



54 PONTMORLAIS - CIRCUS - MERTHYR TYDFIL CF47 8UN. Telephone: Merthyr (0685) 3780 or Rhossili (044 120) 460. Or send s.a.e. for information.

Phone today - Fly tomorrow . . .

IF YOU WANT TO LEARN TO FLY QUICKLY SAFELY AND EASILY we suggest it might be worth your while to come to us.

WHY? The combination of our unique training methods, the latest training machines, individual attention, really careful, diligent and experienced instructors; together with what is undoubtedly the best selection of training slopes, capable of coping with any wind direction or strength, all within 10-15 minutes of our centre gives our School some unique advantages. YOU SPEND MORE TIME FLYING AND LESS TIME TRAVELLING AROUND. Stay at our centre and take advantage of the nearness of our slopes, which must be the best in the area otherwise other schools would not travel considerable distances to use them.

COME TO FABULOUS RHOSSILI — BRITAINS PREMIER SOARING SITE - Self catering caravan and cottage available at both Rhossili and Merthyr. Also full board or bed and breakfast. Enjoy the fabulous Brecon Beacons as well as fantastic Rhossili.

AVAILABLE FROM STOCK: The latest Super-Swift, Wasp Falcon IV, Hiway Scorpion, Flexiform Spirit and several second-hand bargains from £100. Our after sale service is second to none. Prone harness £35. Variometers.

> PHONE TODAY — FLY TOMORROW LEARN SAFELY: FLY WITH IBIS

OVERSEAS VISITORS WELCOME:

German, French, Italian and Spanish spoken.

ELEMENTARY PILOTS CERTIFICATES ISSUED

OLD GLIDERS PURCHASED — FAVOURABLE TRADE-INS

Chief flying instructors: Allan Hetherington and Mike Adam.

Mitchell Wing Don't Buy UNTIL YOU HAVE INVESTIGATED .



MODEL B-10 BUZZARD

We've been telling you all along to watch our smoke, now look what we've done.

1st in long distance. (95 miles)

1st in out and back distance. (48 miles)

1st in Southern California Regionals.

1st in Lover Dat '77 Nationals.

1st in top speed.

1st in minimum sink at '77 Nationals.

1st in duration at '77 Nationals.

And the Big One - 1st in the Unlimited Class at the '77 Nationals. Heavener, Oklahoma.

A real thermal machine. Designed to appeal to the expert pilot who wants to fly cross country. Lands under 12 M.P.H Top speed of 55 M.P.H. Sink rate 2 ft. per sec. 18 to 1 glide ratio. Easily set up in minutes - Wings hinged to fold for car top loading - Stabilator Control on all three axis. Sold as plans only, kit form or complete. Soaring performance and much more. Worlds finest foot launched aircraft. Send \$3.00 For Full Information And Brochure. Now offering a dealer program. Inquiries invited.

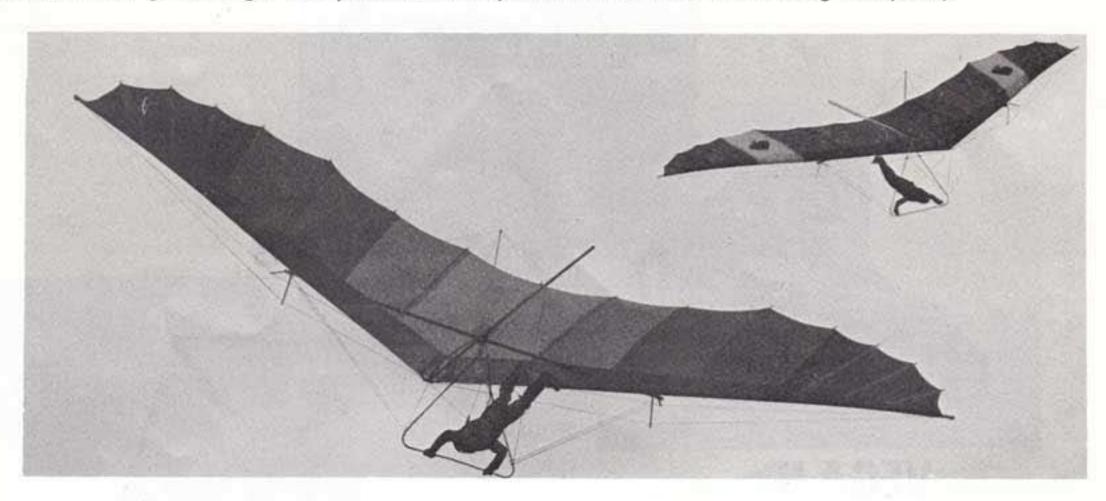
M COMPANY - 1900 S. NEWCOMB

PORTERVILLE, CA. 93257

TELEPHONE 209-781-0778

Telex 682-455

BE AN INDIVIDUALIST Fly the craftsman made kite for the discerning pilot. The Hustler has phenomenal glide-angle and penetration capabilities that are astounding everybody.



HUSTLER

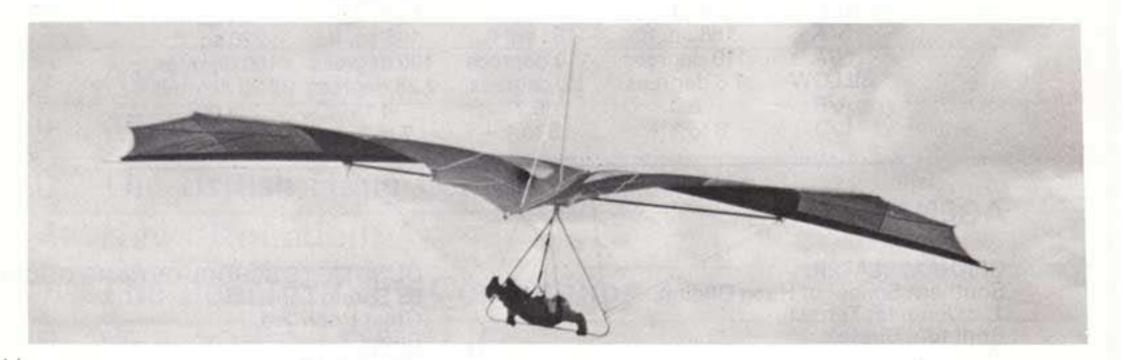


Flying the Hustler is an absolute delight, because of the immediate feeling of smoothness and stability. Its response to control inputs is positive, and excessive movement is not required even for extreme manoeuvres. The ease with which the Hustler soars, and the light, nimble characteristics make it a very attractive glider.

Radial tips stabilise the Hustler throughout its entire flight envelope. Hands-off stall and dive flight tests have shown quick and positive recovery.

Flight tests undertaken in South Germany and Austria have shown the Hustler to handle well in still air mountain conditions. It can be controlled immediately upon take off even at low speeds, and exhibits no tip stall tendencies when landing in still air.

Cost for small Hustler £450-00. Large £460-00. Including carrying bag, V.A.T. and can breakdown to approximately 11 feet. Delivery time of 4 weeks



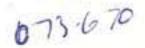
SWIFT Still one of the best kites for learning through to intermediate and beyond. £380-00 including seated harness, carrying bag, V.A.T. and breakdown frame.

We have designed and manufactured what is proving to be one of the most comfortable prone harnesses, with four suspension points to evenly hold the body. Each independently adjustable to accommodate all sizes of pilots. Beautifully manufactured and finished as are all our products. Price £47-00.

WHY PAY MORE FOR LESS!

Our after sales service is getting known as one of the best, short delivery time, good spares service and personal attention.

MORE AGENTS WANTED



For more information or trial flights, write to JOHN GLOVER, AVON KITES, 112 STATION ROAD, FILTON, BRISTOL or telephone ROGER FULL, ST. IVES 7651

CHARGUS GLIDING CO. LTD.,

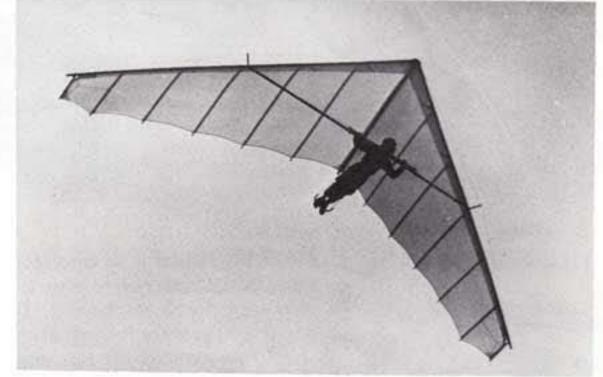
GAWCOTT, BUCKINGHAM

TEL. BUCKINGHAM 4321



VEGA II

MIDAS



	MIDAS 'C'	MIDAS 'E'	V IIA	VIIB
L/E	19 ft. 3 in.	19 ft. 11 in.	18 ft. 6 in.	19 ft. 8 in.
KEEL	8 ft. 3 in.	8 ft. 3 in.	14 ft. 7 in.	15 ft. 7 in.
S/A	166 sq. ft.	188 sq. ft.	195 sq. ft.	220 sq. ft.
N/A	110 degrees	110 degrees	100 degrees	100 degrees
BILLOW	1.6 degrees	1.6 degrees	2.25 degrees	2.25 degrees
A/R	6.0	5.7	4.16	4.09
L/D	8 to 1 +	8.5 to 1 +	7 to 1 +	7 to 1 +

AGENTS

GRAHAM SLATER, Southern School of Hang Gliding, 11c Denmark Terrace, Brighton, Sussex. Tel. Brighton 25534

DEREK SIMPSON, 9 Leckhampton Close, Warndon, Worcester, Tel. Worcester 51781

PAUL WINTERINGHAM, Long Orchard, Alderbrook Road, Solihull, Warks. Tel. 021 705 4248 DUNSTABLE SCHOOL OF HANG GLIDING, 55 Spring Lane, Great Horwood, Bucks. Tel. Winslow 2086

RICHARD WARE, Pickering Cottage, Staxton, Scarborough, North Yorks. Tel. Sherburn 333

GUY BURTON, 4 Avon Road, Keynsham, Bristol.

3-4 WEEK DELIVERY ON ALL MODELS



WINGS

The official magazine of the BHGA

Editorial Office: 14 Earlsthorpe Road, Sydenham, London SE26
Editor: David Worth; Commercial Editor: Lesley Bridges, Yard House,
Wentnor, Nr. Bishops Castle, Shropshire. Telephone: Linley 322.
Editorial Board: Jeannie Knight, Tony Fuell, Nick Regan, David Worth.
Area Reporters: Scotland, Ian Trotter; North, John Hudson;
West Country, Bob Wishart; Wales (central), John Searle;
News Roundup Editor: Derek Stacey, 59 The Horseshoe, Leverstock Green,
Hemel Hempstead, Herts.

Cover: Bill Lehan and the staff of Wings! wish you all a very merry Christmas and a happy New Year.

Airmail 9 Wingtips The British Hang Gliding League 1977 10 News Roundup 14 The Pennine Club Competition 17 Hang On for Dear Life 18 20 The Masters by Teri Hughes **Book Review** 21 23 Information 26 Classified Ads



Wings! is published by the British Hang Gliding Association. The views expressed 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 appropriate captions and any material which is to be returned should be accompanied by a stamped and self-addressed envelope. The editor reserves the right to edit contributions where necessary. The magazine can be obtained by joining the BHGA. Membership Secretary: Audrey Evans, 2 Lynch Down, Funtington, Chichester, Sussex, PO18 9LR. BHGA: President: Ann Welch, Chairman: Pat King, Treasurer: Derek Evans, Council: Gordon Wyse, Brian Milton (Press Officer). Chris Corston (Secretary). Robert Wisely, Reggie Spooner (Insurance), Jeannie Knight, Malcolm Hawksworth, Will Jones, Colin McCormack. Flight Training Officer: Keith Cockcroft, Accident Investigation Officers: John Hunter and Tony Fuell, Registration Officer: Terry Dibden, Solicitor: Anthony McLaren, Technical and Safety Officer: Ted Shreeve, Medical Adviser: Dunstan Hadley, Radio Communications Officer: John Westcott. Enquiries regarding pilot grading, etc. should be addressed to Keith Cockcroft, 3 Mill Field End, Midgley, Nr. Halifax, West Yorkshire. General enquiries should be made to the Monksilver address.

THANK YOU

me and my family financially suitable for present needs.

difficulty of coping with many other things, especially when I not possible. Derek Evans tells who have helped bridge the gap. me that anyway, "These things are always kept anonymous".

Once more thank you all and thanks to Derek for administering the fund.

I am delighted that we have a proper office at last and am very pleased to be getting back to work. Gordon Wyse stepped in as Acting Secretary, shortly after my accident and my thanks go to him

To all who have contributed to the for his hard work in this Appeal Fund I offer a very sincere caretaking role. Nursing the job "Thank you". The cash has kept part-time, neglecting his own job in the process, has been almost viable during a very difficult time impossible and a strain on and enabled me to buy a better car Gordon and his family (Evelyn and Liz). I especially will always I had hoped to write to all be indebted to Gordon for all he contributors but in view of the has done. I do not forget either the extra efforts of Derek and Audrey Evans and Janet Hayes. get into the new offices, it is just My thanks to them and all others

Chris Corston

EDITORIAL

After a false start on my part (see October News Roundup), Chris Corston is finally back with us as secretary. I am sure we are all glad to see Chris back in the fray.

you will probably be able to put a the ground, just try to imagine the affairs of the BHGA it is people like Gordon exist, who really do slog themselves for the sake of the membership, and shun any limelight that the position might give. Thanks often seem boring especially when they don't seem to have anything to do with you, but take my word for it, Gordon should get all the thanks we can give.

I would also like to introduce another new name to the staff of Wings! Derek Stacey is to look Bob McKay puts it succinctly into after the News Roundup Section as 'News Roundup Editor'. If you have any news items no matter how small, let Derek know, you will find his address on the title

page.

I must say I found the account There's no odds - or degree, like of Gary Mees' accident involving — one's either With Chris's return, Gordon harness suspension failure (see still 'ere or one's gone! Wyse has stepped down from the this issue) particularly disturbing. Make sure you have a happy New Year,

post of Acting Secretary. Few of Next time you are 500 ft above face to the name, and even fewer your harness failing - not a nice will realise the great sacrifices thought. I pondered over the set-Gordon has made, in his business up Gary had used and couldn't and his private life, to keep the help coming to the conclusion affairs of the BHGA ticking over. that, suspension wire, karabiner, Until one becomes involved in nylon rope, karabiner, harness, was about three too many almost impossible to imagine that linkages to fail. While inspecting the photograph of Gary taking off and reflecting on this fact, I noticed that both of his uprights were bent considerably from the vertical (lay a straight edge down the photo). The moral is obvious, one weak point too many is one chance too much. One of your new year resolutions should be to say, before each and every take off, 'How many chances too many am I taking?"

It's alright for some Now collectively -The chances that we will get killed! Are a thousand to one!

Individually!



Agent: Lancs Yorks Cleveland

ALCON IV 'FLOATER'

PRICE: £467 inc VAT & bag

TWO KITES AND SPARES ALWAYS IN STOCK Phone for demonstration or write to: Hambieton House, Clotherholme Road, Ripon, N. Yorks.

TREVOR BIRKBECK: RIPON 5540

PULL-OUT SUPPLEMENT

Dear Sir, May I suggest an addition which will enhance the already excellent new format of Wings!

How about a pull-out supplement which could contain all the selfjustifying, chest beating, hair pulling and general handbag fighting between Council members. Competition Committee members and League competitors. This would be a boon as it would enable myself and the 90% of BHGA members who are heartily sick of the carp and counter carp over the League and the way it is organised. (Articles such as "Opinion and Reply") to simply detach it and store it neatly in the garbage can where it belongs. Let's face it they add nothing to the magazine, to our all important public image and in general have nothing at all to do with flying.

> J. Cousin Northants

Ed: But what have the silent majority got to offer in its place?

A THANKYOU TO GORDON

I know I can speak for all hang-gliding people when I say how delighted I am that Chris Corston is able to take up again his old post of BHGA Secretary. Let us not, however, in the euphoria of welcoming Chris back, forget the work of Gordon Wyse as Acting Secretary for most of 1977.

I am a personal friend of Gordon. Therefore, I'm one of the few people who know what sacrifices he has made for our sport. BHGA work has demanded so much time — and Gordon has selflessly given it — so that he has not been able to give his business, making and selling garden and aquarium rockware, even a fraction of the time it has needed. Consequently, he has been late completing orders and has lost old and valued customers which it will be an uphill fight for him to win back.

You'll never hear Gordon boasting of what he has done for BHGA, of how he stepped into the breach at only a few day's notice and did the job so well that no one noticed the change in incumbent. Nor will you hear Gordon complaining of what BHGA cost him, personally, socially, financially. Sure, Gordon got a hell of a kick out of doing the job, out of serving members and the sport, but in my view what he has done demands some really meaningful recognition. I say he deserves it.

Garth Thomas Staffordshire

'CLOSED SHOP'

Several opinions have recently been expressed in Wings! concerning the 'League' and 'competitions' and the 'British Team'. All opinions have missed one point, or accepted it, namely that everything revolves around a Class II Hang Glider.

The League was initiated for any class of Hang Glider but is now



exhibiting Class II only. My attempts to enter the League in a Class III m/c, were thwarted by the Competitions's Committee demanding that I fly the Class II course at Mere to earn my points . . . surely an unfair decision. How would the Competition Committee members feel if I set a course for Class III Hang Gliders and told them to scratch round it in their Class II m/c's for points entry to the League? Thus I feel 'banned' from the League.

The two annual Competitions put on by the BHGA always show more competition rounds for Class II than they do for Class I and Class III Hang Gliders — (Bias to Class II again). Thus anyone flying with less 'rounds' has no chance of becoming overall Champion. The recent MERE event showed a classic case of Class II bias — so much so that the Class I winner had to write to Wings! to confirm his 1st place! This is dreadful.

The British Team — so called — picked from the League results, will undoubtedly serve to select the best Class II fliers but surely International Hang Gliding Competitions have three classes for the winning? Thus the best our team can do is win one event instead of three. The present league does not represent Class I and Class III selection for International Competitions. Would the British Team only send Class II League fliers to the Olympics if it were valid?

I am left with deep suspicions as to why things have been formulated the way they are, especially when the Welsh Hang Gliding K.O. Distance Event openly bans Class III Hang Gliders.

It's a Class II Closed Shop — right?

Dave Cook Suffolk

DEFENCE OF WINGS

Dear Sir, I feel I must write in defence of the new Wings! format. The comments from the member from Gatwick seem very unfair.

I am sure that most members would agree that Wings! now looks far more professional, and I for one think that the layout is fine. We have got to remember that our magazine is read by others who may not know anything about hang gliding, and if they were to pick up some pocket-sized newsletter they may conclude that we were a pocket-sized outfit with a pocket-sized idea of what we were doing, and that certainly is not the case!

Regarding advertisements, well I quite like to see what our ingenious manufacturers have come up with, even if I cannot go out and buy it! It at least gives me something to aspire to for next year!

I do agree with the idea for a list of programme dates. Although I have not been able to go flying this year because of pressure of work, moving house, becoming a 'dad' etc, I would like to know if there is anything coming up which I could nip out to for a day, if only to sooth my flying frustration and catch up on what's new

Whilst I am writing I would like to take Tony Fuell to task regarding his remarks that standard rogallos are 'dead'. Hey, Tony, that hurts! I've got one and I am very fond of it! It must be one of the oldest kites around, built to McBroom plans in 1973, and first flown on a very windy day at Hay Bluff. Mark Southall may remember 'testing' it for me after I had skinned my shins to the bone! The kite has the latest rigging and large 'A' frame, and has a distinctly 'vintage' feel about it.

Believe me Tony, she is not 'dead'.

Finally I would like to say that I think the new Wings! is very good indeed, and if anyone wants to help improve it then let them roll up their sleeves and put their sweat bands on, because it's hard, uphill work!

Paul Burger Shropshire

INSTRUCTOR WANTED

Dear Sir, Before leaving England to come and live in Israel I gathered information on the sport of hang gliding.

The region I am living in is ideal for hang gliding. The countryside is beautiful and clear of obstructions. The weather is warm in winter and hot in summer. Plenty of predictable afternoon winds and hot air for thermals. There are easy slopes, hills and high mountains which are ideal jumping-off points.

Several people on my kibbutz are keen to take up the sport and I would like to invite an instructor to come and stay with us in order to train us to a proficient standard.

I would like to request, through your organisation, that a fully qualified instructor, interested in travelling to this part of the world, be given my address. My idea is that he will bring two kites which he will sell to the kibbutz. This will pay for his journey. His stay on the kibbutz will be free. Accommodation, food, laundry and entertainment will be given free. I would like to advise that the length of the visit be a minimum of one month.

Barry Shaw Kibbutz Neve Eitan Bet Shean Valley Israel

FINAL WORD

In reply to Brian's article, I would just like to make a couple of points clear.

- I am in no way trying to discredit Brian or his committee with any breach of professional misconduct, and I will be the first to say that he and his organisation have worked hard and done a bloody good job, a job which very few people have the courage and ability to tackle with the enthusiasm with which he has done it.
- 2. If a member of any selected team cares to stick his fingers up at a selection committee that's his affair, but he is then guilty of professional ethics and as such deserves to be replaced. Surely this is why reserves are nominated, to take the place of any team member who cannot compete for one reason or another. This still allows the selectors to pick or choose within the range of the top placings.

3. If a flier loses his form then he will surely start to lose or most certainly lose his place in the League points system, and so eventually lose his right for selection, certainly one bad or even two bad competitions will not totally say this man is off form but if he is off form then gradually he will slide down the League placings to be replaced or overtaken by more consistently good fliers at that time. So Brian, to me those two points in your reply don't convince me.

However I have had my say, and I have always been one to abide by the majority decision, so be it if that is what the members wish.

Fred Ashton Yorkshire

SITES RIP OFF

Dear Sir, Your editorial lays out probably the most constructive idea printed in a year. You are absolutely right, a central bank of such information is essential now. It is long past time the BHGA started to exercise its function as the National regulating body and insist on all affiliated clubs, schools, submitting such information described but including such additional stuff as club dues, site fees, or other charges, even if only for Council's use. The extent to which some member clubs are using restrictions imposed on them by other bodies to rip off visiting fliers may raise a few eyebrows even in that quarter.

Yes, I could name instances if pressed, but I won't, for because of my address I am forced to be a visitor, if I want to fly — and I do. This makes me (and others in the same boat) rather vulnerable, doesn't it?

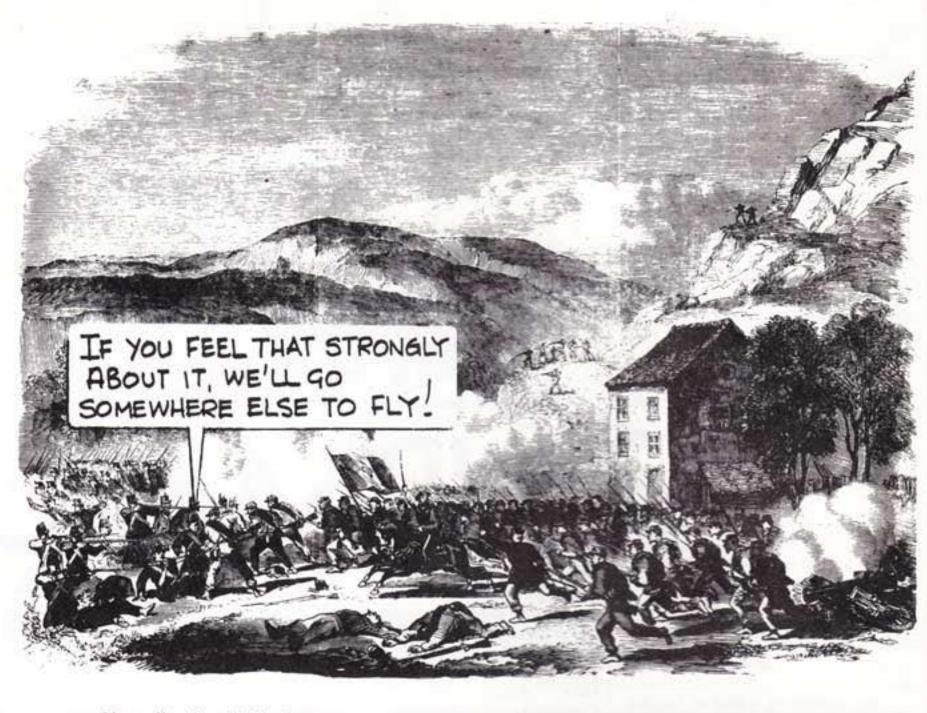
J. Cousin Northants

ACCIDENT REPORTING

Dear Sir, Following your article on Karabiners I feel I must speak my mind. It was stated that there were three incidents from the north and the way in which the article was put, there was no real injury to anyone involved. This is not so. In the Edinburgh area a flier's karabiner failed in flight and he dropped from well over 30ft, suffering a number of broken bones and was in intensive care for some time - very seriously ill. At the Buxton conference it was decided that more accident reports should be published in Wings! The BHGA are always screaming for us to fill them in. What is the point if you don't publish them. In the above incident a lot of fliers went to a great deal of trouble to get all the details and information needed. The same happened when I reported a mid-air collision earlier this year. If all these people go to the trouble of filling in forms and phoning all over the place. not to mention the driving involved, please have the decency to publish the incidents in Wings! I'm not asking you to publish all incidents but I'm sure both incidents in question certainly merited being published.

> J. Potts S.S.A. Safety Officer

Editor: In this issue there is quite a lengthy and very detailed analysis of karabiner failure and guidelines on surviving such a catastrophic



occurrence. Naturally this kind of report takes considerable time to prepare with the result that there is a time lapse in between an accident being reported and the outcome of any which the accident investigation officer may be carrying out. Coupled with the fact that Wings! is compiled before the membership receives the previous issue (by the time you read this, the contents of the next Wings! has been decided) an unavoidable delay occurs. The report on karabiners which appeared in the October magazine was sent in by Noel Whittal independently of any accident investigation and was based on his own findings. At the time I was unaware that John Hunter and Tony Fuell were working on a report on harness system

ANYTHING which John and Tony feel should be published in Wings! for the safety of our sport, IS PUBLISHED. As far as I am concerned, the accident investigation team can use as much space in the magazine as they think necessary. We must therefore, respect the judgement of our investigation officer, as to what he thinks should be relayed to the membership. The only other course is to print details of every bent control frame and twisted ankle. Meanwhile don't stop reporting accidents, the information certainly IS being used.

If you have something to say send a letter to the Editor, 14 Earlsthorpe Road, Sydenham, London, SE26.

THE Birdman

PRONE HARNESS

Designed for comfort and ease of use. Providing a low seated position giving more control on Top and Spot landings. Totally waterproof, and will act as floatation assistance.

£ 45-00

<u>Seated Harnesses</u> — as used by several schools, relaxing comfort and safety.

£ 16.50

Waterproof carrying bags for your Hang Glider, flare orange end caps as approved by the Police force.

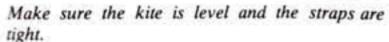
£20-00

Ring or write to :- Mark Southall, Birdman Harnesses, Overtown House, Mildenhall, Marlborough, Wilts. Marlborough 53021 (0672)

All prices subject to V.A.T.

WING TIPS







Sail starts to fill and lift as you run.



Move hand down to bottom bar and ease kite off the ground.

Sunday dawned a clear blue sky with high blown cirrus — but nil wind. When I arrived at the Dyke there were some twenty to thirty gliders parked on the hill, most rigged and some praying nose-up for a breeze.

It was the same old story. People stood around in groups chatting and eyeing up the new Hiway, or commenting on the amounts of SST's on the hill.

Then for some reason the flying started. People struggled to take off, running like mad things with their stirrups wrapped around their legs, harness strap slack, some not running and stalling on take-off, uprights bending and snapping. Once again the apparently innocent nilwind conditions were taking their

to get off the ground correctly when there's no wind? I've had to teach a lot of people on my course and I've found that the

NO WIND TAKE OFFS

Graham Slater, chief instructor of the Southern School of Hang Gliding, offers this bit of advice to all of us who are not that bright at getting airborne on nil-wind days.

following technique is a simple into or close to the body thereby answer to the problem.

(a) One hand on an upright, one hand on the bottom bar and somebody on the nose if you find you cannot hold the kite at the right angle of attack or keep the wings level on your own. This applies especially to the 'aces' who spurn help in nil wind.

(b) Straps tight, try to lift yourself off the ground. Difficult you may say, but think about it - keeping When are 'fliers' going to learn the straps tight on take-off means you can rotate the nose slowly, using your link with the kite as a firm fulcrum.

keeping the nose low.

(d) When read the noseman retires and you start to run. Keep the straps tight and as you accelerate the sail will begin to fill and take the weight of the glider off your arms. This allows you to place both hands on the bottom bar.

Now keep accelerating andd ease the bar away slowly. Hopefully you'll start to lift off. Keep running until your feet are actually pulled off the ground and whatever you do, don't push the bar too far away or you'll stall. It (c) Stand upright with the bar can be very nasty, suddenly

turning back to the hill and seeing all the smiling faces of the 'pilots' watching you pile in.

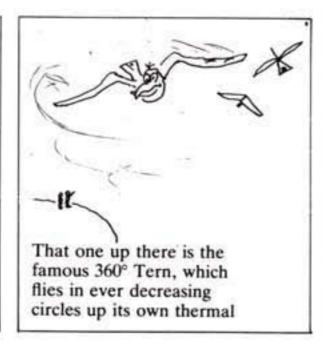
Don't forget to keep your speed up when you're in the air. There's no wind so your ground speed will have to be faster than usual.

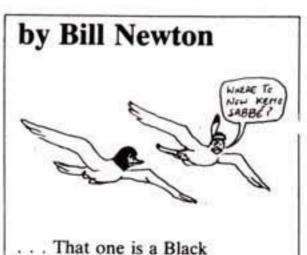
All right, so you can soar, and you think this doesn't apply to you. Just remember that anybody can take-off when they have a bit of wind helping them off the ground.

This basic take-off technique I use and I know other schools use with great success. It works for prone as well. The important thing to remember is to keep your harness straps tight and be part of the machine. Don't flail away like an insane rag doll only to be dumped, possibly injuring yourself and damaging your machine, in front of a hundred or so spectators out for a pleasant Sunday afternoon walk on the Downs.

SUPERNONK







. . . That one is a Black Headed Gull, so called because it soars the pimple at Rhossili . . .



THE BRITISH HANG GLIDING LEAGUE 1977

Driving back from the last League of 1977 was a bastard. Nothing but fog all the way - blinding along the M1 in Peter Day's VW with all the lights on, hoping that no idiot had left a jack-knifed artic' across three lanes somewhere After it was all over, after I'd had a night's sleep and a few weeks to put it into perspective the whole course of the 1977 League seemed rather like that journey. Flat out, foot down, never mind if we can't see where we're going, we know where we want to be! And, by God, I do believe we got there, in the end.

Tony Fuell looks back at The British Hang Gliding League 1977

N BRIAN MILTON

Brian wears a yellow ski-suit at all times, in hotels, on the hill, when flying. Probably to bed as well, although nobody asked him. He's very good at mental arithmetic, an excellent organiser, articulate, literate, hardworking and has a sense of humour. It's very hard to see why he is so cordially detested by so many people, or why so much of the BHGA's Council's time is spent rushing around in little circles on 'Stop competitions mean? Can we choose a British Milton' campaigns of one sort or another.

The 1977 League is Brian Milton. It was his they'll perform well? creation - it has taken his directions, and ultimately it is his success. And it was YES. Just getting to all the various successful, make no mistake. Despite all the competitions was such a test of stamina and

existence of the League has given British Hang Gliding a new and valid existence. Since Brian seems set to get all the kicks for the things that went wrong, it's only fair to say that he should get a huge amount of credit for the things that went right.

HE GOOD

All right, what has the League achieved? What does success in five team mainly on the League results and know

The answer to the last question has to be errors, follies and wrong turnings, the mere persistence that you could select a British team

that you would be picking people who not only had the ability, but the determination to do well in any competition. Quite a lot of the 'hoo-ha' about the League has come from people who, (like me last year), haven't had a lot of competition experience, but fancy

Left to right, Back Row: Peter Day, Chris Coleman, Graham Salter (hidden), John Hudson, John Fack, Mick Maher, Julian Thomas, Lester Cruse, Ashley Doubtfire, Mick Evans, Norman Milhouse, Mike Atkinson, Roger Black, Paul Baker, Dave Lyne, Dale Clother, Frank Taryjanyi, Roger Middleton, Chris Johnson, Roger Wates, Ken Messenger, Dave Weedon, Graham Leason, Mark Southall, Dave Worth, Miles Handley, Jeremy Fack. Front Row: Tony Fuell, Tony Beresford, Bob England, Johnny Carr, Brian Wood, Bob Calvert, Bob Bailey, Graham Hobson, Brian Milton.



themselves as regular, quite good Club fliers and think that given their day, they could give Wood, Carr, Calvert and all, a pretty good run for their money. No way! Bob Calvert, for example, told me at the last event that out of the previous fortnight he had been flying practising — on twelve days! Add this kind of determination to near-perfect ability and you have a combination that's very hard to beat. Each of the top fliers has his own way of coping. Brian Wood is so relaxed and competent on the hill, it's a wind-up in itself. Whatever the task, you know that he'll do a perfect take-off, and if the task can be maxed, then he'll max it. If it's a comparative task, then he'll be up there with a good score. Johnny Carr runs on nervous energy, and pysching-out his opponents, mainly by making them helpless with laughter. The shriek of "Easy — son — easeey!" from below has caused many a contender to forget what he's up to for long enough to let the Carr slip through and steal away with the prize. In my case, I had to work damned hard all year, even to finish 31st. And I never did beat Dave Worth, curses!.

All in all, we've had some high old times this year. A lot of good vibes have been around, along with the occasional bad one. The depressing and petty regionalism which was beginning to break out within the BHGA has taken a back seat, I think, as a direct result of the League events. The Southern fliers now know (to their cost) that not all the fliers from other parts are nonks. The other fliers have learned a lot from the South. The League has been a big melting-pot. We're all flyers accidents of geography over the location of your home hill haven't seemed to matter quite as much when everyone is on a new and different site, and everyone is faced with a difficult task to do.

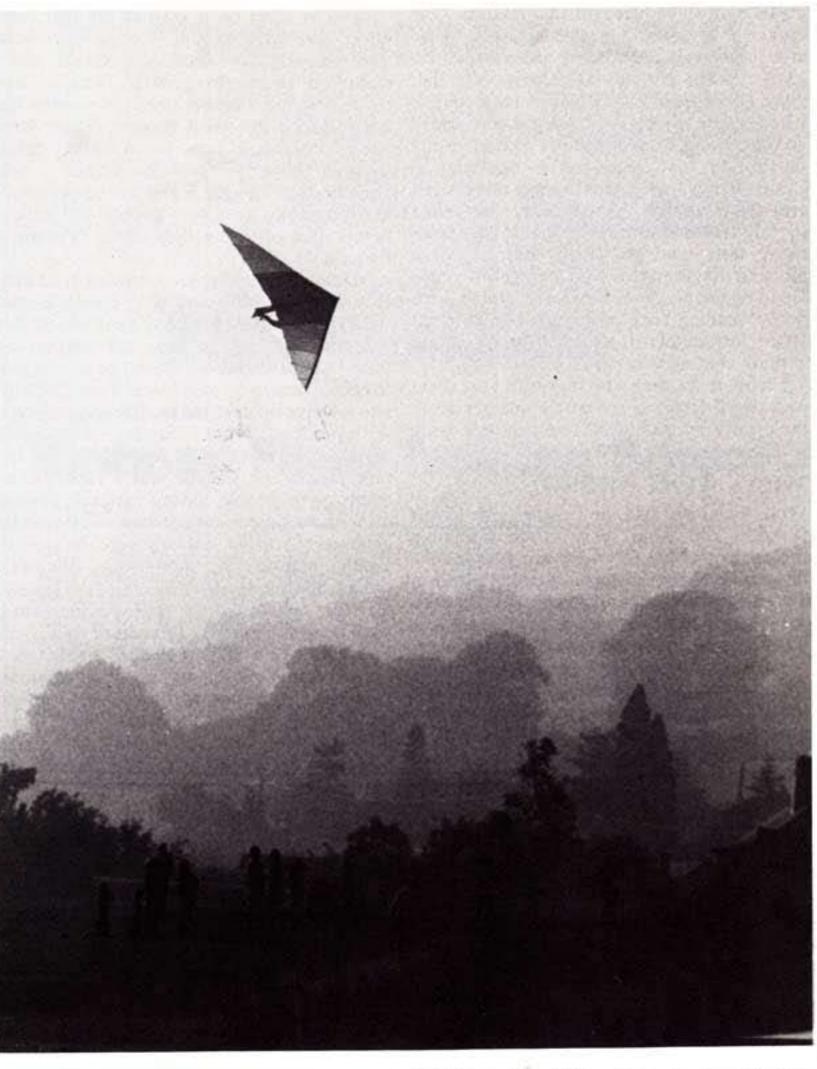
Having the League seems to have been a good experience for those Clubs which were far-sighted enough to provide hospitality. Hatterall Hill at Pandy has a SW backside of over 1,000ft. which had hardly been flown until the Birdman II competition. Llandinam wasn't even a site, until Milton had his cross-country there. In most events the free-flying ability shown by the League pilots, (and Keith Cockcroft) have opened up new areas.

EMORIES ARE MADE OF THIS . . .

Birdman I. Looking up through the branches of a tree, from the foot of Pandy, and seeing a huge flock of gliders wheeling and turning against a perfect sky . . .

Mere. Staggering out of bed to boil a kettle, only to listen to clunks of ice rattling around inside Standing on the top of Bratton Camp watching a flock of crows using a thermal, Ray Sigrist coming out with the immortal line, "They're animals, those birds!". . .

Tony Jones. That beautiful ten-minute thermal I got on the last day when everyone else was packing up to go home....Watching people 5,000ft. high in thermals on the first day....Standing frozen in horror as the Red Arrows flew straight through our airspace...





Top: The misty end at Middletown. Above: Bob Calvert gets the treatment. Photos: Tony Fuell.

Birdman II. Cold. Pain in my kidney. Watching Keith Cockcroft looking for new valleys to conquer. Vandals at the hotel destroy a beautiful new Gryphon — is nothing sacred? . . .

Long Mynd II. Fog. Skateboarding. Fog. More skateboarding. A fearsome landrover ride to the top. Fog. TV cameras. Launching through fog to the clear sky beyond. Ken Messenger handing out free beer — thanks, Ken! Fog all the weary way home . . .

SAFETY

We started the year with fifty-four League entries. We finished the year with the same number of survivors. Only one minor injury was sustained during the whole thing when in the last League, on another task involving a very low-level 360, Roger Black crashed and broke a rib. This excellent safety record, in the most intense competition yet held makes a nonsense of those who reckon hang-gliding's dangerous. If you want a comparison, look at the carnage in last year's TT races (or any

major motorbike race, for that matter). One broken collarbone in a year is laughable by the injury standards of almost any competitive sport, except perhaps Monopoly. Not that there weren't a few hairy moments, of course. I had a few myself - notably a high-speed hedge-leaping exercise which proved to my satisfaction that Willis varios can take it! Lester Cruse flew several tasks with his left arm almost useless, Mike Atkinson got into a slightly horrendous dive in one of the speedrange tests, and got it out after a frozen moment that lasted too long for comfort. Steve Goad rigged his glider for seated, and took off prone, stalling back into the hill from about 100ft. fortunately in a very light wind, and without coming to harm.

I suppose we were a bit lucky this year. Next year, we'll certainly get better weather on all the events (we will, won't we?) and everyone will be more careful. (Won't they?).

WHAT WENT WRONG?

Well, no sooner had the League pulled away from the kerb, so to speak, it ran slap into a major obstruction. By now the story of the disqualification of seven pilots at the Birdman I competition is part of history. It has been thrashed out ad nauseam in Wings! and elsewhere. Suffice it to say that the handling of what was, in itself, a minor incident by the Competitions Committee caused a major injustice to the pilots concerned, nearly finished the League itself, split the BHGA from top to bottom, and has to be recorded as a major boob all round.

Lessons have been learned all year. The pilots have been terrifically vocal. They have never kept quiet about the things which disturbed them. In general, what's been agreed by the Competitions Committee has been agreed for good reasons. There have been occasional failures to think things through properly. Over the winter, a new Handbook of League Rules will be prepared, and hopefully next year people will have a better idea of where they stand. (Promises, Promises!)

Marshalling has been a consistent headache. Roy Hill, his wife and son, Derek Evans, Keith Coles, Bob Wishart, Paul and Lesley Bridges and others have all carried an immense load. But on several occasions girlfriends, passers-by and Uncle Tom Cobleigh and all have been roped in. Not good enough. event needs professional marshalling, and decent equipment. The last task of the last League was a super-slalom much differential in the performance of this event, with people having to track through very narrow gates with at least 500ft. terrain think? clearance. And yet, not only were the turningpoints manned by non-flying volunteers (which doesn't mean we weren't very grateful for their help!), but the mirror-pylons which have been standard for this sort of thing since Pickering were not available. Predictably, several disputes over scoring arose, the most serious being the one over Johnny Carr's flight which in fact, decided the overall second place in the League. After (successfully) appealing a marshal's decision Johnny was given his full score for the course, and knocked Bob Calvert Easy, son! Easeeey!

down to third place. Very hard on Bob, that, particularly as the Marshal concerned was adamant that Johnny had gone outside the gate, and stuck to her opinion right the way through all the subsequent appeals. My point is not that this particular decision was right or wrong, but an ounce of foresight in the setting up of the course could have prevented inexperienced marshals being asked to judge flights with inadequate equipment. Oh well, next year things may be different . . .

THE RESULTS

Well, they speak for themselves, don't they? Moyes in the usual top spot. Miles Wing/Wasp in second. Hiway in third, Wills Wing in fourth. Actually if you look closely at the top ten, Wasp did very well indeed, with five places. Hiway, Wills, Chargus and Skyhook had one each, which must indicate something dare I say it, perhaps there isn't quite as year's superkites as the ads would have us

Certainly, the closeness of the results indicate that no-one's going to have a monopoly of the top spot for long — only 312 points (a mere 15% of the total) covered the top ten flyers any one of them, given a good day could be a winner.

As to the South-versus-everybody-else contest, (as if it really matters), SHGC had 40% of the total League entries, and ended up with 50% of the top ten, 45% of the top twenty. So we did quite well, really.

The League — Its History and Ambitions: A Last Word from Brian Milton

ACKGROUND Like most organisations in Britain, the BHGA is a very centralised body. It reflects the way we govern ourselves politically. Power in Britain — like it or not is concentrated in London. Power in the BHGA, to get action on decisions, rests constitutionally with the BHGA Council. It's worth any hang glider pilot who wants to do anything about the future of the sort taking a look at the BHGA constitution.

Long Mynd Club's vote. I wanted to get on but on the outside, looking in. Council because I didn't want Britain to pilots in the country to compete.

Britain in 1976. The National Championships this period, though, and especially at Skirrid, at Pickering, which had its rules ratified by that the idea for the League came into being. Council after a lot of work by Steve Hunt and Geoff Shine, went into its finals with two Ken Messenger had taken the initiative with former champions - Brian Wood and Bob his Birdman competition,

already eliminated, considering the League positions of both these pilots (1st and 3rd), it's a criticism of the competition as much as of the pilots that this happened. Team selection for the 1976 World Championships was based on the Pickering results, as it had to be — because it was the National Championships, after all — but it was obvious that a cold hard look at competitions in Britain was long overdue.

I stood for election, and won because of the involved in some of the decisions at Pickering,

In the subsequent wrangle over how send a team to South Africa in 1977. The we picked a national team for Kossen, I played decision on that team would be made by a bigger part in working out a system, and Council, so if I wanted to have a say in that, asked Council Member Fred Ashton to I had to be on Council. There was no nominate me to chair the competitions debate - formally - on the subject for the committee. This he did, successfully, and I first six months, but informally, each told Council I had a lot to do, very quickly Council member knew it was coming. When for the Open Championships at Mere in it did, we decided not to go. But if we August. There was no committee for months, didn't go to the world championships, we had it came into being in August, because of two to have an alternative form of competition to factors; one was the team trials at the Skirrid in satisfy the need - as I saw it - for the best July, the other was the terrible row over the death of Guy Twiss that looked like There wasn't much faith in competition in threatening hang gliding itself. It was during

> Put simply, pilots want flying competitions. for manu-

facturers only, and everyone who flew in Ken's competition, or watched it, raved about it. Getting the League to work depended on how well the Open Championships went at Mere, and specifically, whether I could get some credibility, and also get credibility for competitions. The national team was away in Kossen, but the chance that kept Brian Wood and Bob Calvert out of the team put them into Mere, where they were invaluable. A Competitions Committee was formed in the following way . . . I collated all the rules I thought would work, took a lot of advice from the FAI rules for Kossen, and sent the As a very new Council member, I was proposed rules out to fliers I respected, or people with status in the sport. Brian Wood, Johnny Carr, Miles Handley, Lester Cruse, Len Gabriels, Alvin Russell, Malcolm Hawkesworth and Bob Calvert replied, and these names were ratified by Council August 22nd 1976, a week before Mere, as the committee. I subsequently asked that Roy Hill and Ken Messenger also be ratified.

The following month, the League was agreed in principle by the BHGA Council, and a committee meeting took place in Rhosilli, the first such meeting. The original proposal — that, for example, we should have three classes of kite, and a hundred fliers was drastically changed. No classes, and could the invitation be written in terms that would scare Ghengis Khan, so only the real competitors would apply? Pilots were asked to pay £16 for four competitions, organised especially for them, and the Scottish and British Open would be League comps.

54 pilots applied within the deadline, and at another committee meeting in Mere in January 1977, they were all accepted (on the grounds that there had not been enough competitions to judge who was and who wasn't good enough).

There were two aims to the League, and they're still the most important aims; to raise the standard of competition flying in Britain to match that anywhere in the world; to raise the performance of British hang gliders. But what mattered to those who entered was that it had an overwhelming effect on national team selection, and as far as the competitions committee was concerned, if you weren't in the League, you wouldn't be considered for any national team.

At the beginning of 1977, we had a list of pilots, £880 in the bank, and the will to get the League going.

MBITIONS What about the future? As long as we keep a great big hole in the League by dropping the last 25% of the fliers at the end of every year, to bring in a new entry, we're going to keep the League fresh. There will be pressure at the top, and the bottom, and though one has nightmares about what can go wrong, the policy of individual responsibility about whether or not to fly a particular task is a good one . . . as I've said, everything isn't lost on one flight ... though every pilot

League entry is a problem, to involve the whole country, and Scotland and Wales as well, who through one thing and another,

remembers a task where if he'd just done a

haven't got a League member.

little better he'd have beaten . . .

We have to spread the competitions around, with a fresh organiser for each one, which we

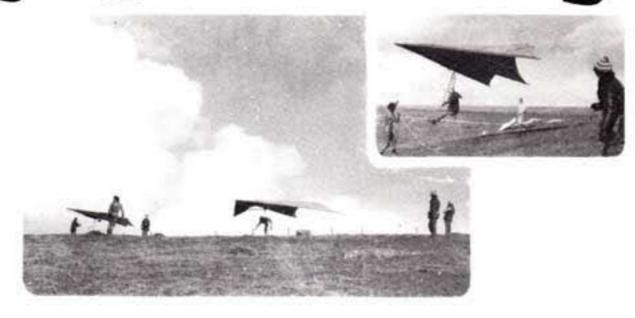
think will happen.

But real ambitions? Money has to come in from outside the sport, and go to fliers and organisers. The British market can't compete with American or Japanese money, if we use only the money that the membership fork up. Manufacturers need money to develop, clubs we're looking for outside money to boost that. need money to stay up with new developments. That money can only come travelling expenses underwritten. from outside the sport.

We need sponsors for competitions, and for individual fliers. Sponsors won't come without television. That's a simple rule. Get televison, and you'll get sponsors. It's on the cards that there will be some form of television coverage of every one of next year's competitions, even if it's just regional coverage, with the possibility of a "pull-together" at the end by a major network sports programme, using film from each of the regions. If that's confirmed, then a sponsor could be found for the League, incorporating his name in the title of the competition. Individual pilots, with a guarantee of TV coverage, will find it easier to get sponsors. The money coming in for the League competition, wherever it was, and I League - how will it be spent? It's got to be really ought to get the pair of them drunk one used to encourage competition, and that night. Bob Wishart had the terrible job as means organisers.

We'll still be able to give each organiser everything, and sometimes he looked so £150 next year to cover costs, and perhaps doleful at the job he had to do that it was more, from the League pilots' pockets. But difficult not to burst out laughing. But he did

Flying comes easy



at Ashley Doubtfire's

Tel: 067-25-3021

Birdman Flight Training School

MILDENHALL

MARLBOROUGH

WILTSHIRE

BHGA Registered, using CAA approved radios, Static and Gliding tether, Keel assist, Dual soaring; and running two-day and four-day courses for novices to Elementary certificate / Pilot 2. One - Three day soaring and top landing courses to Pilot Badge/3' level - reduced rates for glider owners. Refresher courses at all levels available at special rates. We are 8 miles from M4 / Exit 15.



need money to get and hold sites, and fliers League pilots themselves, if money comes in from outside, should have most of their

This can all happen. But it's got to be made to happen.

HANKS

without the commitment of a small number of people around the country, who had none of the glamour of actually flying in them, none of the thrill of actually beating the best in the country on individual tasks, but who were there when they were needed. Roy Hill spent his own money travelling around the country as chief marshall, and one couldn't hope to find a better one. Keith Coles and Gerald Williams turned up to marshall at every appeals marshall, keeping his eye on

The League would never have run

it. At club level, Paul and Lesley Bridges of the Long Mynd, along with Nick Bishop and Alan Phillips, used all the small resources of their club to provide us with superb sites on which to fly. Ewart Jones, in Wales, initiated the practice of doling out bottles of whisky to doubtful farmers watching hang glider pilots drop in from all over the sky, which is now a standard way of smoothing things over. Terry Flower, of the Avon, found us places to fly in the irritating winds of that second League comp . . . he's another one to get drunk. And so's Trevor Birkbeck, who made it on League entry, and whose flight after that squall on the final day with a vital task half-finished enabled us to complete this year's programme in what conventional glider pilots have called the "worst year's flying weather in living memory".

Finally, thanks as well to BHGA treasurer Derek Evans, who saw the League off the ground and brought it through to its final and, aside from balancing the books, grafted like the rest of them and took the opportunity to get in some flying as well . . . at which we all cheered mightily.

NEWS ROUNDUP

AVON NEWS

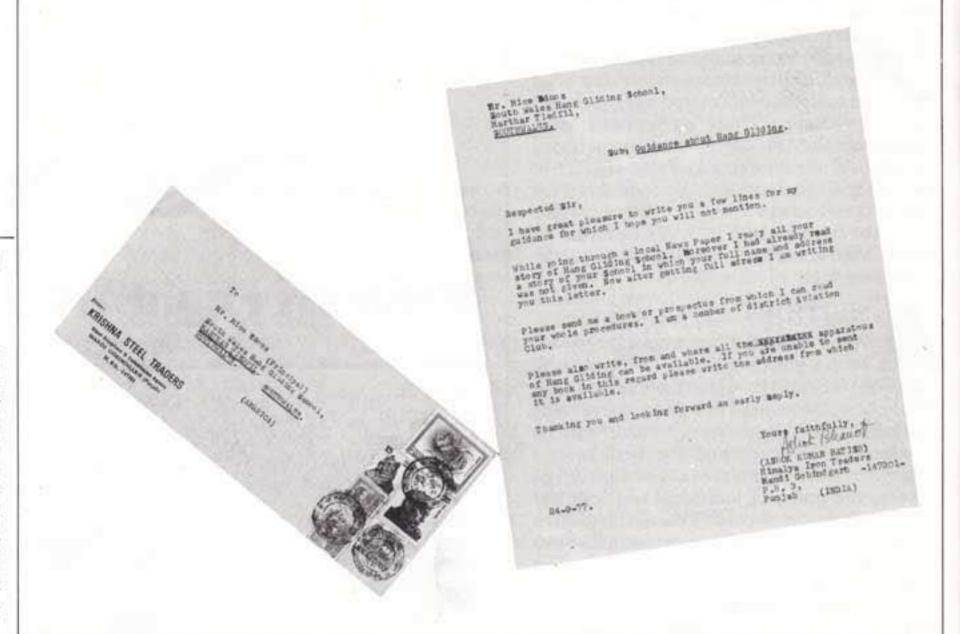
The glint in the eye of Avon member Paul Baker is expected soon to produce widespread outbreaks of the dreaded "eyes-up neck wrench" amongst his clubmates and sundry spectators, following his recent acquisition of the Moyes Maxi-Stinger which Australian Phil Mathewson used to win the '77 Mere Nationals. Get up there Paul!

Bob Wishart

BENNETT, KNAUSS AND NEWMAN BUY A MOUNTAIN

Bill Bennett of Delta Wing Kites, Tracy Knauss, editor of Glider Rider and Larry Newma of Electraflyer have purchased a considerable amount of land at the top and bottom of Lookout Mountain, a prime soaring site in Eastern USA. To do so they have pooled resources and formed a company called Air Space which will be responsible for the Flight Park. This alliance is remarkable in that two of USA's top manufacturers have got together on a project which should enhance the stability of hang gliding sites.

HANG GLIDING REACHES HIMALAYA IRON TRADERS



CHRIS'LL FIX IT!

Some good news just has to be that the irrepressible Chris Corston is back as BHGA Secretary, with a permanent staff and smart new Taunton offices at his disposal, and the smooth running and continued growth of the BHGA on his mind.

Chris's courage and determination, which helped his recovery after an accident last February, have enabled him to accept the misfortune of being confined to a wheelchair, and to conquer many of the restrictions thus imposed on him.

To a busy secretary and negotiator mobility is obviously important, and though Chris dreams fondly of his beloved SAAB, a more practical means of personal transport is provided by a suitably modified Morris 1800.

Occupation of the spacious and modern offices will commence just as soon as BHGA Solicitor Anthony McLaren has steered the final draft of the £1,050 p.a. three year lease through due legal process. Following establishment of power and telephone services and equipping with desks, chairs, typing, duplicating and filing facilities, the new BHGA Headquarters at 167a Cheddon Road, Taunton, Somerset will be in business!

First task for Chris and his new fulltime secretary Joan Light will be to lift from the shoulders of Gordon Wyse the considerable burden and variety of secretarial duties he has been doing



The smart new premises. Photo: Bob Wishart

during Chris's hospitalisation. These include negotiations with many local and national bodies, organisation of some Competitions, Public and Press relations, etc. and already constitute a full-time task. It is inevitable that a backlog has accumulated despite the magnificent job Gordon has done (as well as having to run his own business).

Chris and Joan will also absorb all the Monksilver work comprising distribution of BHGA mail and dealing with 500-600 general enquiries per month — though this figure can rise to over 1,000 per week following a national press release! Janet Hayes, the wife of former BHGA Treasurer Mick Hayes, has done this job ably and well since the inception of the BHGA way back . . .

Next, with the help of a second

secretary, (possibly part-time), Chris will take over all the duties of Membership Secretary from Audrey Evans. Audrey, the wife of BHGA Treasurer Derek Evans, has done this job since March 1976 when she took over from Janet Hayes. Considering that BHGA membership now stands at 3,400, and that internal sales of books and badges, etc. frequently accompany membership applications and renewals, the job obviously calls for considerable organisation and

much hard work and time.

It is planned to retain the same telephone number as before, namely Taunton 88140.

In conclusion, I am sure I speak for every member of the BHGA (and many more) in saying "Welcome back Chris, and success be yours".

A sincere thank you also to Gordon, Janet, Audrey and all others who gave such willing service particularly during the difficult period of Chris's absence.

Bob Wishart



DUNSTABLE DUNCE

How to spoil your day, and maybe lose a site as well. The unidentified nerk who flew his Wasp straight through the approach path to the London Gliding Club's field at Dunstable probably never even saw the tug pilot taking emergency avoiding action. Everyone who flies at Dunstable knows where the gliders and aircraft go. The only reason for flying a hang glider in those areas is sheer blind stupidity! Some people don't deserve the gift of flight!

THE MAN WHO WENT BACK TO HONG KONG

I entered the University of Swansea in October 1976 merely with a view to study marine biology. However, my interest in paper aeroplanes led to my joining the hang gliding club there. So much for marine biology. Progress was steady, and by April 1977 I was soaring Rhossili regularly. Everybody else, meanwhile, seemed to be doing crosscountry flying as a matter of routine. I was envious, but accepted that neither my available skill nor equipment was quite up to it. However, I was convinced that not every flying site had been found, and that somewhere in the world there must be a ridge surpassing the characteristics of even the beloved Rhossili. In that frame of mind, I went and bought a Hiway 21ft. Cloudbase, found my way to Heathrow and put my glider and myself onto a flight to Hong Kong. The fact that Hong Kong is my home had little to do with my choice for a location to look for my dream ridge.

Hong Kong is a small place, but it is very mountainous. Also, the sea is never very far away. As a result, the hope of finding a good coastal soaring site was quite high. Soon after arriving with my rucksack and a very long red bag, I had singled out the Dragon's Back, a 950ft. two mile long ridge facing the sea as a good bet. A road goes to within 400ft. of the top, and although top landings seemed improbable, at least the bottom was littered with three beaches and a golf course.

As can be expected, all systems were go - except the weather. For a solid month, the wind either blew steadily from the southwest, (the ridge faces east or northeast), or was light and



View of landing area. Kite is just left of centre over sea.

variable. Finally, a fair northeasterly longer?) The moment was not to be came up, and the whole family climbed up the hill for the occasion. The path leads up the back of the hill, and a surprise was in store at the top. The fair breeze was something like 35mph. So, I had a decision to make — this was a totally unflown site, and added to that, because Hiway had to rush the completion of the kite for my departure, they didn't have time to test fly it. I hadn't had the chance to either, for lack of a suitable site. I guess if I had reasoned it out properly, I would have carried the kite back down and waited for a day with a gentler wind. But a month of waiting, a beautiful hill, a soarable wind, and the thought of flying my own kite for the first time. in airspace where no other kite had been before effectively removed my powers of reasoning. Once I had made the decision, I rigged quickly and did a long, slow pre-flight check. (Again unreasonable. PF's should cover the same ground every time, and be 100% thorough. Why should this one take

delayed any more, so I got into my prone harness and clipped in. My mother had never even seen a take-off before, but she handled the nosewires like she'd done it a hundred times. I put one foot in the stirrup, and as the nose came up and the kite lifted off, I was instantly into prone and had the bar back as far as it would go. The kite drifted right, and I overcorrected, starting a series of oscillations. I was about 200ft, above the top of the ridge by the time I sorted myself out. I had expected my upward progress to have slowed by now, but I realized that I still had the bar full in. When I finally found myself moving away from the hill, I eased the bar out a bit, and up I went again. By the time I had slowed down to my normal flying speed, I must have been well over 500ft, above the top, which gave me ground clearance of about 1,500ft. I hadn't been that high since flying Snowdon. Even the people on top of the ridge looked like matchsticks. The kite was

flying straight but slow, and needed a steady pressure on the bar to keep the speed on. I explored the full length of the ridge, and was unable to find any bumps in the airflow whatsoever. A black-eared kite, the local bird of prey, came to investigate his namesake, and we flew formation for some time.

I began to relax, and take in the views and thoughts of being alone, and high. Not for long, though, because twenty minutes of continual pressure on the bar were beginning to make themselves felt, so I put on some speed and headed for the golf course. To my surprise, I had over 1,000ft. over my planned landing area, and as the wind was somewhat cross slope, I decided to fly downwind to a beach maybe half a mile from the end of the ridge. Flying over a cluster of black rooftops on the way, I gained some height and had about 600ft, over the beach. A triple 360 soon took care of that, and I was at a reasonable height for some sort of approach. At that moment I hit a vicious patch of turbulence from a line of trees.I was already staying clear of them for that reason, but the air smoothed out completely at about 10ft. altitude, and I landed gently between a lifeguard tower and a rubbish bin. Thus ended the flight by virtue of which I am the unofficial holder of the Hong Kong altitude, duration, and cross-country records(!)

That's the first site I tried. With many others that look just as promising, and from the enthusiasm shown by the crowd that gathered, I lots of aluminium multicoloured fabric in the Hong Kong sky in the near future. Edmund Hui

TRIP MELLINGER FLIES 26 MILES ACROSS THE PACIFIC UNDER POWER

On October 19th, Trip Mellinger flew from the mainland of California to Catalina Island by McCulloch powered Easy Riser, a distance of twenty six miles. The flight took Trip thirty seven minutes. After a dummy take-off from Point Fermin, to allow the press to take pictures and make their way to the follow-up craft, Trip set off into thick fog and cruising at 50mph soon left the chase boat behind. Some local fishermen had a surprise when Trip appeared out of the mist circled their boat and disappeared back into the gloom. His instrument panel included a vario, altimeter, rate of climb indicator, airspeed indicator, head temperature gauge, and compass with which he plotted his course at some 500ft. above the sea. Trip's appearance at Avalon, Catalina Island caused a furore with all the stores closing down as spectators thronged to the beach to see Trip land. Amidst the confusion Trip was arrested and subsequently released after a phone call to the FAA and much pressure from the pressmen.



Trip Mellinger starts take-off run on his record flight to Catalina. Photo: Bettina Gray

Nan	ne	1st task	2nd task	Total	League points	Mere	Overall
1.	S. Marshall	85.39	100.00	185.39	500	140	640
2.	J. Ketelaar	72.55	88.63	161.18	434.71	200	634.71
3.	B.J. Harrison	80.01	93.83	173.84	468.85	100	568.85
4.	A. Weekes	91.69	63.64	155.33	418.93	130	548.93
5.	R. Brown	82.00	63.64	145.64	392.79	140	532.79
6.	T. Birkbeck	68.56	83.44	152.00	409.95	120	529.95
7.	J. Bowyer	87.72	62.66	150.38	405.58	100	505.58
8.	B. Hudson	81.28	83.44	164.72	444.25	50	494.25
9.	I. Thomas	72.08	57.47	129.55	349.40	140	489.40
10.	B. Chaplin	74.92	52.27	127.19	343.03	140	483.03
11.	K. Reynolds	100.00	52.27	152.27	410.67	70	480.67
12.	R. Close-Smith	76.08	47.08	123.16	332.16	140	472.16
13.	R. Walder	63.92	52.27	116.19	313.37	140	453.37
14.	C. Betts	57.16	57.47	114.63	309.16	100	409.16
15.	A. Hetherington	61.42	73.05	134.47	362.67	50	412.27
16.	K. Cockcroft	89.32	+	89,32	240.90	150	390.90
17.	J. Milburn	61.82	47.08	108.90	293.71	90	383.71
18.	G. Snape	55.41	47.08	102.49	276.42	100	376.42
19.	T. Taylor	48.14	52.27	100.41	270.81	100	370.81
20.	K. Jordan	91.78		91.78	247.53	120	367.53
21.	J. Bond	36.79	47.08	83.87	226.20	140	366.20
22.	D. Heffer	81.32		81.32	219.32	120	339.32
23.	L. Gabriels		67.86	67.86	183.02	150	333.02
24.	J. North	41.15	52.27	93.42	251.96	80	331.96
25.	J. Burgess	56.58	47.08	103.66	279.57	-30	309.57
26.	J. McSweeney		47.08	47.08	126.98	170	296.98
27.	M. Hajdukiewicz	46.86	-	46.86	126.38	120	246.38
28.	T. Knight	16.56	47.08	63.64	171.64	70	241.64
29.	N. Atkinson	46.54	*	46.54	12552	80	205.52
30.	M. Hibbetts	11.76		11.76	31.72	140	171.72
31.	C. McCormack		22.08	22.08	59.55	120	179.55
32.	K. Prydderch	*	47.08	47.08	126.98	30	156.98
33.	P. Bridges		-	-	,	50	50.00

LEAGUE ENTRY COMPETITION —

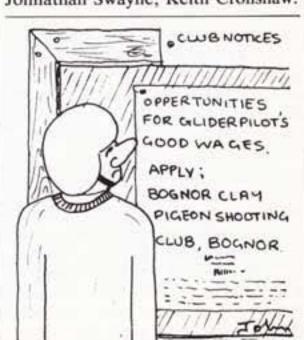
(Hawes, Wensleydale, October 29th/31st, 1977)

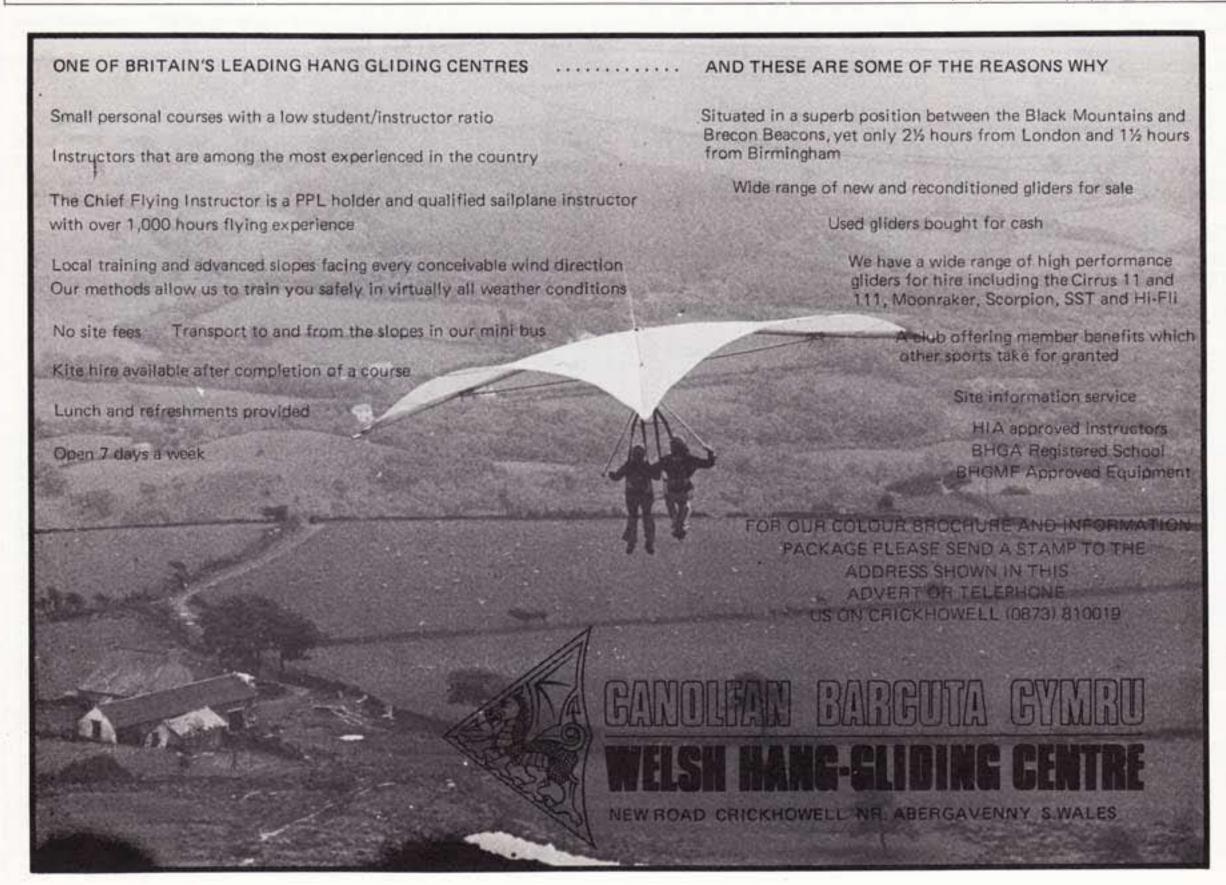
Explanation, some zero scores in tasks:- K. Cockcroft had to make a training conference on Monday, so missed 2nd task, K. Jordan broke kite (and his arm) fluffing a landing task 2. D. Heffer (and M. Hajdukiewicz) had their car break down and didn't make site for task 2. Jamie McSweeney broke his kingpost on task 1 on groundlooping, and Mike Hibbetts did the same on task 2. Colin McCormack was blown high back on the hill with his 360 in a speed task, and had difficulty penetrating to 1st pylon on task 1, and also difficulty coming down for landing, falling outside the 10 minute and 5 minute limits respectively. Neil Atkinson broke a kingpost on task 2. It should be said that the flying conditions were more difficult in a League competition than at any time snce Clatter on the 3rd League, and everyone who flew showed both courage and flying skill. I understand a lynch party was being formed on Monday afternoon, but otherwise, everyone showed good humour. I'd particularly like to thank Trevor Birkbeck, who organised the comp, and those League pilots,

Johnny Carr, Brian Wood, John Hudson, Mike Atkinson, Lester Cruse, plus Roy Hill, Keith Coles and Gerald Williams, who turned up to marshall. Brian Milton

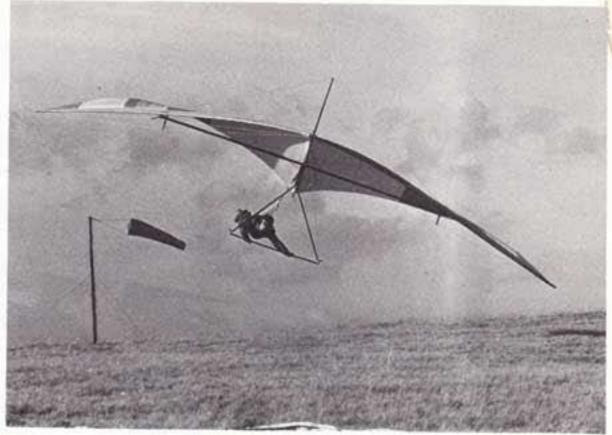
Entered League Entry, but did not turn up, or did not fly: Rob Symberlist, Bob Wiseley, Mike

Caston, Pat King, Steve Fensome, Dave Roberts, Jo Binns, John Rankin, Roger Sylvester, Bob Hooper, John Curtis, Barry Bourne, Alan Firth, Johnathan Swayne, Keith Cronshaw.









THE PENNINE CLUB COMPETITION

Report by John Hudson, photographs by Geoff Hunt.

he weather was kind to us again. How lucky can you get! Usually organising a competition is a sure-fire way to guarantee foul weather.

On Sunday 6th November thirty-nine fliers gathered on our training site, Lobden Moor, to pit their skills against each other. Some came for pure pleasure, some to improve their competition skills and others came to win.

Bob Calvert and Bob Bailey came to win and after three events, concise, neat and skilful flying gave 1st place to Bob Bailey, notching up another win to add to his growing competition record.

The day started with a wind on one of the very worst corners of our site, and forced the two competition organisers, Graham Hobson and Trevor Birkbeck, to pull out all stops in an attempt to hold difficult events on little more than a 150ft. training hill. That they succeeded to a remarkable extent is a tribute to their flying and organising ability.

The wind early on was gusting from 16mph to 28mph and the "wind up" for the first event was marked. The Oooh's and Ahh's from the later fliers, as early pilots fought to remain in control of wings that seemed to have minds of their own, brought long silences, and even longer faces from those next in line.

However, the timed triple slalom and spot event went off without a serious hitch, save for the quite unusually large numbers of landing mistakes in the "lumpy" landing area.

Landing problems became more obvious in the second event during which pilots had to continually roll their gliders from side to side, weaving in and out between four close gates. This event finished with a duration time to be flown within the confines of a tight flying area, which caught many pilots out, sounding the death knell for Philip Robinson and Colin McCormack.

It was during this event that landing mistakes really showed up. I dare not mention





their names, but quite a few notable fliers, ploughed in, ground looped, bent their gliders and generally proved that the better flier you become, the more care you have to take! League rules presided, and replaceable damage caused elimination from the task.

The final event was a pure distance task, and this showed up the need for clearly explained rules. Wind drift caused a fair number of pilots to deviate from the designated glidepath, and because the ground fell away steeply, giving more distance, Graham had no real option but to disqualify those pilots who drifted too far out of line.

In all events, scoring was based on the best score being 100 points and the worst score zero points. This method gives benefit to the pilot who "stars out" and beats his nearest rival by a large margin. His score reflects the amount he beats his rival by. The disadvantage is that a high score by one pilot, degrades the scores of the other pilots — great if you're the one with a high score!

Although well-organised by Graham and Trevor, these two Generals had a fair team of helpers. Keith Cockcroft spent the whole day acting as launch and chief take-off marshal, and Judy Thomas, Wendy Maloney and Louise Armstrong organised scoring, food and drink. Will Jones acted as commentator throughout the day.

We had many willing volunteers to man the numerous slalom markers and watches, and all in all this was a pleasant, well-run and skilfully flown event.

Congratulations to the Winners:-

Class I: 1st Bob Bailey — Wills XC, 2nd Richard Brown — Flexiform Vector, 3rd Bob Calvert — Hiway Scorpion, 4th John Hudson — Flexiform Vector, 5th Geoff Ball — Hiway Scorpion, 6th Martin Baron — Spirit.

Class II 1st Nigel Thomas — Skyhook, 2nd Paul Gallager — Wasp C3, 3rd Christine Capel — Hiway 220



HANG ON FOR DEAR LIFE!

A pilot's suspension system is his lifeline yet it is probably the least inspected part of his equipment. With several recent cases of harness suspension malfunction, Tony Fuell and John Hunter investigate the reasons behind such failures and the chances of surviving such a failure.

At the last-but-one League, some people were talking about a Spanish pilot who'd been killed at a competition they attended. The stitching on his harness had been faulty and had failed in flight, leaving him dangling by his hands from the control bar, about 300ft, up. Apparently the poor bloke had stayed like this for only twenty seconds and had then let go, or slipped, and plummeted to his death before a large crowd of spectators. Amongst them were his wife and

Bad news never travels alone, and shortly after that, we had a U.K. accident which could have had a similar outcome, but fortunately didn't. Firstly, the accident report:-

GARY MEES

Site: Mendic Hill, Perthshire. Injuries: Severe multiple fractures pelvis, legs and feet. Now recovering.

Glider: Spirit

Harness: Scot-kites prone Equipment: Crash helmet, track

Nature of accident: A flight was

in soaring conditions, turbulent at times. At some point, the suspension system failed, and the pilot became detached from the glider.

Falling on to the control bar, he was able to hold on, at arms length (fortunately, the glider was headed away from the hill at the time). Despite several attempts he was unable to haul himself up into the control frame, and said later that he was deterred from doing so by the violent turns that were caused each time he tried. The glider continued to fly away from the hill under partial directional control until the pilot had to let go, at a height of about 40ft, causing severe damage to his legs and feet, possibly made worse because of the light footwear he had on.

THE INVESTIGATION

A thorough investigation of the suspension system was made, and some serious defects were discovered. It has been concluded that the basic cause of this particular accident was

that in turbulence, the small Karibiner at the bang point had somehow become twisted so that the weight of the pilot went on to its pin, which bent the gate open, allowing the polypropylene rope which was the next-lowest part of the system, to slide out. The lessons to be learned from this are, of course, never to trust your life to an inadequate Karibiner, - a very good article on the subject appeared in the October issue of Wings! In looking at this system the investigators found at least three different modes of interaction of its components which could have caused the failure. The diagram shows the most likely one, but we were also able rope within the Karibiner. It's not a bad idea to sit and play with your own suspension system for a while, and do everything you can in the way of twisting it, turning it and jerking it up and down to see if you can get it apart. If you can, chuck it away immediately and get a better system.

found another weak point in the pinging sounds from above, or an

system where the hang loop made of coated wire passed over the keel. Two small clips held the wire in position, and on one side, the movement of the wire against the clip had already begun to fray it through - several strands had already gone (Photo 4). Even if the Karibiner had held, there is a fair chance that sooner or later the wire would have gone - the end result would have been exactly the same. All Spirits with this system have been recalled for modification - if your own glider uses anything remotely like this, you are advised to replace it immediately.

HANGING ON

to open the gate merely by moving the But, what can you do if your harness fails? What are you likely to experience? Is survival possible? We tried to reconstruct the sequence of events. If you had a "clean" failure, with no warning at all, you could well just fall straight out of your glider, particularly if you're flying seated. However, you would probably get But as well as the actual failure, we some kind of warning - ripping or

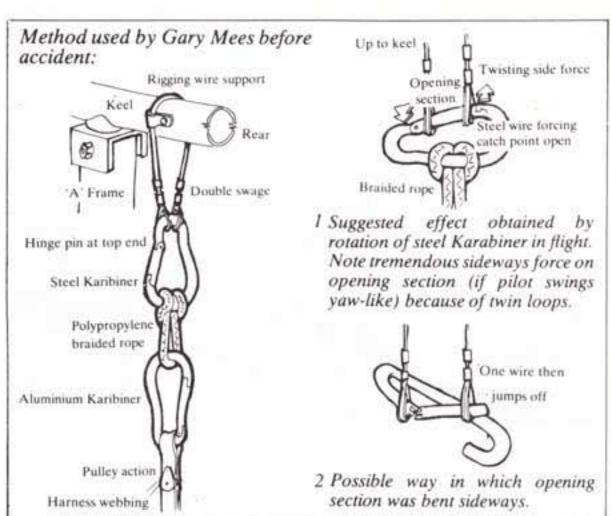
extension of the harness as the failure takes place - which could give you a second or two to get a good grip. If you're prone, you could drop straight on to the bar - you might be able to balance your body across it, which would make things a whole lot easier. Or you could just break you neck who can say, until it happens?

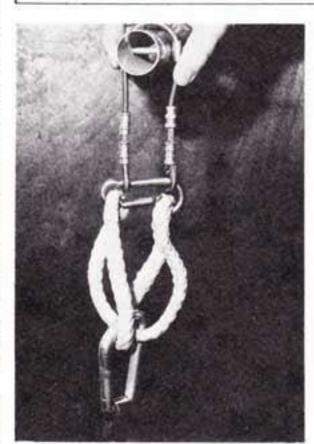
Let's say you found yourself in that awful situation which faced both Gary Mees and the Spaniard - hanging by your hands. What can you do? When we first heard aout the Spanish accident, a lot of people said that if your life was at stake, you'd hang on, no matter what. And it's obvious that if you're at any height you've got to stay with the glider somehow if you're to have any chance at all. But can you?

We tried, with the co-operation of Hiway, to see how long a number of fit, young, active fliers could hold on to the typical control bar by their hands. The results were quite frightening. It's quite clear that unless you can get an arm or leg over the bar to take the strain off, you don't stand a chance of holding on for more than two minutes or so. Also, if you don't move quickly to try and pull yourself up into the control frame, after about thirty seconds, you won't be able to. Possible courses of action are:- getting an arm or leg over, swinging right round over the bar in a 'pull-up', or wedging your hands between the side wires and the uprights (very painful, but quite effective, if you've got a narrow control frame). An ex-trapeze artist advised putting leather or rope wrist straps on the control bar. With these on, even the weakest person can be supported for ages. But flying with wrist straps on . . . would you?

As Gary found out, putting your weight on the control bar will most likely cause the glider to fly very fast indeed, and it will react violently to roll inputs as you try and get up. But the aim is quite clear - the only real chance you've got is to get up into that frame and stand on the bar. Then you can move your weight around, and have a pretty good amount of control while you fly very cautiously to the nearest landing site. If you have any height at all, concentrate on getting up, and don't worry about the glider if you don't make it you stand very little chance anyway -- you'll be more or less at the mercy of fate. If you can hold on long enough you may be able to influence the direction the glider takes, but by the time you reach ground level it will be going pretty fast, and you may injure yourself anyway.

The only advice we can give is that if you get into this situation, react immediately. Try and get both legs over the bar, and pull up to a sitting position. If you can't manage that, get your legs over anyway, and in the last few moments, go back to hanging by your hands until the glider drags you on to the ground, then let go and roll. Try not to let go until your feet touch. But, best of all, make sure that your harness and suspension system never let you down, then you won't have to make this kind of choice.

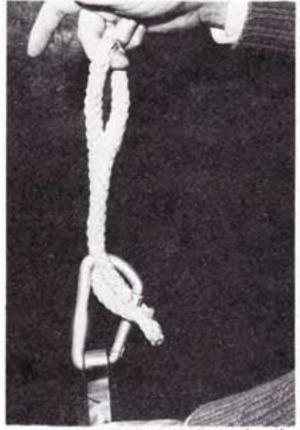




2a One loop slips out -

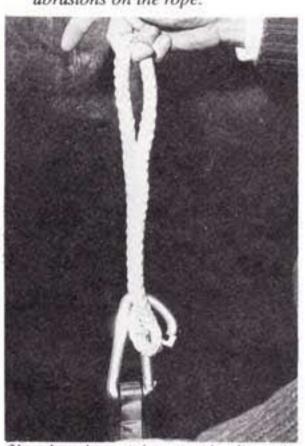


2b followed by the other. Note abrasions on the rope.



3a Supported by a single loop, the pilot 3b when the weight comes back on, the goes weightless -

failures achieved by merely twiddling and jerking the system about. Photo 2a shows the most likely failure mode, with the karabiner gate down rather than up. Failure in the third mode (3a) is not implicated in this accident, but



rope pulls the karabiner gate open.

The above are photographs of actual could happen in other set ups. This particular failure would probably not cause the pilot to fall out, but it is not a good idea to have the gate open under any circumstances. None of the photos are 'posed'.



1. Gary Mees takes off - note suspension system, the rope is clearly seen.



The hang point — note clips attaching wire loop to keel.

3. The karabiner — note distorted gate. The whole thing is far too small and weak.



4. Detail of the wire loop where it passed through the clip showing broken strands.

THE HIWAY EXPERIMENT: Try it for yourself!

Pilots had to jump from a trestle, and grip a 11/s inch standard bottom bar about two feet out of their reach. (To duplicate the effect of a harness failure). The time was recorded when the pilot's hands left the bar. It was noted that even with gloves on, the hands tended to come unclenched, and the fingers 'ride up' over the bar.

Pilot	Time Mins Secs			
G. Shine	1	13		
D. Clother	1	12		
M. Leader		55		
B.J. Harrison	1	5		
K. Cowie	1	5		
'Bazza'	1	53		
Average	1	13		



Dennis Pagen takes off. Photo: Hugh Morton

om Peghiny put it on ice with a final minute hoopla and emerged the 1977 Masters Champion. The Grandfather Mountain Invitational at Hugh Morton's mountain in North Carolina was the scene of the best meet of the year. Ten thousand spectators watched thirty-two of America's top hang glider pilots compete for the Masters Championship. The only near casualties were when four spectators decided to watch the event from a nice sunny rock which just happened to be in the pen of Mildred the Bear and her friends. When Mildred appeared, the spectators lost their lunch - to the bears.

The Masters Committee invited thirty-two pilots from as far as Canada and California to accept the challenge of the tough tasks involving pilot skill and judgement.

To fly in the Masters, all invited pilots had to fly a glider certified by the HGMA (Hang Glider Manufacturers Association). The Moyes Maxis owned by the Braddock family team were the only gliders not accepted. Meet Director Tracy Knauss read the pilots' names for a required roll call while Tom Price (HGMA representative) told whether or not the gliders met certification requirements.

Thirty-two competitors divided into two groups of sixteen with four 4-man heats used to minimize the effects of conditions was the plan for the meet. Every pilot flew at least once with all other pilots in his group. Pilots received a low point score for winning — 1, and up to 9 for a crash outside the landing area.

Pilots launched from 6,000ft. ASL with flights ending in the landing area 1,500ft. below. Two wooden ramps facing NW and SE were used in the meet.

Thursday, the 22nd, saw Steward



Pilot launches his Phoenix 8 into the wispy clouds of Grandfather Mountain. Photo: © Bettina Gray

EMAST

Teri Hughes reports on the Grandfather Masters Meet.

Smith and J.C. Brown, the official "Wind Dummy" pilots, testing the conditions by flying the prescribed course. Official wind dummies for the Masters were paid to fly each task. One condition and wind test pilot would fly the course at the maximum for conditions while the other would fly at the minimum for conditions. This gave the competition pilots a basis for evaluating the conditions.

It was announced that the first event would be the Optional Distance Task. This task had pilots launching and soaring downridge while circling mountain pylons, then flying out to the valley for some gate crossings followed

by a landing at the Grandfather Golf and Country Club's landing area. Super soarable conditions arose as a strong shear line developed just before three positions of their respective the first competition flight. Great altitude gains hindered judgments of some pilots over the gate crossings.

The duration-altitude gain task was the second task chosen. A climb for time to a mountain pylon located 200ft, above the downridge from launch was required. Pilots passing an entry "gate" in minimum time and as possible to a time of fifteen minutes the received a score. Conditions arose

gain requirement during the beginning of the round. Pilots were then required to fly and land as close to fifteen minutes as possible.

On Friday the Optional Distance Task was again selected after the strong morning winds had died down and given way to a midday shear line that provided lift for all pilots. After the fist round was completed, the fog took over the mountain top, and the meet was cancelled for the day.

Sunday morning began with the meet officials and wind dummies deciding that the conditions at the time called for the maximum/minimum duration task. The pilots were to fly a maximum of six minutes to the gate which started the race to the landing area, during which time the pilots performed three alternating 360° turns. This two-part task gave two separate scores.

Conditions for the second round of the day were very light and it was decided that the Slalom Task would be run. The wind dummies tested conditions and suggested the number of pylon circlings to be required in the Slalom Task. Originally this was designed as a max L/D test. Conditions got better and pilots completed the maximum requirements with ease making this event a race.

To many pilots, finishing in the top groups was a must. This was the fourth and final flight of preliminary competition. Several surprises occurred during this last round. When the dust settled, Barry Gordon, Mike Arrambide, Chris Perkins, Tom Peghiny, Tom Haddon and Jeff Burnett had made the finals.

On Monday the pilots' meeting landing in MacRae Meadows as near began at 8.30 as usual. Unfortunately weather conditions worsening at a great rate. Not until causing pilots to forego the altitude Thursday had the 60-knot winds let up



Finalists line up. Top row left to right: Tom Peghiny, Jeff Burnett. Middle row: Chris Perkins, Barry Gordon Bottom Row: Tom Haddon, Mike Arrambide. Photo: Hugh Morton



Tom Peghiny, winner of the 1977 Masters meet. Photo: Hugh Morton

mellower competition-type conditions.

The maximum/minimum flight task was used for rounds 1, 3, and 4 with a straight duration task being used for round 2 of the finals.

Hours after the last competition flight had been flown, the results were announced.

Tom Peghiny (Phoenix 8) in 1st place, Chris Perkins (Phoenix 8) in 2nd place, Mike Arrambide (Cumulus 10) in 3rd place, Jeff Burnett (Phoenix 8) in 4th place, Barry Gordon (Olympus) in 5th place, and Tom Haddon (Seagull 10 Metre) in 6th place.



Map and Booklet published by Ringsend Airline Publications. Obtainable direct from:-Mark Leslie, Stableyard Flat, Knockmaroon House, Castleknock, Dublin. Map: 75p+15p P&P Booklet: £1+25p P&P If both ordered together P&P is 30p.

hat the Sligo/Leitrim/Fermanagh area of Ireland contains some of the best hang gliding sites in Europe is something at present appreciated by only a small handful of fliers. This booklet will, I trust open more pilots' eyes to the magnificent potential which is lying waiting to be explored and flown in north western Ireland.

It is the first publication I have seen which sets out to catalogue the major flying sites of one area, in a manner similar to that employed by climbers and cavers in their guidebooks, so that the visitor has at his fingertips a comprehensive selection of sites for all wind directions.

Starting with an introduction to Irish flying and this area in particular, we are given maps, wind direction tables, individual descriptions of the sites covering access, take-off points, top and bottom landing areas, warnings and cross-country potential, and finally cross-sections of the major soaring slopes.

This booklet is the result of Mark's personal exploration and flying research in an area which is still practically untouched by even most Irish fliers. The large majority of sites included were first flown by Mark — on a Birdman Albatross — and he is still the only person to have flown many.

The report is an attempt to stir clubs and individuals into compiling similar records of other areas in Ireland or to submit information to Mark. He has divided Ireland into ten major flying areas and eventually plans similar reports for all, with area (8) — Galway, Mayo, Achill, area (3) — Dublin region, area (10) — Derry region and area (2) — Newry region

already on the drawing board. He looks forward confidently " to the day when the roving flier can set off with a comprehensive guide for flying in all ten of our hang-gliding regions".

The Map of all Ireland — sold separately — provides the link for all areas, marking all major sites with necessary wind directions and approximate height as well as whether or not there is a road to the top (almost obligatory in Ireland). There are no other details but no doubt the Map will be under constant revision as Mark's travels take him to parts of Ireland he has so far barely touched.

It is very easy to get carried away enthusing about the sites in this area -(9) — Sligo and Fermanagh. Although there are many which are not included, we are given a selection of sites (mostly over 1,000ft. from top to bottom) many with roads to the top, covering all wind directions and ranging in length from half a mile to seven miles (average about two miles). Ridge, thermal and wave lift are all present the dark peat bogs of Ireland being excellent thermal producers and the physical arrangement of the Sligo hills screams "Wave" at one from the Ordnance Survey Map.

All sites mentioned, with the exception of a solitary ten-mile ridge in the Ox Mountains, are contained within a circle of radius sixteen miles: access is hardly a problem. There is a noticeable lack of a "Landowner's Permission" paragraph under each site. This because the only is Landowner problem have encountered in Ireland is the problem of being allowed to drive away without having thrust upon me ten cups of tea, supper, guinness, whiskey . . . Having said that it is vital that one does approach the local farmer and observe common courtesies. Do take the time to go in and have a chat and you'll always be welcome back; to display off-hand behaviour or just to ignore the locals could mean infecting Ireland with the dreaded landowner disease we have all around us in Britain.

Galway, Mayo, Achill, area (3) — I don't feel like criticising such a fine Galway, Mayo, Achill, area (3) — compilation and work of art (as well as Dublin region, area (10) — Derry region and area (2) — Newry region sketches of flying at the Loch Navar

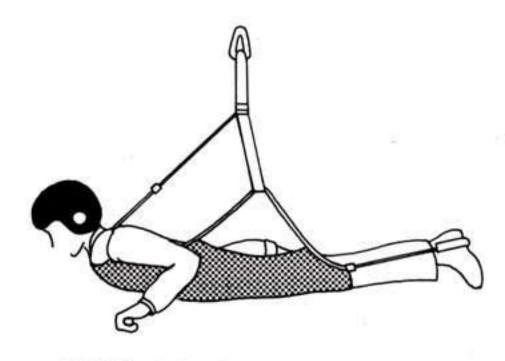
site) but in order that future volumes might be improved, it would be very helpful if more detailed sketch maps, showing contours, access paths, landmarks, power lines, etc. could be placed opposite the description of each site. If one buys the ½in. Ordnance Survey sheet as recommended, there should be no problem but little sketch maps would, I'm sure, be invaluable to those who — unlike myself — have never visited the area before.

I also feel that the information under the heading "Cross Country Potential" is slightly misleading. Much of what Mark terms "Cross Country" looking for truly mind-blowing is merely flying the soarable ridge to its looking for truly mind-blowing. It's all waiting — almost virgin.

limits, e.g. soaring the seven-mile long Loch Navar ridge (no gaps to jump) is described as a fourteen-mile round trip cross-country. This is not a universal fault as the area's wave potential is adequately described but "going crosscountry" to the cognescenti amongst English pilots means greater reliance on thermals than is allowed for in this booklet. The result of course is that in fact the cross-country potential is far greater than is mentioned in Mark's brief paragraphs; — I trust that this potential will be realised next spring and summer by British fliers who are looking for truly mind-blowing sites.

THE BRUNEL' HARNESS

Uses the suspension bridge principle to support apron evenly along its entire length with simple, low drag support webbing.



£46 inc. VAT, P&P

Mc Broom Sailwings Ltd., 43 Canford Lane, Westbury on Trym, Bristol. Tel: 550454.



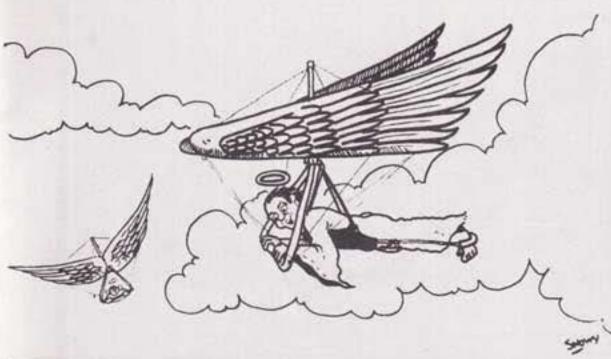
F.A.I. Class 1 Competition is becoming a tough business these days, attracting some of the best pilots in Europe and demanding gliders with the highest 'hottest' performance possible. Not at all the sort of thing normally associated with novices or intermediate pilots.



It may surprise you to learn therefore, that Europe's most successful competition glider, and most popular novice/intermediate glider this year, are one and the same, the Wasp Falcon III sport.

Waspair Limited, Restmor Way, Hackbridge Road, Wallington, Surrey, SM6 7AH. Telephone 01-647 4343/4/5.

INFORMATION



THE DALES HANG GLIDING CLUB

From the 1st December the chairman secretary will be as follows:

Chairman:

Noel Whittall 2 Argyle Close Horsforth

Leeds

Tel: Horsforth 584044 Secretary: Peter Anstey

82 Rastrick Common Brighouse W. Yorks

Tel: Brighouse 716069

MEMBERSHIP RENEWAL

Membership numbers 5692 — 6093 are due for renewal on 1st January 1978.

POWERED HANG GLIDING CONFERENCE

The last line in column 2 of the report on the powered hang gliding conference, which appeared in October Wings! should have read:

'below 80% of sonic speed' not 8% as printed.

BHGA OBSERVERS

The following is a list of BHGA Full Observers as of 23rd November 1977. The list will be reviewed after six months.

1. D.W. Arkle 2. R.L. Ashton 3. B. Bibby R. Ballard 5. A.M. Birch P. Bridges 8. A.F. Ball 11. R.E. Bailey 12. R. Beckett A.D. Cranfield 14. M.N. Collis

Glen Clarke 17. B. Carter 18. J.A. Caley 19. F. Clarke 20. C. Corston

32. M.B. Fortune 33. A.R. Fuell G. Fischnaller 35. C.M. Froggatt 37. G. Fowler 39. M. Foster 42. R.J. Garland 43. A.W. Gosnold

21. R.G. Calvert 24. T.L. Dibden P.J. Day 26. A. Doubtfire 28. D.H. Ellison 29. J.A.J. Evans 44. R.D. Green 46. L. Hill

47. C. Hawkes 49. M. Hawksworth 52. S. Hampton 54. R.C. Hanlon 55. H. Hodgson 57. G.C. Hobson 59. B.K. Harrison 60. K. Jordan 61. J.M. Jenkins 62. R. Jerome 63. P. Jackson 64. A.G. Knowles 66. H.D. Knowles 67. P.J. King 69. R. (Misty) Lamdin 70. D.F. Lyne 71. G. Leason

72. P. Mills 73. D. Munn 74. B. Milton 76. P.F. Mayo F. Threlkeld
 J. Northage 79. R. Potter 81. R.J. Pattinson 83. S.M. Rose 84. E. Rowley 86. M. Ramsey 88. B. Scott 89. Pete Scott 90. R.A. Scates

91. M.G. Shaw

94. G.A. Shine 95. R.J.S. Spooner 97. G. Slateer 98. A.E. Squire 99. D.W. Simpson 100. B.W. Slipper 101. E.C. Salisbury 103. D. Tait 105. G.I. Thomson 106. D.J. Taggart 107. Ian Thomas 108. A.H. Trapp 110. T. Taft 112. D. Willis 113. D. Wilkins 114. D. Worth 115. R.J. Wilson 116. D.A. Weeks 117 E.M. Woods 118. J.R. Ware 120. D.F. Yule 121. M. Lake 124. L. Cranfield 127. R.W. Black 128. B. Bradley 129. E.K. Battersea 130. I.M. Beloe 131. T.J. Flower 132. D.P. Green 134. T. Knight 135. J. Knight 136. K. Messenger 137. A.J.S. Maclaren 138. M. Mugridge 139. D. Raymond 141. M.S. Southall 143. A.J. Westcott

144. R.L. Balchin

D.J. Squires

93. J.H. Smith

187. R.G. Mackay 191. R.C. Symberlist 194. C. Coleman 195. W.C. Niblett 197. H. Heggie 198. S. Wootton 200. T. Laverty 201. C. Ryan 202. B. Kennedy 203. D. Liddard 204. D. Simpson 206. P.J. Sutton 207. H. Edwards D.G. Chambers 209. D. Roberts 210. W.H. Dodwell 211. J.D. Erskine 212. G. Weed 213. John Fack 214. P. Baker 215. Jeremy Fack 216. T.R. Yeoman 217. B. Crick 218. R. Smith 219. P.A. Fouracre 220. J.S. Long 221. P. Fathers 223. A.J. Barnard 224. A.C. Keith 225. A. Young 226. A. Hetherington 227. A.S. Munro 228. G. King 229. R.J. Kelly 230. P.C. Mawer 233. A. Geldart 234. J.H. Clarke 235. D.R. Austen 236. M.K. Brenchley 237. F.H. Kemmery 238. D. Marlow 239. R.C. Doel 242. D. Bond 243. D. Lewis 244. T.M. Carter 245. J. Rankin 246. J.S. Potts B. Renshaw 249. P.H. Robinson 250. J.R. Edgecombe

145. P. Bullock

156. J. Hunter

166. R. Softly

175. P. Donald

176. C. Williams

177. R.A. Horlor

178. R. Billington

181. J.L. Thomas

182. R. Richards

184. J.P. Fry

167. R. Full

165. B. Wishart

147. R.E. Fellows

169, R.D. Christon 171, T.M. Stark

 David H. Squires 282. Trevor Birbeck 254. A. Pearson 283. G.K. Snape 255. J.W. Barber 256. M. Roberts 257. P. Laverty 259. J.W.R. Whitfield 261. G.M. Murray 262. F.H. Joynes 263. R.S. Willbourn 264. S. Murphy 265. L.R. Chaffe 266. T. Peto 267. R. Bailes 268. R. Docherty 269. M. Barclay 270. P.M. Winteringham 271. S.D.J. Dudfield 272. S.H. Leonard 275. A.J. Ramsden 277. J. Slater Brown 278. T. Murphy 279. John Dixon 280. Tom Ramshaw 281. Ronnie Freeman

284. Gary A. Mees 285. Steve Bond 286. Alf Rogers 287. W. (Bill) Huyton 288. W.C.A. Cowell 289. Victor Cameron 290. Donald Carson 291, D.J. Catanach 292. Terry Aspinall 293. M.J. Batchelor 294. Richard Brown 295. J. Sharpe 296. E. Hindmarch 297. Nick Lawler 298. Steven Medland 299. Ken Cram 300. Mike Pollard 301. Robin Pattenden 302. T. Rathbone 303. P.R. Robinson 304. B. Smith 305. Robert Wiseley

BHGA MEMBERSHIP SUBSCRIPTIONS AND SUNDRIES

Individual Membership: £7.50 pa (plus £1.00 entry fee for new Family Membership: £10.50 pa (plus £1.00 entry fee for new

2 adult members of same family and household. Existing members can extend to family category on payment of additional £3.00

ITEMS AVAILABLE FROM MEMBERSHIP DEPARTMENT: Windscreen Badge25p (If above three ordered together) £1.00

Pin on lapel badge Keyring and fob with BHGA Badge Keyring and chain with BHGA Badge in acrylic "teardrop" (can be used as a pendant) "HANG GLIDER PILOT" - by Ann Welch & Gerry Breen An excellent up-to-date book for beginners and advanced pilots "HANG GLIDING" — by Bob Mackay. An informative book mainly for those who have just entered the sport Log Book . The BHGA leaflet "An introduction to Hang Gliding"

List of British Hang Glider Manufacturers Free to Members List of Schools on Current Register Free to Members (Send s.a.e. if only ordering free items) WINGS' BACK NUMBERS: Single copies to Members 40p, to

others 50p, for July 1977 issues onwards, deduct 10p for prior

2 Lynch Down, Funtington, Chichester, Sussex.



251. E.J. Gray

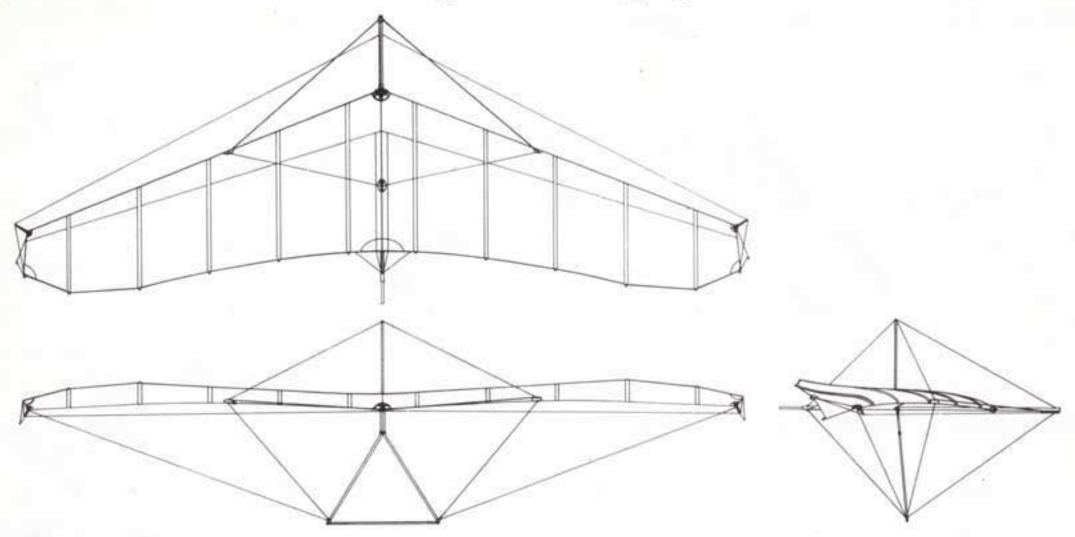
KITE SKOOL and Wasp make a great team IN THE MIDLANDS

for SALES, SPARES & TUITION CONTACT DOUG SQUIRES at Kenilworth (0926) 52900/56313

Kite Mool of Hang Gliding BHGAHIAregd

7 MERCIA AVENUE, KENILWORTH CV8 1EU

The Wasp Gryphon III



Now in production

Waspair Limited, Restmor Way, Hackbridge Road, Wallington, Surrey, SM6 7AH. Telephone 01-647 4343/4/5.

New SKY VARIO

The SKY audio—visual Vario at the right price £95 + VAT

Ultra Sensitive

Compact (one unit) 5"x2·25"x3·5"

Easy to read

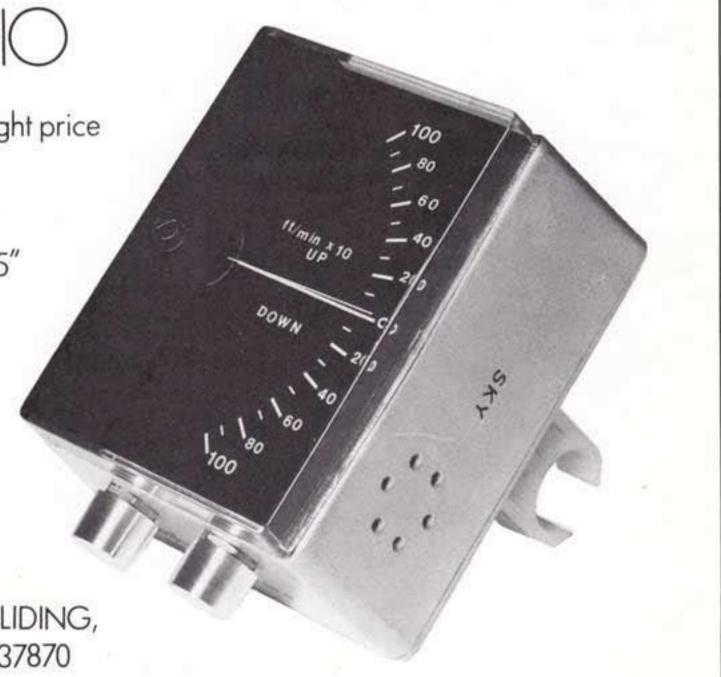
Strong

Audio on up only

Adjustable threshold

Only 800grms

available from THE HIGH SCHOOL OF HANG GLIDING, Sion Lane, Clifton, Bristol. Tel: Bristol 37870



SPECIAL OFFER

Owing to a favourable exchange rate we are able to offer the following instruments at a discount price.



SUPER LIGHTWEIGHT ALTIMETERS

Swiss built to a high standard, each altimeter weighs only 3.2 oz. and is fitted with a Velcro wrist strap. The dial is marked in 20 foot increments and is very easy to read.

The instrument employs a shock resistant 19 jewel Swiss movement which is temperature compensated for accuracy over the whole range. If required the THOMMEN can be easily strapped to your vario'.

A twelve month guarantee makes this altimeter one of the years best buys.

Price £44-00 each including V.A.T. — strap (state wrist or vario') and postage.

PLUS

SUUNTO COMPASSES

This beautiful, well damped compass is essential to cross country flying. It prevents cross wind deviation, thereby maximising distance. An excellent and valuable asset to the serious flyer.

Price £7.50 each including V.A.T. —strap and postage.

THESE OFFERS ARE ONLY OPEN UNTIL 16th JANUARY 1978

VARIOMETERS

We are the largest stockists of variometers in the country 5 different makes and over 15 instruments held in stock.

Also send (include stamp please) for our extensive stock list showing our full range of hang gliding tube, hardware, kit built gliders, instruments etc.



John Hudson,

The Main Welding Co. Ltd.

Shawclough, Rochdale, Lancs.



small ads

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

Second Hand Wasp Falcons for sale. A few to choose from. Mostly IV's, some IIIs. All in perfect condition and tested. £300 to £395. New Gryphons now available. Contact Lester Cruse Tel. Downland 54322.

Aircraft Pressure
Instruments RAF
Altimeter £36, ASI 10110kt £36, 4oz
'Streamline' Pod, fits
standard tube. Takes 3
instruments £10. Full
set £120. Hallam
Grayland Electric
Vario £50, Moving
rotor electric ASI 540kts £36. Tel. 029346611

Wanted Urgently — an experienced hang glider sail machinist and cutter. Apply in writing to Ken Messenger, Birdman Sports Ltd., Mildenhall, Marlborough.

Galaxy-Flyer Helmet now with the new British Standard 5361. Price £16 inc. P & P. Frank Acton, 53 Royston Park Road, Pinner, Middx. HA5 4AB, Tel. 01 428 2686

Falcon IVB Wasp 4 months old, excellent condition, tasteful sail design, the machine for cross country. £400

Hailsham (0323) 844 820

Flexiform Spirit. 22ft. Bag. Flies seated or prone, quick slide rig, multi-coloured sail, six months old. £295. New Hiway prone harness £37. Consider P/X for Nikon/Olympus camera. Jeffery Hunt, Poynton 6192, evenings. (Cheshire).

McBroom Argus 230. In good condition, with bag and seat. £80 ono. 'Phone Jean, Acton Burnell 237 (Salop) or Lesley, Linley 322.

Wasp Falcon 3. In very good condition, with a white, green, blue sail, seated harness and bag. Ideal first glider. £325. 'Phone Oxted (Surrey) 2786. Mike Johnson.

Sunspot. As new, three months old, no prangs. White and orange sail. £350. Ring Paul Bullock, Church Stretton (Salop) 2884.

McBroom Swallowtail. 20ft.-20ft., with radial tips, rigging seated or prone, harness, bag, excellent condition. £225. Rob Balchin, Chipping Sodbury 317021 (Bristol).

Ideal for beginner. 19ft. Birdman. Red/white and blue complete with seated harness. 'Phone Holmes Chapel 37334 (Buyer collects from Cheshire).

Skyhook IIIA. Blue and white sail, adjustable wings, clipin suspension, flies well. Offers to P. Hanson, 'Phone Doncaster 23493.

Variometer. Electraflyer (Scotkites), visual/audio, as new £75. 'Phone Peter Robinson, Warmwell 85136

Found at Mere. Control bar and lower rigging wires. Ian Hayes, 72 Coniston Road, Kempshott, Basingstoke, 'Phone 62536. Husband and wife required by leading Welsh hang gliding school.
Accommodation and fair salary for the right couple. Man should be competent flier, wife willing to help in hostel and accessory shop. 'Phone Mike Adam, Merthyr Tydfil (0685) 3780.

Falcon IVb, attractive sail, vgc., £390. Also Wasp Kneehanger Harness. 01 300 1128 (day), 01 647 9701 (evenings). Roger Wates.

Wasp 229. Blue/white sunburst sail, seated harness, £85. 'Phone Gordon Munro 01-778 4677 evenings.

Wasp CB. Prone/seated controls, seated harness, dacron sail, and carrying bag. Price £120. 'Phone High Green 7134.

Mitchell Wing. New unused plans. £20. 'Phone Tim, Doncaster 855700. Midas E. Excellent condition, all white sail. Many new fittings, spares. The kite is really good to learn to fly with. £425. ovno. Tony Fletcher, Aberdare (0685) 875630 (evenings) 874221 (day).

Wanted. Nicopress or Talurit Swageing tool. Dave Bazeley, "Borlasevath", St. Wenn, Bodmin, Cornwall. 'Phone St. Columb 483.

Wasp 221. Neat condition, very quiet, black and green sail. Recent factory check. Ideal training kite, complete with bag and seated harness for £130. Call John Bowman, 359 Acklam Road, Middlesborough. 'Phone 0642 87769.

A Brand New Falcon
IV complete with
seated harness, control
frame, carrying bag and
helmet. £460. Please
contact S. Lamsam,
Girton College,
Cambridge.



INSURANCE

INSURANCE The following insurances have been specially negotiated at Lloyd's for BHGA Members PERSONAL ACCIDENT WHILST HANG GLIDING WITHIN THE U.K. & EUROPE

DEATH, LOSS OF LIMB, OR EYE, PERMANENT TOTAL DISABLEMENT

 Code
 Cover
 Premium

 A 5
 £ 5,000
 £ 6.00

 A10
 £10,000
 £12.00

 A15
 £15,000
 £18.00

 A20
 £20,000
 £24.00

TEMPORARY TOTAL DISABLEMENT (Totally unable to follow occupation — maximum 104 weeks excluding first 14 days).

REDUCED PREMIUM IF

ADDED TO CODE A. Premium Cover Premium Code Code XD20 £ 8.00 £20/wk £10.00 D20 **XD30** £12.00 £15.00 D30 £30/wk **XD40** £16.00 £20.00 £40/wk **D40** £20.00 XD50 £25.00 £50/wk D50

MANUFACTURERS, THEIR EMPLOYEES AND SCHOOL INSTRUCTORS PLEASE ADD 50% TO ABOVE PREMIUMS

No Proposal Form is required. Provided you are between the ages of 16 and 65 and warrant you are physically fit, we can normally give cover immediately we receive your Name, Address, Age, Occupation, Glider Details, BHGA or Local Club Membership Number and Cheque. Just write direct to Cowes.

GLIDER COVER

Full Ground Risks but excluding flight risks and first £5 each claim (Includes 30 days use abroad) Each Additional £50 Value — add £1.00 Premium.

£300 £7.00 £350 £8.00 £400 £9.00

LIFE AND ENDOWMENT ASSURANCE

There need be no Premium loading to cover the Hang Gliding risk. Just tell me your requirements.

REGGIE SPOONER

INSURANCE BROKER FOR THE BHGA, CLIFTON HOUSE, BATH ROAD, COWES, I.O.W. PO31 7RH. TELEPHONE: COWES 2306

BHGA Annual General Meeting 19th March, 1978

As required we are giving you notice of two proposals for changes to the Constitution that have been recommended by a majority of Council Members:

Proposal 1:

Under paragraph headed "THE COUNCIL" sentence 2 currently reads

"Not more than two of them shall be from any one Member Club."

It is proposed that this sentence be altered to read:

"Not more than two of them shall be from any one Member Club or Associated Organization."

Proposal 2:

Under paragraph headed "VOTING AT THE ASSOCIATION'S MEETING" Voting (i) currently reads:

"shall be by individual members in membership classes (a) (b) (c) and (d) only and by member clubs on behalf of those members that give their vote to their member club representative."

It is proposed that the wording after "... (d) only" be deleted and the following words inserted:

"Either in person at the meeting or through a postal ballot in which votes must be received by the Returning Officer not less than three days before the meeting." Voting (ii) delete this sub-paragraph entirely.



Midas C. Latest specification. Fantastic performance for pilot who really wants to go places. Soars in 14-45mph winds. Rigged for seated or prone and is in excellent condition. Ring Ickford 244 (9am-5.30pm).

For sale. Airstream prone harness, good condition £25. Good reason for sale, contact Ian, Ibis Hang Gliding School, Merthyr Tydvil or 'phone Merthyr 3780.

Chargus 18/50. Ideal for beginner, also soarable. Immaculate condition, beautiful yellow and black sail, complete with seated harness and bag. £120. Must sell before buying new kite. 'Phone Quainton (Bucks) 297 evenings.

Firefly 20/17.
Intermediate. Must go before I return to sea in January. Ideal 11st.plus pilot. Dark blue sail with red/yellow panels £225 ono. Gordon Bull, 17 Elmbank Road, Langbank. (Nr. Port Glasgow) Langbank 769.

Wasp C4 221. 2½ years old, yellow/black sail, anodised control frame, spare l/e boom and c/f upright, seated harness and bag, picture supplied on request. £145. 'Phone 01-686 2726 (evenings & weekends).

NZ Lancer IIb, 185 sq. ft., up with the Gryphons, 32 ft span, no deflexors, fast predictable roll rate, plenty pitch response, heaps penetration, £520 Phil Mathewson 01-673 0401.

Wasp Falcon IV. Nine months old, good condition, flies extremely well, contact Richard Worth on Enstone 322.

Birdman Firebird. Exfactory prototype Firebird S. Excellent intermediate kite. Good condition, no accidents. Blue terylene sail plus seated harness. £220. 'Phone John Dent, Oxford 40902. Wasp C5. Perfect, quiet, multi-coloured terylene sail, prone frame, reversible rigging for seated. Wing wires, Keel cambering, plus bag and harness. £200. 'Phone 01-778 2434 01-854 2226 (evenings).

Phoenix 8. Medium, immaculate condition, multi-coloured with sail windows. Yours for £450 ono. Ring Peter Hanks, Chichester 81679.

Breen Hi-Fly. Anodised finish, with quick rig system, seated and prone rigging can also be flown dual. Suitable for under 11st. beginner or intermediate. Harness and bag. Bargain at £190. 'Phone Wickham 833170 after 6pm.

Phoenix 6B Junior, with keel pocket. Condition as new. Only 1½ hours in air. Multi-coloured, seated harness and bag — leaving England. £400 ono. 'Phone Susie at Beckington (Nr. Frome) 437.

Midas E. Two months old, as new £380. Contact Richard Worth on Enstone 322.

Wanted. Skyhook Sunspot or Skyhook Cloud Nine in good condition. Reasonable price paid. Transport available. 'Phone 061-643 1389, Mr. Armitage.

Avon Kites Swift. £280. With bag and seated harness. Immaculate condition, used very little. Reason for sale, buying Hustler. Tristan MacDonald, Cockwells 398 (Cornwall).

Hiway Cloudbase. 20ft. Never pranged, in excellent condition with waterproof zipped bag. £240 ono. Tuition available. 'Phone George 031-663 6278.

McBroom Argus. Bag, seated harness, new keel, new side tubes, new cross boom, new heart bolt. In as new condition structurally, £120. 'Phone Cockwells 484 evenings.

Ridge Rider. Gold and green sail. Excellent beginners kite. Carrying tube included. Excellent condition. £150 ono. Ring Northwood (Middx) 23697

To clear. Six × eight ft. lengths 11/2 in. o.d. 16 gauge tube, HT30TF. One 17ft. 1in. o.d. 14 gauge HT30TF tube. One new terylene Skyhook 3A sail, black/red/gold and Wasp seated harness. £90 the lot. Buyer collects or pays carriage. Will arrange carriage if required. Write to D. Robertson. York House, York Place, Cullen, Moray, Scotland.

For Sale NOW Class I Moyes Stingray, 185 sq. ft., plenty penetration, 28 ft 6 in span, no deflexors, land on any blade of grass, £485. Phil Mathewson, 01-673 0401

Wasp CB240. '75
model, seated, prone,
'A' frames new with
seated harness only and
spare parts £200,
Contact Bob, West
Kingsdown 2724
(Kent).

Wings! First edition.
Mint condition copy of
this historic document.
(January '75) available.
Offers please, to Tony
Fuell, 74 Eldred Ave,
Brighton. B'ton 502452
(evenings).

Plans wanted. For the Icarus II Easy Riser. If you have them, please 'phone Taunton 87922 Ext. 324.

Wasp 221 C4.
Red/white and blue sail, flys, soars, forgives.
Ideal first kite. Ready to fly complete with seated harness and bag. £160. Peter, 01-892 0461. (Richmond).

Wanted. A good prone harness and also a seated harness. Fair price paid for both. 'Phone 066-76 2414 and ask for John McConnachie (office hours) or write 7 Lowers Way, Kinmylies, Inverness. Cloudbase. 19ft. radial, good flyer, attractive sail, seated harness and bag. £250 no offers. Dickleburgh 515 (Norfolk)

Midas C. Perfect condition, never been pranged, white sail plus seated harness and bag. 'Phone Taunton 87922 Ext 324 (day) or 01-804 3945 anytime. John Barber.

Kestrel Wingdinger Mk
II performance kite.
Orange/blue and yellow
sail. Twin deflexors and
keel camber wires.
Seated or prone. Good
flyer, no prangs, A1
condition. £235
including seated harness
and carry bag. Bob
Jones, Ringwood
(Hants) 2472.

For sale. SST 100C, £380. Dark blue/light blue/white. Excellent condition, a real eater. Complete with spares. Contact E. Gibson, 7 South Row, Isabella Colliery, Blyth, Northumberland. 'Phone Cramlington 712220. Falcon 4. Gryphonitis forces sale. Over 25 miles cross-country. New style triangular control frame and new bottom rigging. £360 ono. Henry Heggie, 5 Randolph Street, East Wemyss, Fife, Scotland. 'Phone Buckhaven 71379.

McBroom Cobra 200. With carrying bag and seat in BHGA colours. 12 months old. Excellent condition, never pranged. £180. 'Phone Cardiff 732170.

Kestrel Windhover. An ideal novices kite, complete with bag, seated harness and spare control bar. £100. 'Phone Bob Dear, Chertsey 60478.

Small, cheap, secondhand kite wanted for my son and daughter. 'Phone Ian Hayes, Basingstoke 62536. Cobra 222. Orange and white sail, black wingtips and tail. Bag and seat. £185 ono. Dave, Bilston 46939.

Scorpion B. Blue/black with white tips. Plus bag. £395, no offers.Excellent condition. 'Phone 0254 885909 (Blackburn)

Wasp 221 C4. Good condition, yellow and red, seated with carry bag. £125. 'Phone Southend-on-Sea 520060.

Wanted Midas E. or good SST 100B. Will travel to purchase a good one. 'Phone George 031-663 6278.

Wanted. Hand operated swaging tool for 3mm and or 2½mm wire. Must be reasonably priced or hireable. 'Phone Blackpool 28127, ask for Paul.

Small ads must be limited to 35 words. Non BHGA members or commercial small ads will be accepted at a cost of 5p per word. Send (a minimum of 20 words) to the commercial editor together with a cheque or postal order for the correct amount crossed and made payable to the British Hang Gliding Association. Copy date: 18th of month preceeding publication.

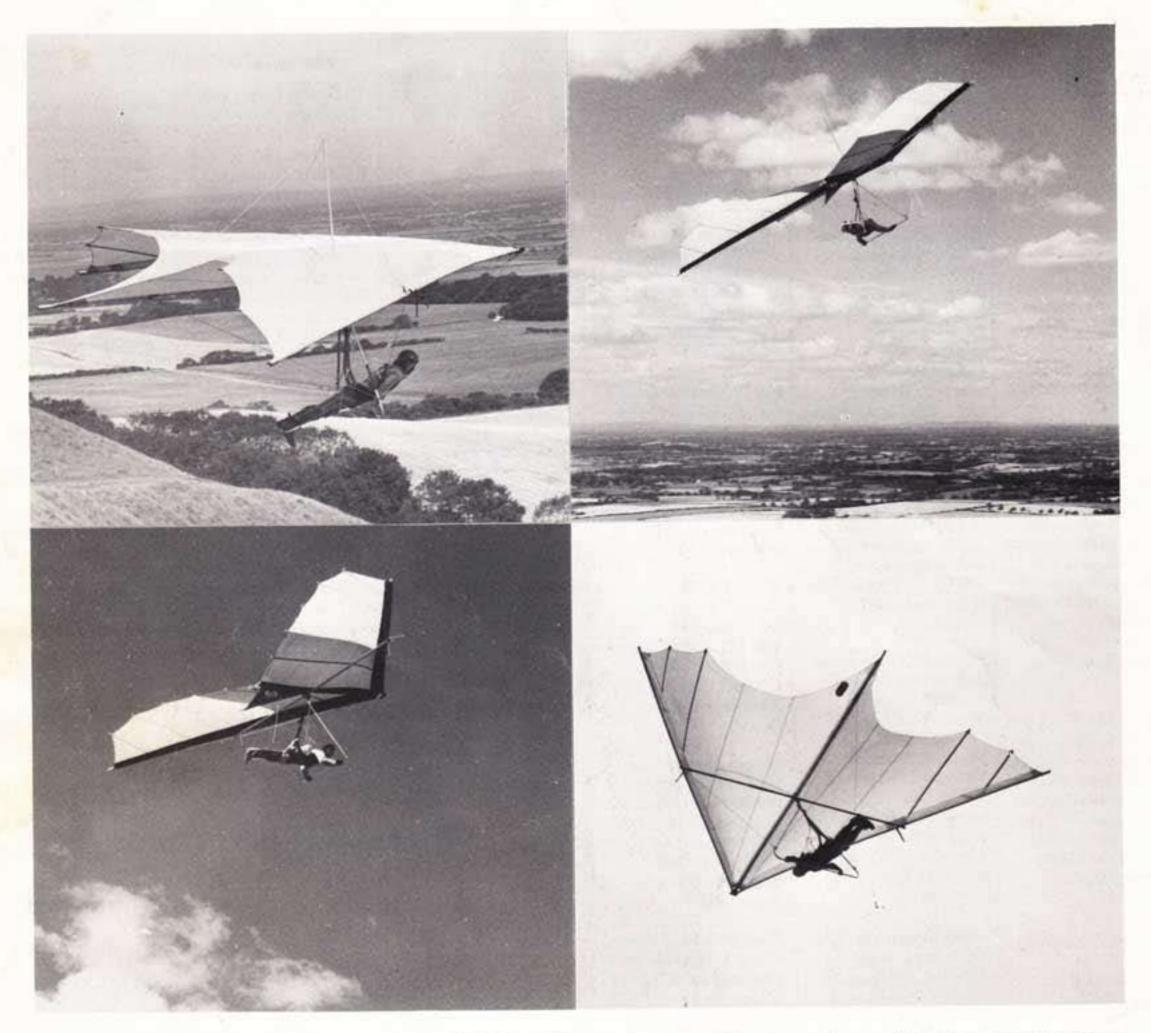


BARGAIN introductory price just £1-98 + 20p p+p

Cheques & P.O.'s to:-C&H Tee Shirts, 2 Braxted Lane, Gt. Totham, Essex.

perfect new yrs. gift small, medium or large.

Cloudbase and Scorpion Class 1 and Class 2



In the British Hang Gliding League 1977, a Scorpion was the top placed British production kite. Also in the '77 League, in a 'no limit, go for it' cross-country task, Bob Calvert flew his Scorpion literally miles further than any other machine. If you want highest performance with light and predictable response, Scorpion's the ship for you.

If you're new to hang gliding or want to concentrate on an F.A.I. Class I glider, the Cloudbase is the ideal novice/intermediate machine. It handles like a dream and is very often up with the higher aspect ratio kites.

