point in pushing out, not in straight flight anyway.

On a freezing winter's day, or solidly inside wave, or in a *big* thermal, is the time to grab the lift. When it's bumpy, when the vario goes bananas, is the time to stay in control, to keep authority over the glider.

I'm not talking about stalls as such. The Vulcan stall is trivial: the only way it'll break significantly is to whip-stall it from highish speed and resist the returning bar pretty strongly. The same probably applies to every hang glider built since '78. Big ups, however, mean big rolling forces. Roll authority increases with speed and damn near vanishes near the stall, though floating cross-booms minimise the latter effect.



If pushing the bar out is potentially dangerous, then just as bad, or worse, is heaving the bar back hard and fast in an attempt to keep the keel level. Had I done that in my paper-chase, by the time my input had any effect, I'd have been out, pointing down, and well on the way to a tuck. Any hang glider will, I believe, tuck, if the pilot handles it unwisely.

Thermal turbulence can break your bones. Keeping speed minimises the risk. Train your instincts to fly a bit faster than best L/D when it's bumpy, and react quickly and gently.

OROGRAPHIC NASTIES

Orographic turbulence can be nasty too. The "washing machine" to the NW of the Cairnwell (and congratulations to whoever dreamt up the term) is a case in point. The obvious way to avoid the bumps of course is not to fly there, but that's a counsel of perfection. If you must, I've a feeling, and it's not much more than that, though Ivor John agrees with me, that you can expect certain types of bump in sequence.

Given a vertical or near vertical lee slope (*as shown in the diagram*) everybody can anticipate rotor. I reckon you can expect it to rotate in the sense shown, namely rolling along the ground, though not necessarily in contact with the ground. Consider first a glider flying upwind. At point A it's in sink. As it sinks, it moves to the bottom of the circle, and what happens? Loss of airspeed. A strong case for pulling on. At B, in lift, the glider climbs to the top of the circle. And what happens there? Penetration problems. I've had this notion for a while and I've tried to verify it in the air. I can't offer conclusive proof but I do think it happens often enough to make the suggestions of pulling on in sink, and being ready to penetrate after lift, valuable.

Attacking rotors downwind has the opposite effect: after lift you can expect increased groundspeed; after sink you can expect less. The risk should be less than upwind though, as I for one wouldn't fly

downwind through that sort of muck (remember we're probably talking of 25 knots plus) unless well clear of the ground.

The same of course applies to the more commonly encountered rotors, at take-off and landing behind a steep windward face. They'll roll towards you here too, so again pull speed in sink. I can think of a few people whose overdraft has increased because they didn't!

TRIM NICETIES

Many pilots trim so that they're just short of the stall when hands off. I think they're right, not simply for ease of circling or lack of effort, but to help safe control. If you're trimmed thus, and want to slow down, you merely reduce your pitch-down pressure. In normal air it shouldn't stall, for a bar with no input will settle just faster than stall. If however you're trimmed to fly fast and wish to slow down, the input is a positive forward push, through the trim speed. The difference between pressure against trim and the sort of pressure which is saying "I'm going to stall unless you let me fly properly" can be quite subtle.

If you're trimmed near the stall, and therefore pulling on a little nearly all the time, the need to make this subtle distinction doesn't arise; *any* pitch-down pressure means one thing: "Let me fly – if you don't, and soon, I'll wallow about and then plummet, and you won't like that at all". Trimming slow, so that 90% of your flying is with pitch-down input would, I believe, reduce the likelihood of accidents such as Bill Cowell's.

I suspect that many of us now fly more by feedback from the bar than by airspeed. Don't get me wrong, especially recent Pilot 1s – airspeed is vital, sensory detection of airspeed is vital. I'm merely suggesting that experienced pilots sense this automatically, in the way that a cyclist stays upright, while they're concentrating, whether they know it or not, on feedback.

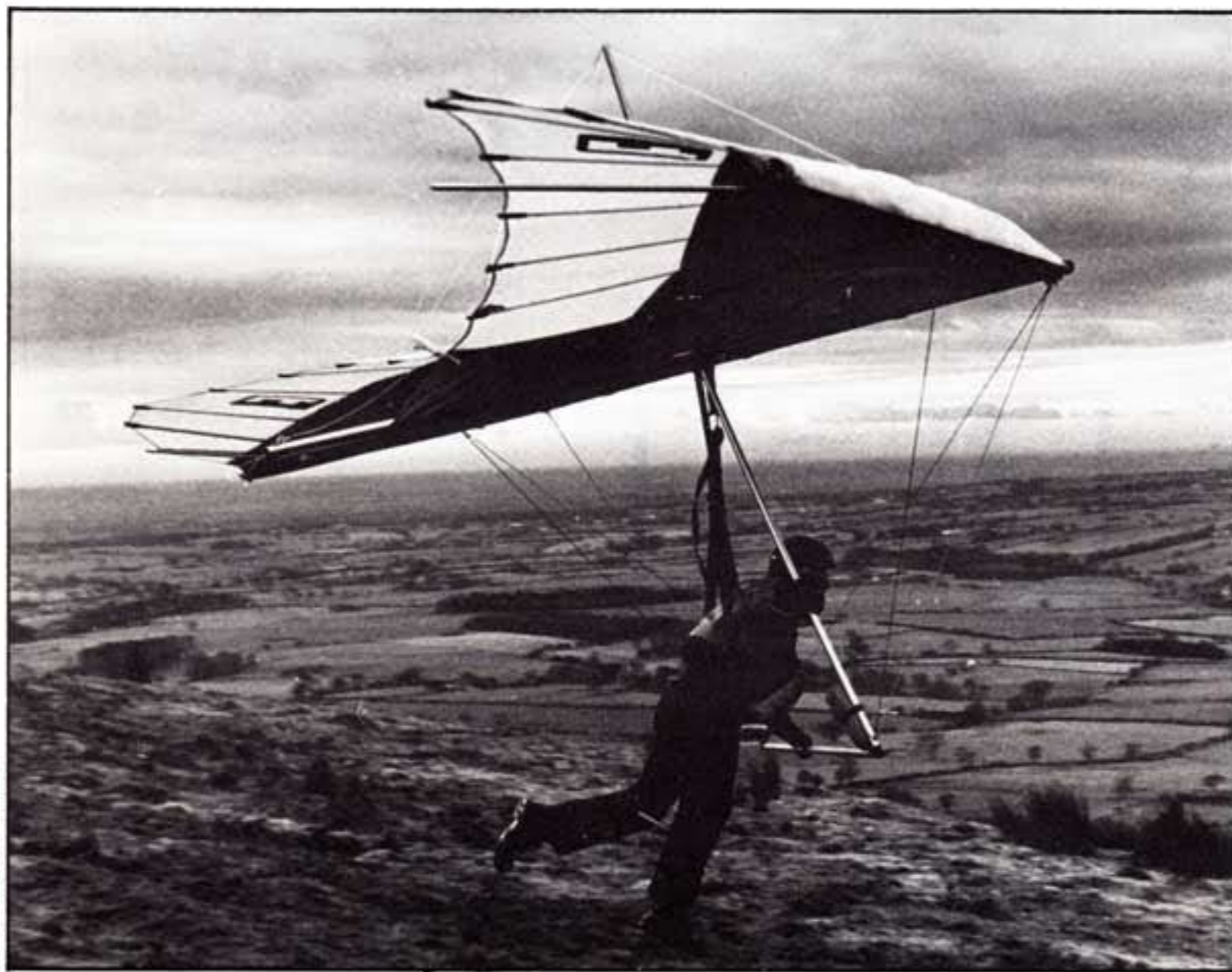
Keep a reasonable speed, stay in control and prolong your flying career.

Flight Reports



NOVEMBER LAKES

Hughie McGovern



Hughie McGovern flying his new Flexiform in the Lake District.

We arrived at the base of **Souther Fell** just as **Dave Weeks & Roy Richards** started up the hill, all 900 ft of it.

There was a fresh breeze, and two hawks hovering parallel to the hill indicated to **Bob Calvert** and I that the local Mr. Weeks had got it wrong, and in fact the wind was off to the south.

Calvert, **John Doherty** and myself had left our own patch as usual because of fresh winds and headed north to seek the usual lighter breezes in the peculiar area in the north lakes around Skiddaw.

Being off to the south it seemed to us that the mighty 'Blencathra' would be a more suitable site. We drove around a mile or so and parked below a steep sided bowl called Mousethwaite Comb, that forms a sort of foothill below the huge craggy bulk of Blencathra on the southern end of Souther Fell.

A couple more Pennine lads find us, but don't seem convinced we are in the right place. They elect to go and see how Dave & Roy are doing on Souther. Six hundred feet later we're ready to go, and find that the lakes syndrome is working again, namely very little wind. Yet a few miles down the road it had been blowing a hooley.

Bob C. launches first and heads off into the bowl, just as Roy Richards appears below us, in his attempt to fly round from Souther. Roy goes down to be followed minutes later by Dave Weeks.

Bob's gained a little height and has slid across onto the face of Scales Fell, just below Blencathra.

I'm ready to launch but the wind has gone com-

pletely. Typical, I thought, Calvert the jammy sod's cracked it again. But as John and I wait, we realise that the wind is coming and going in 5 minute cycles 'wave', we exclaim. *Go for it!*

I launch into 8 mph and slide round into the bowl to be rewarded by a rough ride and gradual lift up to a couple of hundred feet over take off.

Bob's well away a couple of hundred above me. After 15 minutes settling down I endeavour to follow him onto the main face.

Bearing in mind this is November I'm staggered to find 10-up lift, and more staggered to find 10 down sink. In other words, it was very unfriendly wave, and all this in a light breeze.

I hack it for an hour during which time I see other ant-like figures struggling up the hill. But... nobody launches. I suspect they don't fancy being tossed around as Bob and I had been. I must admit I'm beginning to believe the old adage that adrenalin is brown.

I decide to attempt a top landing near the launch point. I'd seen Bob C. manage it with difficulty, so I follow, to be rewarded by a vicious 10-up kick followed by equally nasty sink. That continues right down into the bowl, about 1000ft.

No chance of getting back up and I can't say I really bothered. I've got enough problems at this point, avoiding trees and the car park, but a little up helps me clear the cars and I line up for a landing in the same direction as I'd seen Dave Weeks land earlier.

Too late I realise it's now downwind and I start next seasons ploughing a little early. People run to help, but I shout I'm OK, if somewhat embarrassed.

I unclip, and the wind changes direction - it's now blowing lightly down the hill.

Somebody launches off the top but makes no attempt to soar. He just flies down to land OK nearby.

After that, it's a catalogue of sled rides to the landing field, with **Geoff Snape's** flight being the only one worthy of note.

Geoff, as usual, had to be different. He'd climbed some 800ft up the main face of Scales Fell, across the bowl from where everybody else was launching. After much deliberation (he'd been watching Bob and I being tossed around) Geoff launched into the most dramatic sink I've ever seen. His Atlas simply parachuted vertically 600ft without moving forward a foot, until he narrowly missed violent contact with the hill, and just managed to make it to the landing field, to clock up the shortest flight for the longest climb of the day.

Phil Robinson had briefed us what to expect and unclipping from his kite Geoff proceeded to kiss the ground, then utter a stream of powerful abuse which roughly interpreted, cast doubt on the dubious parentage of the prevailing conditions.

Bob Calvert lands and everybody swaps comments on the day's flying, or lack of it.

Bob and I have had the best of it (and the worst), with Bob commenting that he hasn't been so frightened for a long time. He tells us that at one point he was being blown backwards in an estimated wind speed of 50 mph on top of Blencathra. He reckons he contacted wave but it became a close encounter of the unpleasant kind.

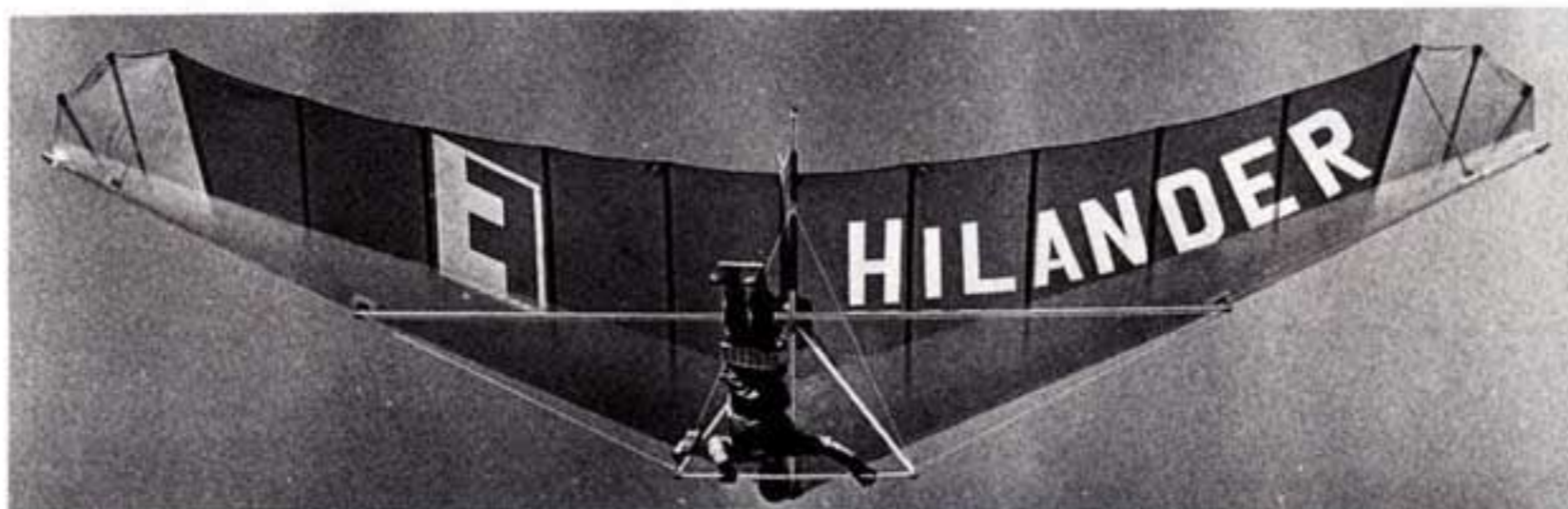
Blencathra faces Wolf Crag, and is extremely spectacular. One day of the **Lakes League '80** was held on Wolf Crag, so many league lads will remember looking across towards Blencathra. Bob and I reckon it will be a brilliant thermal site in summer and an XC flight into Scotland, some 30 miles north, could be on the cards.

Conclusions reached on the day's flying were, that light winds can sometimes disguise adverse conditions especially in mountain flying. We could write volumes on hitherto unexplored micro-meteorological conditions. Britain at that period was being wound between two ethereal gear wheels of high and low pressure that had persisted for 6 days. A high centred over Norway was being powered by a deep low in the western approaches. The high was keeping some fronts at bay and giving some clear sunny weather, but it was causing fresh winds everywhere except in that peculiar area in the north lakes, and it gave some of us an exciting if hairy afternoon's sport in spectacular surroundings.

Geoff Snape commented that it was as rough as anything the Owens Valley had dished out, and he nicknamed Mousethwaite Comb, "Piute Canyon" after his near fatal flight in that region during the 1979 Owens Valley XC.

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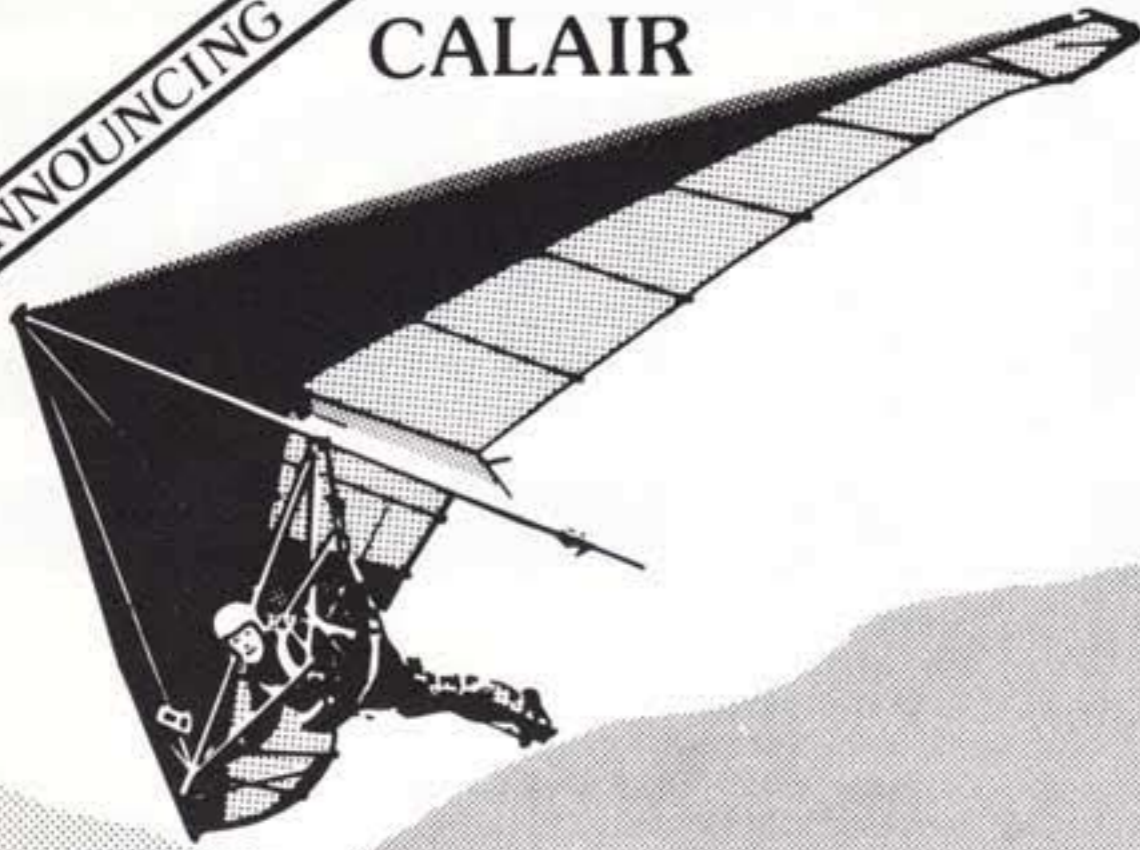
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CLUB GUIDE

MAJOR BRITISH CLUBS AS AT 20/11/80

Avon	John Clark, 11 Bramley Close, Olveston, Avon Tel. Almondsbury 613778
Cumbria	Dave Weeks, High Keld, Chestnurhill, Keswick Cumbria 72315
The Dales	Peter Anstey, 82 Rastrick Common, Brighouse , W. Yorks 716069
Devon & Somerset Condors	Geoff Bryant, 2 Park Lane, Cannington, Bridgwater , Som. 652403
Dover & Folkestone	Phil Hart, "Spring-tyne", Redsole Farm Lane, Paddlesworth, Nr. Folkestone, Kent. Tel. Hawkinge 2066
Dunstable	Chris Ellison, 60 Luton Rd., Chalton, Beds. Toddington 2620
George Caley Sailing	Mike Bradley, 5 Yedmandale Terrace, Yedmandale Road, West Ayton, Scarborough , N. Yorks. 863691
Isle of Wight	Russ Potter, "Wavecrest", Galley Lane, Brighstone , I.O.W. 740597
Kernow	Roger Full, "Tredenek", Rosewall Hill, St. Ives , Cornwall. 6140
Malvern	John Bevan, "Blackthorn", Plough Rd., Tibberton, Nr. Droitwich, Worcs. WR9 7NN Tel. Spetchley 420
Manx	David Moule, Melrose Private Hotel, Loch Promenade, Douglas , Isle of Man. 6269
Mercian	Tony Ramsden, 45 Cederhurst, Harborne, Birmingham 30. Tel. 021-427 5159
Norfolk	Graham Ives, 30 Ashby Street, Norwich , Norfolk 613654
Northampton	Carol Pack, 80 Stimpson Avenue, Northampton - No Phone Telephone: Tom Yeomans on Kettering 711054
North Devon Sailing	Dave Beard, 2 Richmond Avenue, Ilfracombe , Devon 62071
Northumbria	Harry Turner, The Kennels, Newminster Abbey House, Morpeth , Northumberland. 57754
North Yorks	Gerry Stapleton, 12 Low Church Wynd, Yarm, Cleveland. Tel. Eaglecliffe 780533
Peak	Roger Green, 11 Keldholme Lane, Alvaston, Derby 73877
Pennine	John Wood, 4 Daffodil Close, Helmshore, Rosendale , Lancs 28669
Sheffield H.G.C.	Richard Kulig, 317 Brincliffe Edge Rd., Sheffield S.11 53204
Sky Surfing	Andrew Wilson, The Porches, West End Flat, 4 Seaview Ave., Angmering on Sea, W. Sussex. Tel. Rustington 3468
Southern	Paul Coidan, 35 North Rd., Haywards Heath , Sussex 412642
South Essex	Dave Lewis, 10 Dukes Avenue, Grays , Essex. 71172
Suffolk Coastal Floaters	Dave Taylor, 3 Winston Ave., Ipswich , Suffolk 73922
Thames Valley	John Sheppard, 18 Neal Avenue, Southall, Middx. 01-58 7786
Wessex	Peter Robinson, 4 Spring Gdns., Broadmayne, Dorset. Tel. Warmwell 852136
Western Counties	Andrew Pearce, 46 Langaton Lane, Pinhoe, Exeter , Devon. Tel. 68143 (W'ends) Torquay 6284 (Weekdays)

SCOTLAND

In Scotland the **Scottish Sailing Association** is a BHGA Member Club, SSA Clubs are Branches of it. The Secretary of the SSA is Robin Laidlaw, 105 Clermiston Rd., **Edinburgh** EH12 6UR. His home telephone number is: 031-334 6356

Aberdeen

Irene Dunthorn, Margaretta Cottage, South Esplanade, West Torry, **Aberdeen** 877899
Simon Ogston, Top Floor Right, 33 Seymour St. **Dundee** 65437

Angus

Lanarkshire Soaring

David Whitelaw, Creachann, 10 Murray Rd. Law, Carluke. Tel. **Wishaw** 70033

Lomond

Alan Keddie, 41 Townsend Pl. **Kirkcaldy**, Fife 62086

Lothian

Steve Cuttle, 12 Grangelloan, **Edinburgh** EH9 2NR 031-668 2091

Osprey

Victor Cameron, 38 Blackthorn Rd. Meadowpark, Culloden. Tel. **Inverness** 791522

Norsewing

Robert Turnbull, 20 Hammersgarth, Mossbank, Shetland. Tel. **Sullomvoe** 2517

Sumburgh (Not SSA)

Derek Compton, 11 Sandblister Place, Scatness, Virkie, Shetland. Tel. **Sumburgh** 60497

NORTHERN IRELAND

Ulster

Ken McConnell, 336 Glebe Rd., Carnmoney, Newton Abbey, Co. Antrim. Tel. **Glengormley** 44113

WALES

In Wales the Clubs listed below are all Member Clubs of the BHGA. They belong to the **Welsh Hang Gliding Federation**. The Secretary of the Federation is Doug Powell, Dan yr Ogof, Penycae, Swansea SA9 1GJ Tel. **Abercrave** 287.

Beacons Park

Tim Meager, 11 Ashford Rd., Cheltenham, Glos. - No Phone Tel: Ewart Jones on **Crickhowell** 810681

Long Mynd

Lesley Bridges, Yard House, Wentnor, Bishops Castle, Salop. Tel. **Linley** 322

Mid Wales

Tim Williams, Pantamlwg, Trefenter, Aberystwyth, Dyfed. Tel. **Nebo** 326 or Rod Lees on **Capel Bangor** 229

North Wales

Diane Hanlon, 37 Kings Mount, Oxtun, **Birkenhead**, Merseyside. Tel. 051-652 5918

South East Wales

Martin Hann, 6 Churchill Close, Llanblethian, **Cowbridge**, Glam. 2953

South West Wales

Tony Fletcher, 27 Portia Terrace, Mount Pleasant, **Swansea**, S. Wales 49825

The Clubs listed above are "open". There are other Clubs but their membership is restricted. E.G. University Clubs. Members of the Forces can contact Service Organisations as follows:-

Army

Major Roderick Macdonald RE, 59 Ind. Commando Sqn. RE, Crownhill Fort, Crownhill, **Plymouth**, Devon. 772312 Ext. 240

R.A.F.

Sqn. Ldr. Dave Cobb, Room 114 MOD, Adastral House, Theobalds Rd., London WC1X 8RU. Tel. 01-430 7125

R.N. & R.M.

S/Lt. Chris Hopkinson, St. Johns Priory, Poling, Arundel, W. Sussex.

Briforge Club

(British Forces Germany) Capt. Jim Taggart, L.A.D. 16 Signal Regt. BFPO 35.

Enthusiasts from EIRE should contact the Irish Hang Gliding Association through Tom Hudson, 60 Hillcrest Road, Glengarry, Co. Dublin.

NO MORE BORIN' SOARIN'

Well, I agree. Soaring couldn't be boring but I couldn't resist! Graham Hobson turned me on to electrifying those mellow winter ridge days a year or so ago by flying with a small cassette recorder. The advent of the new range of incredible Stereo cassette players, pales the Mono music of a year ago into insignificance.

I'm sure you've seen the ad, where John Cleese goes starry-eyed with an effect we cannot hear but can only guess at. Lay those ultralight cans over your ears and you'll immediately see why.

The result is startling and I've yet to meet a flier who has not exclaimed in amazement at the quality of tone and senses sizzling feeling gained from half an hour on the ridge.

The headphones are about the size of a 1½" end plug and, split from the head frame, fit neatly into your helmet. The Sony player has a strap loop which can be fastened onto your harness or clipped to your arm with a bungee.

Launch, suss out the conditions, switch on and suddenly the world switches off. Clawing your way to the top of the stack, bar out, is meaningless. Zapping around showing off with wingovers and dives is pointless. The all enveloping sound drowns out all extraneous noise and this includes the sound of flight. Suddenly you realise what it means to soar to beautiful music. The crystal tones fill your mind and flying becomes automatic, yet unconsciously tuned to the rhythm of the track you have on. Fast climatic stuff leads to 360's, positive actions and rapid flight, whilst Neil Diamond slows you, to look down in wonderment at the beauty of being up there.

Whatever your taste, stereo in flight just has to be experienced to be believed. When you do experience it, watch out. We need all our senses to fly properly and there's a time and a place for everything. Music dulls these senses and this is dangerous. Never launch with music on or without being able to easily switch it off to land. Check out the air first and make sure that you know who's up. If you have not been flying long, forget it. Flights too full of amazing experiences and does not need injections of plastic tape to enhance it.

However, if you feel safe to handle it, you're into flight and music, and you find yourself on a stable winters day getting nothing but a few hundred feet above the top, with no traffic, no wave, and no thermals to think about clip on, clip in, switch yourself on, switch your Sony on and enjoy it.

John Hudson

P.S. Mainair Sports does not sell these units!

SHEFFIELD POWER

Anticipating the inevitable increase in powered hang gliding, the Sheffield Hang Gliding Club has for some time been negotiating take-off and landing areas for motorised hang gliders. Recent irresponsible "buzzing" of prime sites by visiting pilots has forced the club to formalise and publicise a two-part sites policy for powered hang gliding.

Firstly, the SHGC does not allow the taking-off or landing of motorised gliders at Bradwell, Stanage, or the Mam Tor area. The use of power at these sites is putting existing arrangements at risk, and the club will use all means at its disposal to dissuade pilots from flying motorised hang gliders in these areas. This should not be taken as an attempt to restrict the development of powered gliding, but rather as a concession to local landowners, agents and conservationists who permit the use of their land for conventional hang gliding.

Secondly, and more constructively, the club has to date obtained permission to take-off and land motorised hang gliders on six other sites in the Sheffield area. Visiting pilots are requested to contact responsible club members before considering flying powered - for contacts see June 1980 issue of *WINGS!* or ring the Secretary, Richard Kulig, on Sheffield (0742) 53204.

Richard Kulig
Secretary

CELTS ARE NOT ENGLISH

Are you flying regularly in Wales, Scotland or Ireland? If so, how would you like to represent your country in a prestigious international competition? You can, you know. Just read on....

Last year saw the inaugural Celtic Cup competition between Wales and Ireland (Wales won, begorrah!) at Aberystwyth. And this year the two organising bodies, the Welsh Hang Gliding Federation and the Irish Hang Gliding Association, extend a challenge to the Scots to join the fun. It's being held on the May 23/25 holiday weekend.

Venue is Mount Leinster (Grid Reference 820525 on Sheet 19 of the Irish Ordnance Survey - price £1.57 inc. postage from Eason's, 111 Patrick Street, Cork, Ireland) in Ireland's Sunny South-East. It is a fine hill of 2610ft. lying approximately one hundred miles west of the Welsh coast. It takes nearly all winds and has a tarmac road to the top - you drive to take-off point. And within five miles are Black Rock Mountain (1975ft.) Caher Roe's Den (2409ft.) and Slievebawn (1727ft.). A couple of weeks ago on Mount Leinster someone asked his pal rather diffidently could he borrow his kite - then landed 31 miles away.

The nearest town is Bunclody, where B&B and camping are being arranged for visitors at reasonable rates. Nearby is Rosslare Harbour, terminal port for B+I for a car and four people plus kites, Pembroke-Rosslare return, £79 sterling or IR£86, a saving on the normal fare of exactly £50. If you want to travel Liverpool-Dublin or Pembroke-Cork then the return fare is £94 or IR£103, saving £47. Travel over when you like, return when you like, but you must be in Ireland for the competition.

The only condition of entry is that you have been a member of your national body for three months prior to the event.

The best five scores from each country's flyers count for the Cup, and there are also prizes for individual winners.

So come one, come all. Details from Roy Hammond, Irish Hang Gliding Association, 11 Sheares' Street, Cork, Ireland.

- *What's wrong with England?*

NONK HARNESS LOOP

Here is a method of keeping your stirrup out of the way during take-off, even on a nil-wind run, yet always easy to pick up in flight. You need a 9" length of Heavy Duty Velcro fastener.

Sew the "loop" half down the leg of your flying suit, between the knee and the ankle. If you prefer to take-off with the stirrup behind your legs, sew it down the back of the leg. If you normally pick up the stirrup with the left foot, sew it to the right leg and vice versa. Make a loop in the "hook" half of the Velcro, and slip it onto the end of the stirrup. If the loop is tight it will hold the stirrup better. Make sure it is fitted with the loose end at the bottom.

If you have the loose end at the top you will probably pull the leg off your suit when you kick into prone!

You could make do with a much shorter length of Velcro, but the extra length gives you a fair amount of adjustment to find the best stirrup height.

Harry Hodgson

SOUTH EAST WALES FEDERATION 1980 XC LEAGUE RESULTS

Ptn	Name	Total No. XCs	Total Miles	Best 3 flights			Avg.
				1	2	3	
1	Allan James (Cyclone 185)	12	171.5	25.5	21.5	27.3	24.8
2	Ceri Davies (Cyclone 185)	8	74.3	12.0	15.0	18.5	15.2
3	Peter Harding (Gannet)	5	50.1	23.0	7.0	10.5	13.5
4	Geoff Loyns (Cyclone 185)	3	44.3	17.4	22.6	4.3	14.3
5	Martin Pingel (Cyclone 165)	4	35.0	9.3	8.0	12.9	10.1
6	John Pendry (Predator)	2	25.5	4.5	21.0	-	8.5
7	Phil Marton (Cyclone 185)	2	25.5	11.0	10.5	-	8.5
8	Mark Gladwyn (Cyclone 185)	4	19.5	4.5	5.0	6.0	5.2
9	Andrew Edees (S/Scorp C)	1	4.5	4.5	-	-	1.5
10	Martin Hann (Cyclone 185)	1	4.0	4.0	-	-	1.3

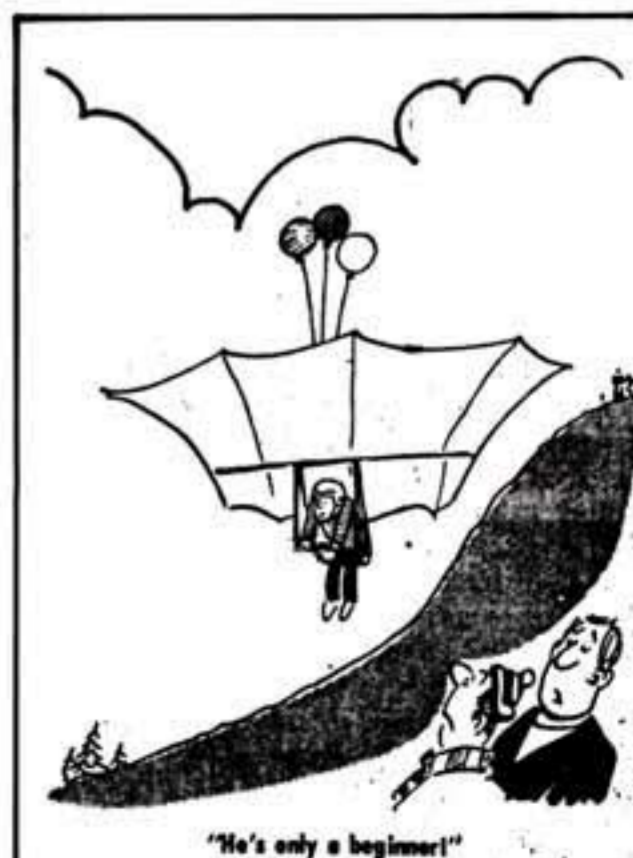
Congratulations to Allan for winning for the second year running. After completing an amazing 116 miles in 1979, he has come back even better with a grand total of 171.5 miles in 1980.

Ceri Davies surprised a lot of people by taking a substantial lead (50 MILES) early on in the year but, unfortunately, due to business commitments, he couldn't sustain his progress. - Better luck this year Ceri.

A mention must also be given to Peter Harding, Geoff Loyns and Phil Merton who all made their first substantial XC flights (i.e. over 10 miles) in 1980 - Well done!

As a matter of interest the total distance flown within the club was: **453.7 miles.**

Martin Pingel



SMALL ADS

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

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

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

Unbeatable Mainair Trade-Ins. Atlas £550, Atlas £450, Atlas £575, Atlas £600, Atlas £650 (large), Cherokee £300, Cherokee £340, Cutlass £590, Cutlass £520, Hilander £495, S. Scorp £375, S. Scorp £400, Silhouette £475, Storm £490, Storm £450, Storm £425 and lots more. Mainair Sports, Shawclough Road, Rochdale, Lancashire, Tel: Rochdale (0706) 55131.

STORM Medium. Lovely condition, attractive sail colours. £510. Dick Piggott, Maidenhead (0628) 26609.

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Hiway **SUPER SCORPION C**. In very good condition, easy handling and effortless flying for £400. Tel: Andrew Brough, Oxford 40292.

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Large **HILANDER**. Good condition. Must sell quickly - bargain at £475 ono. Phone: Loughborough 63536.

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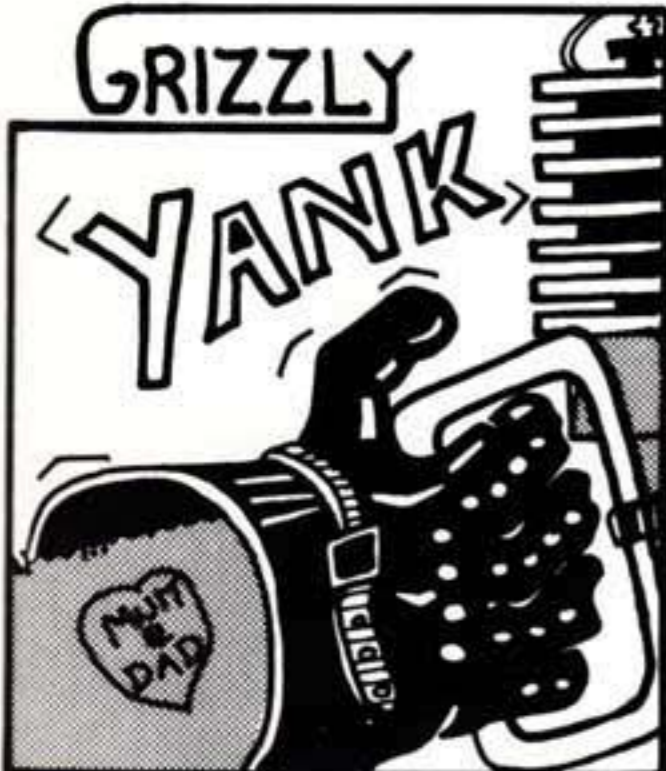
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