

<u>Inquest</u> **snagging**

AN inquest heard how the power unit on Howard Edwards's prone trike may have snagged on a rigging wire causing a fatal stall.

Co-designer of the unit, Bill Brooks told the North Bucks coroner Rodney Corner at Aylesbury how failure to connect the torque/thrust link from the engine to the harness webbing could have left it free to swing from side to side.

A torque reaction as the throttle was closed would have caused the power unit to swing to the right. Witnesses told how Mr. Edwards, 35, appeared to look over his right shoulder before the Cyclone Mark II

entered a spiral dive at 70ft.



Introducing Ruth

RUTH Kohlman, 27, has been appointed BHGA office manager and began work at Taunton on July 5th.

She was chosen unanimously from 42 applicants of whom ten were shortlisted and attended for interview.

Originally from East Anglia, she trained at Cambridge college of arts and technology and has lived in Taunton for the past six years where she has worked in a variety of jobs.

She has already been for a dual powered flight with John Long and says she is keen to learn to hang glide.

But I want to get this job sorted out first," she said. surprise at getting the job was matched when a snap-happy Barry Blore took the above picture for Wings!

BRITAIN'S hang gliding team notched another international success by winning the Midnight Sun comp at Bodo in northern Norway. Phil Huddleston came first on a Magic. Report next month.

Mr. Brooks said he had never known anyone with the same all round ability as Howard Edwards but said he had reservations about the re-designed power unit lay-out in which the engine had been inverted and mounted further to the rear to accommodate a fuel tank.

Kenneth Underwood-Ground, Dr. aviation medical specialist in aviation pathology, said the main injuries were multiple fractures to the ribs and a fracture to the base of the skull. jagged ends of the ribs had punctured both the right lung and kidney causing massive haemorrhage.

Recording a misadventure verdict, the coroner said: "It does occur to me that the design of this aircraft and the way it was put together may not have been completely thought through."

He said he thought Mr. Edwards had been looking over his shoulder to see what had happened and attempted to unsnag

"He stalled and the aircraft plummeted to the ground", said Mr. Corner.

 BHGA councillor Mike Watson, who helped investigate the accident and gave evidence at the inquest, wishes it to be made clear that he did not tell council "recklessness and negligence had been entirely ruled out" in the investigation, as stated in June Wings!.

In fact he said no evidence had at that stage been found to indicate recklessness or negligence and wishes to make it clear he had no intention to prejudge the coroner's decision.

See tributes on page 13.

Altitude record?

THREE pilots climbed to almost 9,500ft. ASL in wave lift over the Yorkshire Dales to notch what is thought to be a British altitude record.

Dave Harrison, Jenny Ganderton and Simon Murphy took off from Wether Fell at about 6pm on Friday July 2 and encountered steady lift of 1-200fpm.

Eventually Jenny headed off cross-country and the three eventually all landed in the same field and went to the same pub at Bedale after 24 miles and three hours.

The highest altitude recorded by Dave on his Demon was 9.450ft. ASL at which point he estimates Jenny and Simon, on were 150ft. below him. His Magics, maximum height gain was 7,650ft. ATO Jenny claims to have sunk 50ft, at take-off, which would give her a gain of about 7,550ft., or 34ft. more than official women's world record. Unfortunately, her barograph was in her car at the time...

Towing

BRIAN Wooltorton's Vector entered an ever steeper climb until the weak link in the fixed line towing system broke, an inquest at Aylesbury heard.

But 36-year-old Mr. Wooltorton, from Felixstowe, was unaware of the dangerous attitude because he was looking for his stirrup, said witness Bill Brooks.

Mr. Wooltorton was demonstrating the fixed line system at the BHGA towing seminar at Worminghall airfield on June 6.

victim

His brother Robert was the release man in the back of the car. He said the weak link in the 700-foot nylon rope broke at about 90 feet.

"Immediately the link broke I released the cable," he said. watched the kite go into a stall".

The glider came out of the stall but did not seem to have much airspeed. Then it appeared something broke and it "just fell" he said. "I believe one of the wings broke."

The inquest watched a film of the accident and BHGA council member



Goodbye goodluck!

AFTER many years' faithful service to the BHGA, Chris Corston performed one of his last duties for us on June 26 by drawing the winning ticket of our Annual Draw.

BHGA chairman Roy Hill presented Chris with a superb painting, on behalf of the association, of a hang gliding scene by David Bridge who has displayed in the Royal Academy.

Percy Moss presented Chris with a cheque from the funds raised through members' donations.

position'.

I have had just over five

years in the 'seated

very camera-shy since

my accident but I don't

think it would have done

the sport a lot of good

for it to have been

widely known that I was

in a wheelchair because

accident. Now I have

gone it does not matter."

hang gliding

"I know I have been

Chris said: "The painting will be a constant reminder of the last seven-and-a-half years. "Sincere thanks to all who contributed to my fund and to those who have written wishing me well for the future.

On the back page of June Wings! it stated I broke my back in '79. It was in fact 1977 - So

Skymaster mods

Sports Adventure Equipment report two detail improvements to their Skymaster parachute system. modifications involve the fitting of a steel seating washer for the parachute release pin and the replacement of the spring clip in the release cable with a special speed link of superior strength.

All users have been informed but if anyone has begged, borrowed or stolen a Skymaster and has not received the update, please contact Adventure Sports and and parts instructions will be by supplied return. Adventure Sports Equipment, 127 Wath Road, Mexborough. South Yorks.

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contributions to the Editor at 72 Hartley Avenue, Leeds LS6 2LP. Phone Leeds (0532) 451891

Adverts -

 to the Commercial Editor, see back page

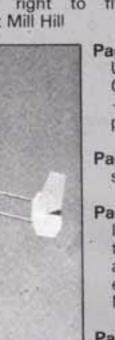
Subscriptions business -

What's afoot this month?



Page 4 — There were some horror stories from Glenshee where Robert Bailey claimed his third Scottish Open title.

Page 5 - Why you should dig deep to protect our right to fly, now irrevocably lost at Mill Hill

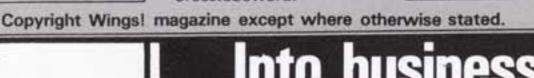


Page 26-7 — Power pages.
Ultralight soaring by GEORGE WORHTINGTON in the Wanderer, pictured left.

Pages 28-29 - Classified section.

Pages 30-31 - What was lan Trotter, right, doing at the Celtic Cup? about the whole debaucherous episode as told by MARTIN PINGEL.

Page 32 - Mainair prize Crosstubeword.



THAT famous flying act - Johnny double Carr and Michael Carnet means business.

Brighton-based The league pilots have started trading as Sky Systems, suppliers of "quality hang gliding equipment".

Michael's British hang gliding career began three years ago as an instructor for Graham Slater and went on to design the Ultra Sports

Michael said Systems would concentrate on supplying the competition market on the basis that "what Calvert and Slater want today" the average club pilot will want tomorrow.

Sky Systems will be moving into workshop premises soon but can be contacted via 143 Loder Road, Brighton BN1 6PN. Phone 505892 or Burgess Hill 47654 or

and all other BHGA

to the Taunton office, see back page





What were Britain's top pilots doing while the Americans were ridge-skimming and throwing hoolies at Semerwater? The answer is on page 21. Picture — Steve Thompson.

Page 7 — Who really invented the spinning

Pages 8-9 - French Connection develop-

ments and the conclusion of RICK

MASTER's three-part special on the

orientation and decompression.

Pages 10-11 — Cosmopolitan.

France's

Owens Valley.

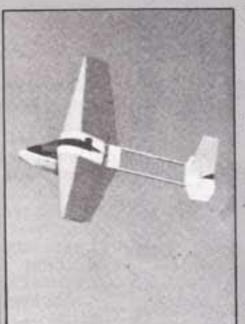
Pictured by Mark

Gerard Thevenot with

Jenny? JENNY GANDERTON on dis-

Pages 22-3 — Cross-country special.

Page 24 - Second-hand Glider Which?



BHGA training officer

Retiring BHGA secretary

Chris Corston

More late news p31

Bob Harrison should conduct an urgent appraisal of the value of dual trikes for ab initio training of hang glider pilots, council decided.

'lost stirrup

Mike Watson told the inquest both the towing speed and rate of climb were greater than he would have liked.

When the weak link broke it placed an even greater stress on the glider.

Group Capt. Anthony Balfour, consultant pathologist said Mr. Wooltorton received multiple injuries but the main one was a multiple fracture to his skull.

North Bucks Coroner Rodney Corner said the pilot seemed to be "all over the place" from the start and was desperately searching for his stirrup to give him more stability. He praised the BHGA for the prompt way it had handled the accident by holding an inquiry and agreed that fixed line towing should not get a black name.

Verdict: misadventure.

 It was incorrectly stated in June Wings! that the accident involved a static winch system. In fact, the only static winch at the meet was that demonstrated by Mike Lake, of Norwich.

See tribute page 13.

3



Bailey wins the 'horror' Open



by Jim Brown

Ralph Bygott - went for it

ROBERT Bailey has won his third Scottish Open Championship, at Glenshee on June 26-27.

But the real winner was the weather, more reminiscent of November than June, which allowed only one dubious task to be completed.

On Friday morning 72 potential competitors gathered at the ski centre at the base of Cairnwell, Glenshee.

The briefing was simple — open distance XC from the Cairnwell; go as soon as possible with no limit either on time available or number of attempts.

The best distance would count and there would be a bonus of 100 points for landing past Braemar.

On top of the Cairnwell conditions were far from good. Wind speed was 25-35 mph and cloud base was level with takeoff, occasionally lifting to reveal huge wave cloud formations above the mountain.

First to go, using a brief lull in the conditions was Ralf Bygott on his Gyr who in a relatively uneventful flight landed on the golf course at Following Ralf's Braemar. take-off, the cloud came down and shrouded the mountain. preventing further any attempts. Most of the competitors returned to the ski centre café to await an improvement.

Meanwhile it was learned

Ralf had made a successful attempt and that the competition task was therefore "on". In retrospect this was perhaps a wrong decision. It meant that any pilot who wanted any chance of winning the competition had to take off and attempt the task in worsening weather.

In the event, only 26 decided "to risk it", the others quite sensibly, in my opinion, chose not to fly.

Conditions, although quite smooth for a time at take-off, could only be described as horrific, with wave rotor and turbulence combined with low cloud.

Stories of massive turbulence and out-of-control manoeuvres were common to all who flew. Had I known what wa going to happen I would not have flown. The most pleasing part of the flight was the landing! I witnessed the Swiss flyer, Heinz Znyssig, in an almost vertical 80ft dive induced by wave rotor. Needless to say, he landed immediately afterwards.

It was suggested by many pilots later that the task was more a test of "bottle" than pilot skill.

Lower

The day ended with a gathering at Dalnaglar Castle where we relaxed and swapped horror stories.

On Saturday the weather was worse with low cloud forcing the pilots to sit it out in the pouring rain hoping for a clear spell. On the Cairnwell at least it never came. In an attempt to beat the weather the organisers announced that Mount Blair, which is a lower mountain, could be used as an alternative take-off.

Called

Ali Milne and Dougall Scott

made a vain attempt at this site but failed to complete the 5km minimum to score. Either pilot could have won the cup had they succeeded.

The weather on Sunday was very poor, with low cloud and rain and so, reluctantly, the competition was called off.

Presentation of the trophies was made at the Spittal of Glenshee hotel. But because there were no less than five second placings it was impossible to present the trophies for the Scottish Champion or the best distance by a Scot, both of which were to be decided by a fly-off the following Saturday.

Next year's Open will be in July and it is scheduled to follow the Celtic Cup at the beginning of that month.

Thanks to Bob and Irene Dunthorne, Richard Walker and countless others for their efforts in organising the competition. It still remains one of the best in Europe. See you all next year!

B.H.G.A.

Clubman's Mere 82.

THE annual B.H.G.A. members' event will be held at Mere (Wiltshire) on 4th and 5th September 1982 — Friday 3rd can be a practice day.

The site will be the Rifle Range, as last year. The relaxed style of this well-known competition will be maintained — so everyone come along and have a great time. The manufacturers will be there with displays and shops, there will be a second-hand kite mart and all the usual facilities you have come to expect.

All the competition events are to be entered for on arrival.

Open cross country. (max. distance for either Saturday or Sunday)

Distance knock-out: section A. single-surfa

section A. single-surface gliders. section B. double surface gliders.

Timed precision flight.

 Bog Rog Trophy (gliders with nose angle of not more than 90° which have neither sail battens nor deflexors).

5. The Club Shield (teams of four — but they must have been members of the club for at least six months).

Although the event is being partially subsidised by the B.H.G.A., site fees will have to be charged to help to reduce the high cost of this weekend:

a. All in: competition entry fees, camping and free-flying £5.

b. Camping and free-flying £4.

c. Camping only, no flying £2.

Please note

Free-flying will be strictly controlled as all competitions will take precedence.

Powered Triking will also be permitted but under special rules which will be available on the day.

If you prefer to stay in Mere town for B&B, you can contact the Information Centre on Mere (0747) 860341 for names and addresses.

The old team will be running the show — Percy Moss, Manager; Bob MacKay, Chief Marshal; Terry Flower, assistant Chief Marshal; and all the other gorgeous girls and boys.

See you all at Mere 82.

Percy

Results

		r omits
1.	Robert Bailey	400
2.	Lawrence Adam	392
2.	Ralf Bygott	392
2.	Donald Carson	392
2.	Alistair Milne	392
2.	Dougall Scott	392
7.	Ken Hiebert (Canada)	367
8.	Malcolm Clee	235
9.	Simon Ogston	198
9.	Werner Hindmarsh	198
11.	L. Lynch	181
12.	Richard Iddon	171
13.		168
14.	Ian Currer	165
15.	Mike Hibbit	163
15.	Heinz Znyssig	
	(Switzerland)	163
17.	Peter Hargreaves	157
18.	Mike Dale	149
19.	Nick Goodyear	138
20.	Graeme Cook	133
21.	Digby Rolf	129
22.	Philip Kurylo	98
23.	Derek Pavey	89
23,	Colin Lark	89
25.	J. Chadwick	68
26.	Richard Newton	58

Advance Notam

From 10 July to 18 July a gliding competition is being held at Dunstable Downs.

Will all hang glider pilots flying this site take particular care to avoid sailplanes during these dates.

They will be returning from XC flights at high speed. In any doubt contact Competition Control on 0582-63419.

Ted Frater BHGA Airspace

Mill Hill: a long battle lost

THE BHGA has lost its long legal battle for the right to fly Mill Hill in Sussex.

Adur district council won its High Court appeal against a magistrates' decision to acquit pilots charged with flying in contravention of byelaws for Mill Hill pleasure grounds.

The case revolved round a technical legal point. The pilots had been prosecuted under an amended bye-law which was introduced after the original bye-law was declared invalid by the

High Court.

The BHGA case in the latest appeal was that as the original laws were declared invalid, they technically never existed. So it was therefore impossible to amend something which had never existed and per se, the new bye-laws must also be invalid.

There was no legal precedent for the case and the argument was rejected by the judges. The only possible appeal is to the House of Lords.

But BHGA solicitor Tony McLaren said he did not think the result had any significant bearing on legal battles at other sites where bye-laws were being contemplated.

"I won't be recommending an appeal because the ruling does not prevent us fighting other bye-laws as the grounds one can fight on are still the same," he said. These grounds were that the bye-laws were uncertain or unfair.

Each case could still be pursued on its merits with the general principle —where bye-laws were inevitable — of lobbying for controlling rather than restrictive laws.

The law at Mill Hill, a southwesterly, now states that pilots can not take-off or land except in an emergency and can not fly in such a way as to cause a nuisance. The maximum fine for breaking the law is £50.

Kelvin Wilson and the other pilots originally acquitted will now face a return before the magistrates unless the council can be persuaded to drop its charges, having won the principle.

That decision will also affect what the BHGA ultimately has to pay in legal costs which will cartainly run to several hundred pounds.

For the future, he urged increased vigilance o representations could be made as soon as bye-law proposals were published.

"I feel we have got to say to the Home Office that bye-laws which allow you to do things but impose a measure of control are OK, but restrictive ones are not.

"And we must point out that there are situations where they are totally unacceptable as was the case at Dunstable."

COMMENT

THE fight to protect sites continues. Our fighting fund is spent. We need your money to protect your rights in the courts.

To concede one hill may not seem an end to flying, but there is no doubt that the pressure would start somewhere else. It could be your favourite take-off point. At least one other bye-law threatening hang gliding is awaiting a Home Office decision. There may well be more. The Home Office's reason for delaying a decision is that they need to examine the issues raised at Dunstable and Mill Hill.

It won't end with Mill Hill.

We will continue to be subject to legal pressure until we become more established. Authority in all its forms can't believe that something as extraordinary as hang gliding can't cause a few problems! We are gradually proving them

wrong.

They will be less inclined to test their theories in the courts if our reputation for defending our rights in the courts continues to grow. It can only grow if we have the money to defend ourselves, and they see we have it.

Legal actions aren't cheap.
Our solicitors don't charge us
the full fees they could
command for their expert
services at the very limits
of the law.

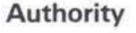
Please put your hand in your purse or your pocket again. I wish I didn't have to ask for it. My cheque for £10 is on its way to Percy Moss, BHGA treasurer at 40, Moseley Road, Kenilworth, Warwicks. CV8 2AQ. Don't let it be lonely!

David Bedding

The time of the signs?

BHGA sites officer David Bedding has written to Bedfordshire County Council urging the removal of "No Hang Gliding" notices which have no force in law.

"It is, of course, the right of any land owner to erect a notice prohibiting an activity, even when the law would not support any action to prevent that activity," he writes. "It is curious that a public authority can make use of this ploy on land that it manages for the use of the community.



"The real danger of the situation is that not all who see the notices realise that they have no legal force. Many talk to us and are amazed by the real facts. Others must consider we are breaking the law, as official public authority notices generally have the full authority of the law. Our members have no wish to be known as law-breakers.

"We do not wish to encourage other members of the public to disregard notices that are supported by the law. On the other hand we would be resistant to taking the other path —



David Bedding eyes on the sky

that of acknowledging that Bedfordshire County Council has unlimited authority.

"I feel that the best course would be for the council to announce that they erected the notices while they examined possible dangers to the public within their area of responsibilites, and have now removed them because they are satisfied that the public are not unreasonably

threatened.

"I understand from the Chairman of the Dunstable Hang Gliding Club that relations with the Rangers are good, despite the notices. There have been no suggestions that operating procedures should be modified."

In a lengthy letter to Home Office Minister of State, Timothy Raison, David Bedding urges the Home Office to "make full use of the knowledge of the CAA" when considering bye-laws relating to hang gliding.

He refers specifically to the Home Office's own suggestion of the need for a bye-law relating to the Malvern Hills — a "need" not anticipated by the Malvern Conservators.

ough the total stupidity of two people who

Little hope at Mill Hill

TIMOTHY Raison MP — Under Secretary of State in the Home Office — has rejected a meeting with the BHGA to discuss byelaws banning hang gliding at Mill Hill.

In a letter to Sites Officer David Bedding, he writes:

"I can not accept that the new byelaw is undemocratic or that there had been inadequate consultation. A public enquiry was held in 1976 which recommended (against your views as I recognise) that there should be a byelaw. The byelaw subsequently made was found by the High Court to be invalid, but not on grounds of principle but on grounds of uncertainty. The Court recommended two ways in which a byelaw could overcome this uncertainty.

"The first was was to set a minimum flying height. This was followed in a byelaw made by the Council, but you among others objected to it and the Home Secretary decided not to confirm it. We thought that pilots would be unable to judge accurately whether they were above the minimum height, which in any case we considered too high.

"The Council were told that the Home Secretary would be prepared to consider a byelaw following the second possibility identified by the court. prohibiting flying to the annoyance of people on the ground; and objectors were told that this was what the Home Secretary had decided.

Clubs: why not have a fly-in to raise funds!

 Flashback to last September's Wings! money or your



It's Official!

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A WORLD RECORD

CONGRATULATIONS TO Bob Calvert who flew the winning combination to this new world altitude microlight record.

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STREETS AHEAD OF THE COMPETITION IN DESIGN, R & D AND PURE PERFORMANCE.





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SEND LARGE SAE FOR INFORMATION

The decompression chamber reveals:

Hypoxia's hidden dangers

A VERY valuable day course on the effects of decompression and disorientation was held at the Royal Navy Air Medical School, Portsmouth. JENNY GANDERTON reports:-

FIRSTLY we had a lecture on the symtoms of hypoxia and all the things that could happen to us when we went "up" in the decompression chamber.

Symptoms of hypoxia

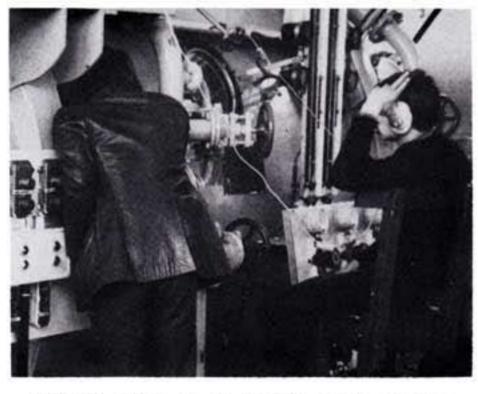
4,000ft Night vision reduced 8,000-10,000ft Ability to carry out new skills reduced 10,000-15,000ft Ability to carry out familiar skills reduced 12,000ft Visual activity reduced 15,000-20,000ft Impairment of higher centres in the brain — like getting drunk. Reasoning. judgement and skills all reduced. Personality changes. Blue lips, white nails, hyperventilation. Become unconscious if exercised 20,000-25,000ft All the above but more pronounced. Unconscious within a few minutes.

Symptoms of hyperventilation or overbreathing

Pins and needles and anxious feeling, dizzyness, muscles twitching, spasm, unconsciousness.

Hyperventilation can have other causes apart from hypoxia. For example, when using an oxygen mask nervousness and tension can cause you to hyperventilate. Excitement or overexertion can also cause you to overbreathe. It is quite easy consciously to control it, and an easy cure is to re-breathe into a paper bag.

If you get the symptoms above 10,000ft. ASSUME it is due to hypoxia and come down to sort out the problem.



"What's going on in there?" BHGA Training Officer Bob Harrison takes a peep into the decompression chamber

Pictures by Malcolm Hurst

Decompression sickness

Commonly known as "the bends", "chokes", "staggers", "creeps". The names expain the symptoms. A bend makes a joint bend and be painful. Rubbing it increases the pain. It's possible to get decompression sickness above about 18,000ft.

We were divided into three groups to go in the decompression chamber and be taken up to 25,000ft and taken off oxygen for four minutes. Quite a wind-up!

When our group's turn came, we had already watched the first group, so we were pretty sure we would survive. Inside the chamber we were fitted with oxygen masks, and told that more American pilots died in the war through badly-fitting masks than were shot down!

However they checked thoroughly that the mask made a good seal, and there was a doctor in the chamber with us the whole time. We could communicate with each other and the outside world with microphones. We were taken up to 10,000ft. and then checked to see that everything was OK.

It was quite an effort to breathe through the mask — you had consciously to breathe slowly to avoid overbreathing

Then we were taken up to 24,000ft. at 4,000ft. per minute up! Some thermal! At 24,000ft. two people at a time disconnected their oxygen and were given simple tasks to do, such as playing pat-a-cake or draughts, or repeatedly signing their name and subtracting 13 from 1,000 — difficult enough even with oxygen.

Most people in our group were able to go four minutes without showing severe symptoms of hypoxia, but all of us were affected. It showed by not knowing whose turn it was playing draughts or your writing becoming very scrawly. In a couple of cases, people had to be reconnected to the oxygen early,

and were unable to do this themselves.

When asked, they could not remember that this had happened. The most insidious thing about hypoxia is that you don't feel any different at all — you don't know you have been affected. Even though you can see that your writing has become scribbly, you still think you're perfectly OK.

When you reconnect, you sometimes get even worse before you start to get better. This is known as oxygen paradox.

Blindfold

When we'd all been disconnected and recovered we were taken back down again at 3,000 fpm not the kind of sink I'd like to fly into!

Next, we were deliberately disorientated. I was blindfolded and told to sit in the revolving chair, head back. When they said the word I had to bring my head forward as they stopped the chair, and take off the blindfold. It's a terrific shock. The room appeared to go round and round, and I slewed over to one side, unable to sit up straight for at least a minute. This is vertigo. It is greatly exaggerated by head movements, so if you are ever in a spin, keep your head as still as possible.

Other tasks involved being spun round with your eyes open, then having to read an eye chart when the chair was stopped. You can't do it because it makes your eyes flicker from side to side, so you can't focus on the chart. If you were in an aircraft in a spin, you wouldn't be able to read your instruments.

In another experiment you were spun round in the chair, then had to pick up a handker-chief by your feet — also very difficult.

All in all, it was a very interesting and educational experience. I would like to thank the RN Air Medical School for the opportunity, and Dr. Dunston Hadley, for persuading them to do it

FLIGHT BRIEFS

Michael's Delta

SOUTHERN Club's Michael Carnet has become the seventh British pilot to gain the FAI's Delta Silver proficiency badge.

His distance flight was on May 16 last year from Nappa Scar, Wensleydale to Hadrian's Wall (77.9km) while the height gain and duration requirements were completed from Devil's Dyke on March 13, 1982. He made a height gain of 1,300m. during the five hours 11 minutes flight.

Records co-ordinator Rick Wilson congratulated Michael and reported he still had five pilots yet to complete their tasks. Michael holds the sport's 19th Delta Silver, with pilots in Europe doing well.

Clubs quit SHGF

BHGA council has accepted the Lothian Hang Gliding Club as a member of the association following its break-away from the Scottish Hang Gliding Federation. Members were advised they had no authority to refuse the application.

Meanwhile the Osprey Club at Inverness and HMS Dolphin club at Portsmouth have become defunct. Half the Osprey territory will now be managed by RAF Moray Eagles and the remainder by a new Highland Flexwings club which is also considering quitting the SHGF as is the Lomond Club.

Shuttleworth displays

Shuttleworth The Collection of historic aircraft will hold main displays on July 25 and September 26. There will be informal flying afternoons on July 11, August 8, August 29 and October 31 and a flying evening on July 17. Further information from the Old Warden aerodrome Biggleswade (076727) 288.

FLIGHT BRIEFS

SHGF committee

The new Scottish Hang Federation Gliding committee is: Chairman, Richard Armstong: 13 Ladeside. Newmilns. Ayrshire. 0560-22515 (H) 041-554844 (B); Secretary Robin Smith: Hammersmith Road. Aberdeen, AB1 6ND. 0224-322173 (H) (0224) 882262 (B); Treasurer. Brian Dainty: 6, Bute, St.Leonards, E. Kilbride Glasgow G74 2AZ. 03552-43860 (H) 03552-43944 (B); Safety Officer: Ian Trotter: 1, Trinity Court, Edinburgh EH5 3LE. 031-5527736 (H), 031-3322411 x87 (B).

Members: Angus Pinkerton: 73 Gartmore Road, Paisley. PA1 3NG 889 5632; Pete Finlay: No.1 Cottage, Newton of Strathendry, Leslie. KY6 3HU. 0592-742882; Steve Byrne: 56 Sherbrooke Road, Rosyth. 0383-417447. Tom Hardie: 1 Shempston Cottages, Duffus, Elgin. IV30 2RJ. Hopeman 0343 830683; Simon Ogston: Seymour Street. Dundee. 0382 65437; Bob Dunthorn: Margaretta Cottages, South Espan-West, ade Torry. Aberdeen Aberdeen. 877899; 0224 Gordon Smith: 5 Denview Road, Potterton. Aberdeenshire. Balmedie 03584 3319.

May lottery

The following are the winners of the 500 Club lottery for May 1982:-

C.B. Anderson £54-80, J.P. Whitney £27-40, J.H. Clarke £13-70, R. Clegg £8-22, A.I. Jenkins £6-85, J.S. Higham £6-85, P.N. Newbold £5-48, P.J. Wilks £5-48, N.F. Boarder £4-11, F.L. Young £4-11.

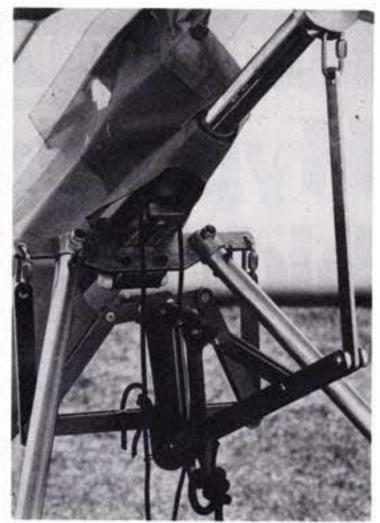
A total of £137 prize money and a like amount for BHGA funds.

Contacts

BHGA councillor Mike Watson has a new phone number — Chalfont St. Giles (0247) 33466. James McMenemy's number is Tidworth (09804) 6147 and not as originally supplied to Wings!



Wings! photographer Steve Thompson deserves scalping for this punny pic, captured during the Foster's Open. Left is Gerard Thevenot, right is Roland Delez.



The

Parths page won but for 30 minutes of bad

THE XC Classic is an outlaw event — no-one sponsors it. No organisation sanctions it. The United States Hang Gliding Association regards it with awed xenophobia.

After their long, uphill struggle to make hang gliding safe, along comes Don Partridge and all those goddam uncertified gliders! They wouldn't touch the event with a 10,000 foot pole.

But they watch it very closely. It is the proving ground of footlaunched flight.

With extraordinary vision, Don chose to limit the contest to flexwings as the only restriction. He loved the easily transportable flexwings and hoped to hasten the day when they would perform like the rigidwings. In the late 70's the sport had entered a period of stagnation because of the newly instituted rules requiring certified gliders in sanctioned events.

Designers in the United States who could not afford the lengthy certification process found themselves denied the opportunity to prove their aircraft in competition while elsewhere in the world the evolution of the flexwing progressed rapidly. By declaring the Classic a non-sanctioned event, Don created an oasis of danger in a sea of safety.

Mellow

It was just what hang gliding needed. The Classic presided over the demise of the Mariah, the rise of the Mosquito, and the glory of the Comet. The Owens Valley offered the test of fire, not just for the machines but for the men who

As this year's Owens Valley XC Classic gets under way, RICK MASTERS concludes his exclusive series with some predictions and a look ahead

flew them. Suddenly, a win in the Classic became the sport's ultimate accolade.

With the advent of the Comet and its clones, the separate paths of the high performance flexwing and the mellow recreational glider nearly merged. The Owens Valley had demanded and received a flexwing that could launch safely, thermal efficiently, fly fast and survive a landing in severe density altitude conditions. It had taken only four years.

But in 1982, the paths will diverge. Things are going to get radical. The Cross Country Classic, as the ultimate flexwing contest, is no more. It has been declared an open field event.

"It's time for another leap," says Tom Kreyche, junior member of the 150-Mile Club and co-organiser of the 1982 Classic. With talk going around that the flexwings were nearing their theoretical limits of performance, he and Don decided that the collapsible rigidwing, epitomized by the Sunseed and the Voyager, would keep the pot boiling. "We don't know where it'll go from here. It might get pretty bizarre."

Just how bizarre is anyone's guess. "We just invite the pilots," Tom comments. "We don't know what kind of wings they'll bring. It could be anything."

Larry Tudor is, in part, responsible. By winning the '81 Open, he fooled everyone into thinking that the flexwings had a chance against the rigidwings, or so believes Eric Raymond. With five wins against Tudor's two, Eric claims he would

have won but for 30 minutes of bad luck.

Gaggle

"Don called a long task," he remembers. "North to Benton, then back down the range to Big Pine. I took off early with the first group of pilots. We were thermalling up in a gaggle when everything just shut down. Everybody went down except me. I was scratching the walls of Coldwater Canyon. I was so low I couldn't see the north Pit! Then I found some marginal lift and took it back up in front of take-off. Everyone was there, waiting. I saw Tudor. He took off and just followed me. And here I'd been flying for 45 minutes!"

Eric expects the rigidwings to dominate the 1982 contest. Evidence supports him. Although only eight rigidwings entered the final Open, three finished in the top five places!

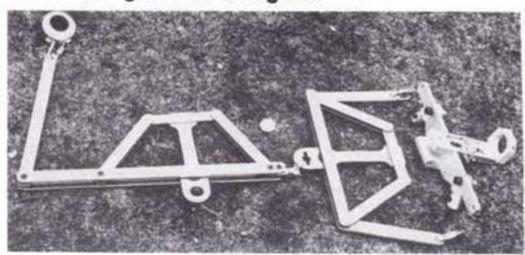
Eric was practising forward tumbles with a rigid harness in preparation for the aerobatic contest at Telluride when the Sunseed failed under negative load and was destroyed in the ensuing crash that nearly cost him his life. When he had recovered from his injuries, rumour has it, he approached Roy Haggard of Ultralite Products with a proposal for a new rigidwing.

Haggard, who had given the world the Comet, was intrigued. Drawing on the computer programming expertise of Peter Lissaman at Paul MacCready's Aerenvironment, they finalised the design of a collapsible rigidwing:

Although the project is shrouded in secrecy and the reports are impossible to verify, the prototypes are described as having tight sails, eliptical tips and a single rudder above the sail. Inside the double surface runs a cantilever beam to

How to make connections

 Jean Louis Darlet — inventor of the French Connection - has adapted the device for simultaneous use in both roll and pitch control, as these pictures by Alan Metcalfe (at Lachens for the Bleriot Cup) illustrate. The glider is a Magic II.



diverge

eliminate the upper rigging. Extensive flight testing began in late April.

Alas, the pods are no more. The clear Mylar pods I grew to love to see other people fly will likely be remembered as the first crude prototype of a highly refined, low drag harness. There was little sorrow at their passing since most of the pilots who had taken them to the Owens Valley refused to use them.

Chris Price claimed they tended to yaw at high speed, but he flew with one anyway, convinced he was getting a 121/2-to-one glide. Others complained that inside the pods they were too insulated from the feel of the wind and the sound of the sail. Alan Reeter, practising during the qualifier, abruptly stalled after taking off and recovered from a high speed dive only a pod's length from the mountain. There was voiced concern that, should a pilot be injured or knocked unconscious in a crash, he could be baked alive inside the transparent, poorly ventilated pod by the desert sun.

Geometry

When asked why he didn't fly in a pod, Eric Raymond replied, "Because they're death!"

The Comet and its clones have undergone a year of refinement. Now pressured by the rigidwings, we can expect to see rapid advances in the variable geometry capabilities of the flexwings. Last year, a few gliders utilized manual tensioners that pulled the two-piece crosstube more into line and resulted in a wider nose angle, tighter sail and faster glide at the expense of roll response. In 1982, the camber of battens may be adjustable in flight by a complex system of cables within the wings. Flaps and other methods of varying surface area are under

development but a true variable geometry hang glider is years away.

The fantail, characterised by the bowsprit Aolus that took the world altitude gain record in the Open, may be adopted as a standard fix for the pitch instability of the new minimally swept wings. For 1982 the Aolus, renamed the Sonic, has been given an internal crosstube, 94 per cent double surface, and eliptical tips, - rather like the Alien.

A look at the daily point totals for the 1981 Classic does not offer much hope for the Europeans this summer. Even though Mike de Glanville of France placed fourth overall, he was still one hundred points away from Larry Tudor. Andrew Wilson, the only other European to place in the top ten, finished ten points behind de Glanville. In 1982, with the introduction of the rigidwings, pilots with over one hundred points will likely find themselves far back in the standings.

My prediction for the 1982 Classic follows (but I'm not about to bet any money on it!):

1st	Eric Raymond	Rigidwing
2nd	7	Rigidwing
3rd	7	Rigidwing
4th	Rich Pfieffer	Flexwing
5th	Larry Tudor	Flexwing
6th	7	Rigidwing
7th	Steve Moyes	Flexwing
8th	Rex Miller	Rigidwing
9th	Jeff Burnett	Flexwing
10th	Dudley Mend	Rigidwing

· Rick Masters has lived in the Owens Valley since 1971. He was the Chief Timer, truck driver and Emergency Medical Technician for the 1981 Cross Country Hang Gliding Competitions in the Owens Valley. His motion picture of the meet, AOLI, COMET CLONES and POD PEOPLE is being distributed worldwide. He is studying mechanical engineering and in the summer offers a guide service to hang glider pilots new to the Owens

Copyright Rick Masters



Jean Louis Darlet with his latest toy.



'Typhoon 'S' Lightning II

YOUR CHOICE FOR THE **BEST DEAL AROUND**

'Demon

Sabre

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mainair sports

Shawclough Rochdale Lancs. OL12 6LN *BHGA approved

-AUSTRIA -

Thevenot's win - one

FRANCE'S Gerard Thevonot won the World Masters in Hang Gliding invitational at Kossen in May with Judy Leden — the only British pilot — finishing a highly creditable 13th.

In unusually good weather, organiser Sebb Hinburger set 20km races to surrounding towns which put up prize money each day. Only drawback in an otherwise successful comp. was the fact that the good conditions meant the course could be completed on two thermals.

Daily prize money was about £250 with about another £400 going to Thevenot. There was no official British team due to a mix-up in arrangements with the Americans who were due to tie in the comp. with the American Cup. Australians Steve Moyes, Stevie Gilmour and Ricky Duncan all finished in the top six.

- CANADA

How I broke the record

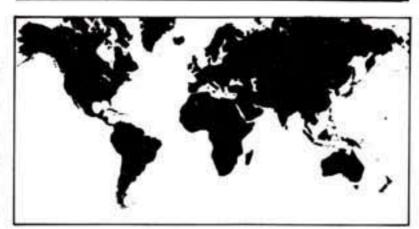
by Willi Muller

THIS is a flight we have been dreaming about for years. We knew it was possible to fly 100 miles from Cochrane Hill — the question was only who was going to be the first one to do it. With my usual luck, it turned out to be me.

Cochrane Hill is just above the town of Cochrane 15 miles west of Calgary, Alberta. It is 330' from take-off to the landing area 150 feet above the Bow River valley.

The weekend of April 17 saw 11 pilots logging over 300 miles XC. A new hill

COSMOPOLITAN



The Wings! round-up of overseas news

and Alberta record was established by Dan St. Louis with 62 miles.

Friday, April 23 was soarable from early morning. At 10am the conditions were straight up gusting to 40mph.

Bruce Galloway, Cliff Kakish and Stu Cameron arrived and we set up our Comets. The conditions stayed strong and only mellowed periodically when thermals moved through.

After about two hours, Cliff noticed a couple of hawks climbing out at an incredible rate and pointed them out to me. "Let's take it," I said.

I flew to about 100 feet out in front of the hill when I intercepted the thermal — about 800-100 fpm up. I left the hill with only about 500' over. I steadily climbed and drifted back and lost the thermal at 11,000 feet ASL — by then I was ten miles behind take-off. Cliff, who had his barograph sealed — open distance XC announced, tangled up his flying wires in the vario and could not get ready in time. Pointing

my Comet downwind towards Crossfield, I got good lift from a plowed field. The gain was not as good as from the original climbout but I was just maintaining or slightly climbing while drifting in the strong wind.

Acme became within reach, unbelievable with only two thermals and I was already 40 miles or better downwind. Just before Acme my Ball vario showed 1000 fpm sink — I felt as if I was just falling down onto the small town. Since the wind was quite strong I picked a farm about half a mile downwind from town for a landing. When I got there all of a sudden my vario started beeping again. The climb brought me again to about 8,000 feet ASL and I could see the town of Three Hills and Carbon where Dan, Ross and I landed the week before.

Happy to know that I would hold my own hill record again, I turned downwind towards the Red Deer River Valley. I knew that if I could make it to the east side of the valley I would break Don Miller's Canadian record.

All that time I was chasing a cloudstreet and it seemed as if I could not catch up to it. At the hamlet of Morin I got some good lift which took me to cloudbase and the start of a 20 mile or better cloudstreet. Being at 13,500 feet and still climbing I just pulled the bar in to zero sink and kept going downwind underneath the cloud. At that time I knew that I had broken the 100 mile barrier so I just kept going straight.

Crossing Sullivan Lake I lost more altitude than I anticipated. The cloudstreet still looked good but I kept sinking. I thought that on the other side of the lake it would go up again — which it did. However, since the going on the last 40 miles or so was extremely easy I did not bother to go back to cloudbase. While going downwind I gained about a thousand feet.

When going across the prairies one does not have to worry about landing areas too

NORTHERN GLIDER SALES

Look who's flying

AZUR



Mark Silvester, League and Grouse Mountain; Graham Hobson, League and American Cup; Bob Calvert, League and American Cup; Pepe Lopez, World Champion, Japan and American Cup; Gerard Thevenot, first place Kossen, first place Lariano.

Come and test fly an AZUR now!
It's
MAGNIFICENT!

8 BRENCON AVENUE, BROOKLANDS, MANCHESTER FINANCE ALSO AVAILABLE 061 973 4085 or 061 434 3364 much. There are farms at least every mile and the decision where to land can be put off to at least the last thousand feet of altitude and that height is only required to check out whether someone is home or not.

I landed at 5:10pm and Wayne Holzer came up to greet me. He told me I was in Coronation which is 200 road miles from Cochrane. We were playing a lazy game of chess when my wife Vincene arrived to pick me up. We arrived home at 2am.

The flight was 142 miles, time in the air 3½ hours, which averages a groundspeed of over 40mph. The glider was a stock 185 Comet, Ball 651 vario/altimeter. I felt the flight was easy and I was lucky to takeoff at the right time. But most important of all, I was in the right place at the right

NEW ZEALAND-

Flights Sails closure

FLIGHT Sails - manufacturers of the revolutionary Shark glider - are to cease building hang gliders.

The decision - announced by Warren Bird in the June issue of the New Zealand Hang Gliding Association's Airborn magazine — leaves Pacific Kites as the country's main manufacturer.

Warren Bird will continue to import the Airwave Magic from Britain. While the Shark enjoyed success at the World championships at Beppu, winning the Class II section, it never caught on world-wide. It was the pioneer of the free-floating bottom surface 100 per cent double skin gliders.

- Spain

GB success

BRITISH-made Typhoons and Magics took the first five places in the Spanish League at Montseny near Barcelona on June 18-20. First was Miguel Lozada, second Santi Font, third Jordi Ginebra, all on Typhoons, fourth Francesc Mula and fifth El Vegetariano, both on Magics.

- USA

Pfeiffer to sue?

LEADING US flier Rich Pfeiffer is contemplating suing Chris Price for assault after the two had a mid-air at the South California Regionals, it is reported.

Price is alleged to have maintained his course in a thermal while Pfeiffer came up beneath him, a situation in which Price, technically, should have given way. Both pilots were disqualified from the comp, after they met noseto-keel. Neither was injured.

Pfeiffer is well-known in competition circles for "thermal-hogging" and was himself once subject to action on more than 100,000 counts of assault with a deadly weapon (a hang glider) after he soared the Rose Bowl baseball stadium.

·ITALY-

Thevenot's win - two

GERARD Thevenot continued his Kossen success by winning the Lariano Triangle comp. at Como and becoming the first to cross the Alps south to north. TONY MASTERS reports.

THE Lariano Triangle is a triangular peninsular between the two parts of lake Como.



Mark Junak over Erba at the Lariano comp

Lake snakes around the mountains 1,000m below and is the first obstacle one has to cross, to reach the higher mountains of the Swiss Alps.

The take-off from Mt. Bollettone 1,300m ASL stands in the middle of the triangle with the Val Padana plains stretching away to the south.

During the competition the weather was exceptional - a pilot's dream - on the edge of a high pressure system we had consistent unstable conditions developing northwards, ideally suited for open distance flying.

Each day we had light S.E. winds which meant most of the flying was straight N.N.W. into Switzerland. In fact everybody was obliged to fly with a passport and every day there was a continuous flow of pick-up cars over the

The first day of the competition - organised by Delta Club Como - pilots went in all directions and resulted in several flights over 50km by Angelo Crapanzano (I), Wolfgang Hart (A), Jeff Scott (USA), Keith Cockcroft (GB) and Stefano Briccoli (I). But it was only an indication of what was yet to come.

On the second day the competition just Gerard Thevenot calls back late in the day after a historic flight. It's the first complete crossing of the Swiss Alps in a hang glider from south to north - 148km to Walchwil, a village just 30km from Zurich.

The third day is a follow-up of the second, a race to the Rhone valley. Bob Bayer (D) flies to Laax 107km, John Pendry (GB) 101km to Thrun, and Gerard Thevenot (F) to Sonvix 100km.

The fourth day has some surprises. Thevenot is in great form, landing at Schlans 102km (again) while Crapanzano and Hartl completely blow it (12km and 8km respectively) dropping out of the top positions. Stefano Briccoli (I) with an 83km flight jumps into second place and Marc Burge is third with an 87km flight. Steve Moyes and Josef Guggenmos after bad starts are both working their way up to the

top positions. At this point Thevenot is AVERAGING 100km a day (four hours flying, four hours waiting and four or more driving back). The competition is now becoming an endurance test, almost everybody is praying for rain, and some are saying that it's tougher than Owens Valley!

The last day promises well and is won by John Pendry (GB), who with an 81km flight to the Lukmanier Pass, jumps into second place. Flying consistently, and averaging 74km a day John quietly consolidated his victory.

Theyenot, with a 23km flight, still is the overall winner and we were only sorry to see his 100km average tumble. He wasn't - he was glad to get back early for once! Marc Burge (CH) with 51km takes third place. The Italian team did well with three pilots in the top ten:

In five days flying with 29 top pilots, more than 6,500km were flown all over the Alps.

		Res	sults	
1	Thevenot	FR	Azur	420,5
3	Pendry	GB	M.Comet	371,1
3	Buerger	CH	Azur	343,3
4	Baier	D	Bullet	334,8
5	Cockcroft	GB	Typhoon	317,6
6	Bricoli	1	Azur	310,2
5 6 7	Crapanzano	1	Vampire II	296,6
8	Moyes	AUS	Missile	294,0
9	Reichholf	A	Demon	288,2
10	Manna	1	Comet	286,3
11	Schoenauer	CH	Firebird CX	286,0
12	Harti	A	Flash	256,2
13	Guggenmos	D	Bullet	233,9
14	Lorenzoni	A	Duck	220,9
15	Blenkensop	AUS	Missile	220,9
16	Magistri	CH	Pirana	213,6
17	Duncan	AUS	Missile	179,4
18	Gilmour	Aus	Missile	179,4
19	Scott J.	USA	Missile	171,2
20	Sigal	USA	Pirana	171,2
21	Harrison	GB	M. Comet	167,8
22	Masters	GB	Comet	165,8
23	Cirla	1	Missile	163,4
24	Strasser	A	Comet	146,2
25	Olschewsky	D	Fledge (W.B.)	108,8
26	Nicoli	1	Azur	105,8
27	Lark	GB	Demon	94,4
28	Pollard	GB	Typhoon	93,5
29	Porcher	A	Flash	62,7



All letters should be sent to the Editor at 72 Hartley Avenue, Leeds LS6 2LP and should be signed and written CLEARLY on one side of the paper only.

Sunny ambitions?

Dear Stan -

I feel the final paragraph of Peter Meredith's letter (May Wings!) sums up the feelings of many flyers within our sport. Wings! is the flagship, the only national magazine read only by members (thankfully!) and here it is giving the impression it is being used as a stepping stone for editorial-ship (sic) of the Sun.

Please, let's stop this unnecessary glorification of articles and return to its previous format where we have a magazine we can ourselves turn to and

have respect for.

NEVILLE ALMOND nr. Andover

P.S. for a comparison, read Vol Libre Magazine, Glider Rider, Sailplane and Gliding, etc.
Also, let's have editorial COMMENT to a letter such as this, instead of sarcasm.

• I wouldn't consider editing the Sun if I was the last man on earth. How you can argue Wings! is more sensational that GR and VLM I can't even begin to understand — Ed

Poets' Corner

Dear Stan -

I was disturbed to read Mr. Peter Meredith's letter in May issue Wings! (Indignant, Alice Springs).

While I lack the experience to submit an "interesting and authoritative" article, I thought the enclosed might help shift the balance a little from the purely journalistic to the slightly more literary style that Mr. Meredith demands.

With Mr. Ewart Jones submitting his W.H. Auden-style verse in the last issue, perhaps this piece that is more in the manner of William Wordsworth, might find a place in Wings! (Perhaps not, these colonials are difficult to please!)

> PETER LANG Sevenoaks

Good Day on the Isle of Wight, May 81

Tiring, I pause, then trudge on up a trail Leading to where the high downs blank the sky. The caber's length of tight packed spar and sail Lurches at each slow step, unwieldy.

At last I reach the top where it can lie, Long, heavy chrysalis on tussocked grass. And then emerge those wings of fantasy, Strain wires, clip catch, pull harness buckle fast.

Helmet fits closely on, stained leather Reeking the sweat of past success and fear. Harness attached, lift bar, stumble in heather As weighted wings press down in quartering air.

The clasped bar steadies, the wind gusts pass, And webbing taut, yes — lightness is there — Adrenalin urged, boots thrust across the grass — Three steps, soles skim, tight-strapped into the air

To fly, borne on the undulating surge Of the sustaining breeze... Steadying pusi To swing beneath translucent wings and urg This bridled bird into the whispering

Now, high above chalk cliffs where waves creep slow, I hang poised, rocked in the buoyant air. Gulls' scream and skylark's song are far below While here taut wires creak beside my ear.

Laughter: another bright wing slips
in view...
Are we, I wonder, as carefree and
happy
Above the Channel's soft streaked
grey and blue
As Icarus over that Aegean sea?

P.M.L.

INSURANCE

DID YOU KNOW

that Insurance Underwriters have paid TWICE AS MUCH TO HANG GLIDER PILOTS as a result of HANG GLIDING DEATH OR INJURY than we have paid to them in premiums. In spite of those heavy losses EXISTING RATES FOR PERSONAL ACCIDENT COVER will be maintained throughout 1982.

DID YOU KNOW

that some major U.K. Insurance Companies NO LONGER REGARD HANG GLIDING AS A HIGH RISK SPORT. In fact through us they offer special schemes for MEMBERS OF THE B.H.G.A. for LIFE, ENDOWMENT, PROTECTION OR HOUSE PURCHASE.

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CONTACT:

REGGIE SPOONER - INSURANCE BROKER TO:-The B.H.G.A. 119 High Street, Newport, I.O.W. or Telephone him or Tim Saul on 0983 522676.

Howard Edwards

Dear Stan —

I learned to fly with Howard Edwards and became the first "idiot" to pass a p.1. on a prone trike.

Time went on and I became an instructor for him and we formed a strong friendship, often stormy, but if you knew Howard, that meant you were all right.

The other week I decided to pop up and see Howard and Sandra and being a totally unflyable day he insisted under great protest from me that we should venture to the local ale house.

While chatting I said how glad I was to have had so much thermal practice for free" so to speak, and Howard suggested I write to Wings! about the prone trike.

Firstly - The idea was to be as near free flight as possible i.e. prone, foot landable etc., minimum power to get you aloft, light weight etc. aerofoil shape to cut drag and retain a good glide. Once aloft use thermals etc. to stay up with the engine off.

Now, the big advantage over free flight is if you blow it. Just reach up, pull the handle to start the fan, and fly off to better looking clouds/fields etc. and start their heads at all, due to very low thrust "genuine people" he had met in hang again instead of waiting for weeks to fly line - through centre of mass. into the situation again and make another mistake and blow it.

off, it was free flight with 50 fpm less back and waving goodbye.



Howard Edwards and his prone trike

sink rate, I learned a lot about staying in lift and thermalling in less time. Thanks to Howard's advice my flying progressed rapidly and safely.

I did several air displays for him, actually we shared a show with some punters called Arrows' or something.

His co-designer and helper Bill Brooks and myself flew over 100 miles, stopping only for petrol - from Aylesbury to Norfolk for the air-race.

Our units could fly in stuff to make trike flyers hair curl and never peck or nod

Something unusual happened as we parted that day - we shook hands as we You see the advantage? With the engine said cheerio, but both of us kept looking

That was the last time I saw him alive so all I can say is "thanks" for the great times we had teaching, flying, sailing and drinking together, Howard I expect a lot of people will miss you. I know I will!!

> Cheers mate, DAVE CLAYTON. Sutton, Surrey.

P.S. A special thank you to Sandra for the present she gave me at the funeral and good luck to her. Anyone who knows her, do give her a call and talk hang gliding as she is as interested as ever and would love to hear from you.

Dear Stan -

Like hundreds of others, I was taught to fly by Howard Edwards. I am sure I speak for all of us in saying how deeply saddened I was to hear of his tragic death in a powered hang gliding accident.

Howard was a gifted teacher of hang gliding. His dedication to the sport and his tireless enthusiasm were an inspiration to others. These qualities were matched by his love of life and spontaneity and generosity of spirit.

Howard once remarked to me how many gliding. He himself was one of the most genuine of all, and he will always be remembered by those who knew him.

> PAUL GILDON, Charwelton Northants.

More Poetry

The Ballad of Praise of the **Blackgang Run**

The wind was howling thirtythree I was sitting at home having my tea Turning the pages of the latest Wings! Full of the usual boring things Like CFX and Barry Blore And lots of things that I'd read But then I reached (when I thought I'd done) The Ballad of the Blackgang

An inspiring tale of an 'open' task And in verse — what more could a reader ask? I read it twice and I read it once more Then I let my Wings! slip down to the floor And I closed my eyes and joined in the flight Of those pilots down on the Isle of Wight. And I'm sure I'm not the only

Who joined them in the Blackgang Run. So thanks to "Bob" and his vivid prose For letting me fly whilst a force eight blows Let's hope that we hear from him again And anyone else with a flowing

Too late, Bob!

Dear Bob (Harrison) -

You might be interested in the following little story: I started to learn to fly back in '76 and received my EPL in '77. I then flew very occasionally up until about 18 months ago. I got as far as soaring Rhossili and top landing (flying a Breen Hy-fly, seated). I then managed to loose all my papers while abroad so I contacted the school where I had first started and asked for a replacement P1. The CFI said that, as I hadn't been flying for a while, he would like to see me do three more flights before re-issuing my P1.

I hired a kite and followed the school onto the hill and spent the day doing longer and longer flights down the hill between which I sweated buckets, lost my temper and swore lugging the kite back up

It's what Wings! has been missing for such a long time, A really good story told in

rhyme A powerful tale with a hint of fun Like the Ballad of the Blackgang

ROY BUTTERFIELD (George Cayley Sailwing Club)

 I don't know who should feel most insulted, me or Barry... remind me to get you the Penguin Book of Better Rhymes for Poets for Xmas - Ed.

Thinks: "I'm too good for this I've soared Rhossili". Unthinks. On the sixth flight of the day I tip-stalled into the hill... I didn't really have time to be scared for me, I knew that I could land up dead or badly injured but I was worrying about damaging the kite and the kites on the hillside below me. Anyway I was very, very lucky and walked away without a bruise but I did bend the kite a bit. The two official reasons for the crash were: overconfidence on my part and tip-stalling because I was too close to the hill, flying too slowly. I can think of two further reasons: I was tired after lugging the kite about all day and I WAS ON A TRAINING SLOPE TOO DAMN CLOSE TO THE HILL.

If I had gone off a Rhossili or similar I would have been two or three hundred feet above the hill with lots of forgiving space between me and the hard stuff.

I can understand the CFI not wanting to re-issue me with a P1 without first seeing me fly but I also feel that if I had been given an assisted launch off a cliff edge I could have made a few mistakes and relearnt what I had forgotten without bending me or the kite.

On returning home after a week away I found April's Wings! on the mat with your article inside... Why wasn't it printed in March's edition???

If you wish to use all or part or none of this letter to teach others please be my guest.

DELMAR BICKER-CAARTEN. Guildford

Brian Wooltorton

Dear Stan -

May I express my deepest sympathy to the friends fellow relations of flyer "Wooley" who was tragically killed towing during accident on Sunday I also feel June 6. very sorry for all the people who have put so much hard work into developing towing which is now bound to take a major setback.

All of hang gliding will What total suffer. despair, poor Wooley, poor hang gliding.

MIKE LAKE Norwich

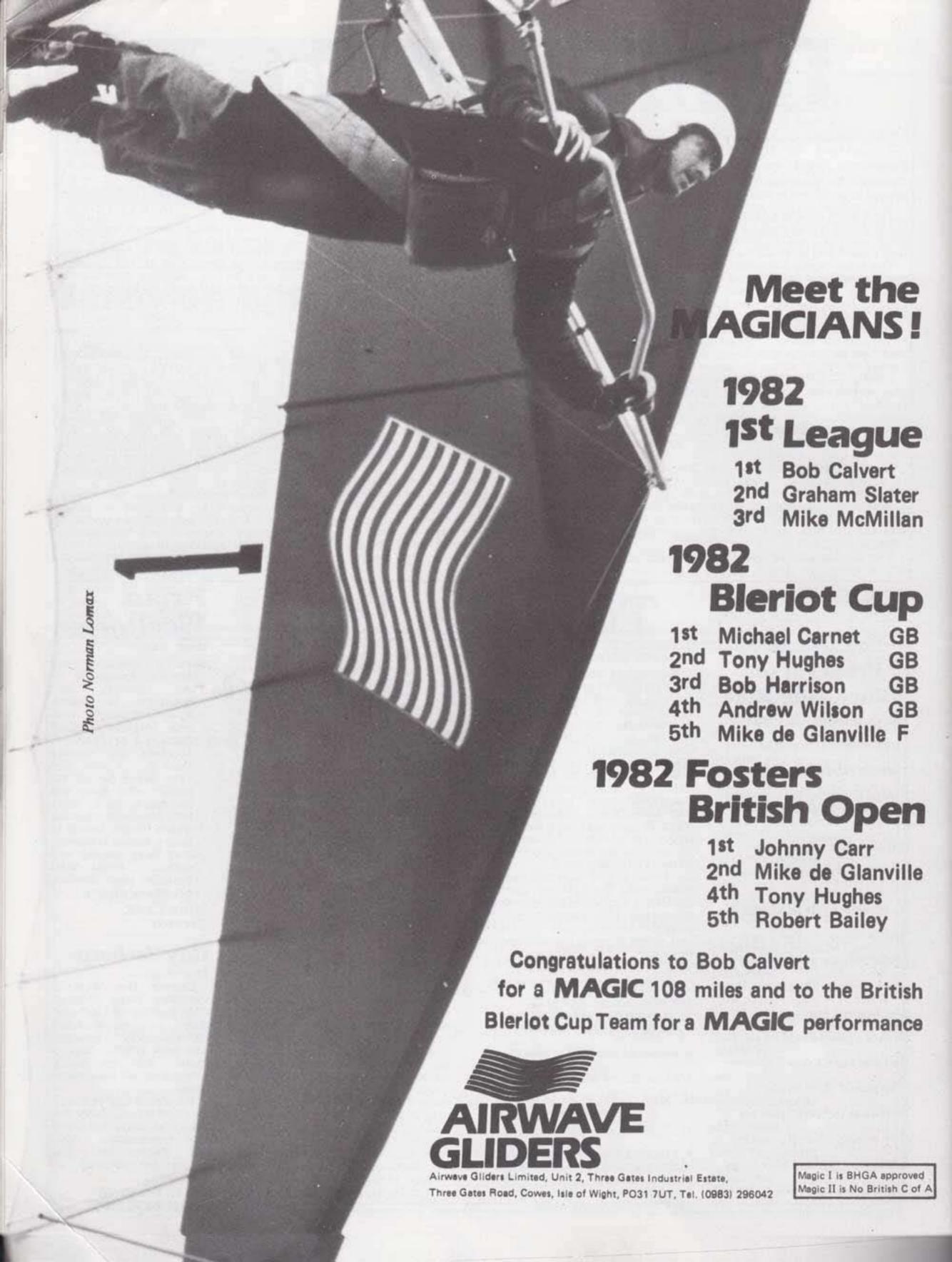
Ray Zschorn

Dear Stan -

During the Western Counties Hang Gliding Club holiday at Lachens, Zschorn Ray unfortunately crashed and was killed. Ray, I know, will be sadly missed by all who knew

We would like to thank Dr. and Mme. Jolly for their fantastic kindness and generosity. Bill Payne and Joe Binns for lending us their van.

COLIN GRAHAM Chairman WCHGC





BRITAIN regained the American Cup from the USA as they got the better of complex tactical battle in the wet and windy Yorkshire Dales.

But it was by no means the walk-over many had predicted. The Americans, coached by former British team boss Brian Milton won three out of five competition days and with both Canada and Brazil coming up, the contest was still wide open when the weather stepped in to convert the early British lead into a win.

Competition director Derek Evans summed it up: "The Americans gave the Brits a great run for their money. The Brits were a bit worried now and again. You adapted very quickly.

The lasting memory of the flying will be the tactical war waged by Milton's men which won them those three days. But the ploy of marking the British out of the race by following them nose-to-tail very nearly let the Brazilians and the Canadians in and

man defences do for football. Said Milton: "Tactically I found it a fascinating competition. I always thought it was a two-nation competition.

some observers felt it did about as

much for hang gliding in general as ten-

"Sometimes we got so carried away we forgot about the other nations the Canadians would have been a major factor if they had had better luck. And for the French it was sad they lost Mike de Glanville, but rules are rules," he said, referring to a decision that the

injured French captain could not be readmitted into the comp. once subtituted.

Derek Evans thanked the Dales club for hosting the comp. the marshals brilliantly led by Jim Brown who arranged the weather - the retrieve drivers, the wind dummies and the longsuffering team who staffed the telephone at the Conistone-with-Kilnsey village hall HQ where the prizes were presented.

THE FULL STORY STARTS OVERLEAF



Above - now then, just because you lost! Robert Bailey under attack from Mark Bennett Below - We three dummies for sale or rent are, from left Bob Harrison, Jenny Ganderton and John Stirk



How they finished

		G	Lear r	Britair	•							Car	nada				
Pilot	Glider	Day one	Two	Three	Four	Five	Total	Place	Pilot	Glider	Day one	Two	Three	Four	Five	Total	Place
Bob CALVERT	Azur (M)		300	95	152	171	883	3	Don MILLER	Comet (106	300	815	
Braham SLATER	Magic	199	188	149	190	0	726	8	Lloyd MATTHEWS	Comet				0	0	170	
like McMILLAN	Magic II	64	274	78	94	0	510	17	Darrel BOSSERT	Comet C			72	122	0	390	6 6
ony HUGHES	Magic (N		184	300	114	156	919	2	Deen KUPCHANKO	Comet	138			129	144	772	
raham HOBSON	Azur (M)		257	84	. 0	0	517	16	Stu CAMERON	Comet (174	227	697	
lobert BAILEY	Magic	99	170	102	91	161	623	13	Ken HIEBERT	Comet	64		26	0	77	276	
		868	1,373	808	641	488	4,178	FIRST			263	928	650	531	748	3,070	FOUR
	Re	s — Bob	Harrison	Magic II	, did not	fly					Res - F	larvey Bi	ACKMO	RE (dnf)			
			US	A								Fra	nce				
eff BURNETT	Comet	181	234	162	0	300	877	4	(S) Mike de								
Mark BENNET	Comet	121	124	125	102	92	564	14	GLANVILLE	Magic II			-	-	-	199	
hris BULGER	Skunkç	214	0	209	102	0	525	15	Jean F. FAUCHIER	Azur	0			76 0	0	351	
oug LAWTON	Sensor	165	117	117	0	0	399	25	Jean ROUSSOT	Azur	112		39	0	227	484	
tu SMITH	Sensor	165	219	192	159	285	1,020	1	Daniel SAINTE-MARIE	Azur	95	130	90	83	82	480	
ruce CASE	Duck	165	135	64	86	0	450	21	Christian RUDOLF	Alpha	0				87	260	
		1,011	829	869	449	677	3,835	SECOND	Yvon BERNARD	Azur	112			147	234	660	
		Res	- Jeff S	COTT (d	nf)				(R) Michel KATZMAN	Vampire		114		0	0	143	(
											518	739	384	306	630	2,567	FIF
			Bra	zil													
Pepe LOPES	Azur (M)	300	203	172	136	0	813	6				Switz	erlan	d			
Carlos NIEMEYER	Comet	135	155	53	300	0			Rolf KNECHT	Vampire	0	97	0	215	122	434	- 0
Carlos FELIPE	Azur	0		151	0	102	423	24		Flash	ŏ	ő	ő	197	0	197	
Julio TEDESCO	Comet	112		53	154	0		20		Flash	ŏ	o	90	207	77	374	- 5
S) Luiz NIEMEYER	Comet	165		53 53	64	-	282	(30)		Vampire	ő	146	39	132	129	446	
Geraldo NOBRE	Duck	135		56	234	0				Centurio		0	121	0	0	121	- 3
R) Carlos LOPES	Azur (M)				-	0	0			Phoenix	2.0	208	75	ő	77	360	
		847	886	538	888	102	3,263					200	7.00	-		200	

Res - Walter SCHONAUER Firebird CX (dnf)

Follow-my-leader American style

THE Yorkshire mist hung low on the hills overlooking the Dales village of Kettlewell while an uneasy silence shrouded the ill-feeling aroused by the defection of leading British names to the American cause.

It was practice week in the American Cup — a week in which the Americans had already shown they had talent worth reckoning with after Mark Bennett had flown 48 miles from Wether Fell, Hawes, to Roseberry Topping in Cleveland to notch a site record.

Now the weather had turned claggy with just enough ceiling on the ridge for Doug Lawton to get some airtime on the new Sensor after some intense tuning to improve the handling which had been worrying him on the early practice days.

At the foot of the ridge at Windbank was a familiar sight — the battered old Mike Atkinson van to be seen at every British League meeting. Less familiar was the tattered Stars and Stripes fluttering in the breeze above it.

That former British team boss and League founder Brian Milton had been asked to coach the Americans was fairly common knowledge some time before the American Cup. That Milton had also brought in Mike Atkinson and whichever itinerant hang glider pilots happened to be living in his van at the time, was not.

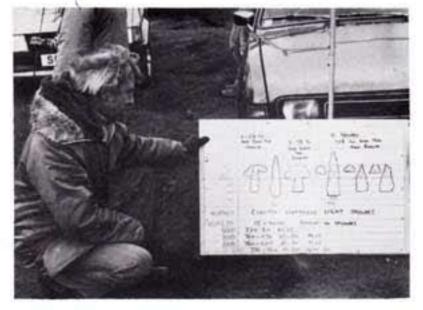
So the American camp consisted of Milton, Mike and Neil Atkinson and Dave Bryant.

What's more, competitions veteran, former BHGA training officer and Yorkshireman Keith Cockcroft (no less) was due to arrive the day before the comp started to blend his local knowledge with Milton's tactical brain.

Keith had first been approached by the Americans some time before the Cup and just before he was due to leave for the Lariano Triangle comp. "I rang Derek Evans and Graham Slater before I went but couldn't get an answer and then I got back from Italy to find all this politics," he said.

In the event, Keith decided to offer his services to all the visiting teams to avoid any ill-feeling. He wanted to fulfil a role which would have befallen Bob Harrison during the practice week had BHGA council granted him the paid leave from his training officer's post requested by competitions committee.

"I didn't want to give anyone any reason to go away from this competition and be able to say 'we didn't know the conditions, we didn't know the site," said Keith.



Brian "God" Ayton — the man from the Met.

Words - Stan Abbott Pictures Steve Thompson

"I believe the British should be able to win on flying skills alone - I wanted it to be a flying competition and not purely a tactical one, or just a test of local knowledge."

In the end, Brian Milton suggested all the visiting teams contribute £30 to Keith's expenses so they would all benefit from his expertise. It was an offer taken up by the Americans and the Brazilians, but Keith was asked to do the job for all the visitors.

He said: "I would not tell anybody about the other teams, about the tactical advantages or disadvantages - that's not what I am trying to achieve. I am trying to achieve an across-the-board fairness so the best pilot or the best team wins overall."

The underlying bitterness was to linger throughout the comp in varying degrees. At its most extreme Bob Calvert informed Mike Atkinson in words of one syllable after he had stopped to offer him a retrieval, that he'd rather accept a lift from an Agrentinian general. Of all the British team, Calvert was the worst affected by the American tactics of man-to-man marking. There just seemed no way he could get away from his tail, Stu Smith on the Sensor.

It was a tactic that had been employed by the Americans since the first day's competition flying at Wether Fell, Hawes.

Saturday June 12, Wether Fell

WHEN the awards were made at the end of this American Cup, competition director Derek Evans mooted that the individual Rogallo Trophy might perhaps be dropped in future comps as not strictly relevant to the concept of a team competition.

Award or no award there will still be heroes... and if one man deserved a special prize in the Cup it was the man from the Met. - Brian Ayton. In a week when the weather gods threw at us the meanest, most unpredictable June conditions, Brian Ayton excelled. He seemed almost to be able to predict exactly what time particular thermals would appear and what their strength would be at any given height.

His advice on the first competition day was invaluable and those who neglected to listen paid dearly.

The wind on the hill was northwest, with fairly generous cloud cover and, upwind, a thicker bank of cloud could clearly be seen.

Brian Ayton's weather map showed a weak occluded front lying right across the middle of Britain, its main feature being that, should it pass through, it would bring with it a 90-degree shift in wind direction. US coach Brian Milton asked the met man what he thought were the chances of the front coming through and was told: "I think there's a good chance it could come through about 12 o'clock." Brian drew him further asking him to place odds on the front's arrival at that time and a cautious Mr. Ayton suggested there was a 30 per cent chance.

The opening task of the 1982 American Cup was to be goal XC to Masham, 20 miles downwind with the aim being to make the flight in minimum time after being "clocked out" at take-off. There were 300 points per pilot at stake, 200 for reaching goal and up to 100 positional points. Pilots not



to the total distance provided they landed within a mile of the road "corridor" route to goal If no-one reached goal, points would be awarded for distance alone.

It was clearly a case of getting off early to beat the occlusion and the British team duly got airborne as the window opened at 11.15 and, each with his own American "tail" following faithfully, wheeled their way to the low cloud base round the corner to the start gate in Wensleydale.

Almost as noon struck on the church clock at Hawes, the temperature on Wether Fell dropped noticeably and within a few moments what had been a steady northwesterly had become a fresh, bracing northeast wind. The Swiss team, two of them still rigging their ASW Flashes ("sooped-up" Fledge-copy) and another three still on the hill might as well have walked into an Alpine blizzard. Also left was Canada's Don Miller who was joined soon afterwards by Lloyd Matthews who left it just too late to work his way round the corner with the Brazilians.



Wind dummies John Stirk and Bob Harrison were briefed by chief marshal Jim Brown to stay on the hill until the competitors decided to call it a day.

It was a long, cold task with about as much purpose as waiting to witness the Martian landing.

Once on their way, the British team found their early departure counting against them: the newly-arrived northeast wind was funnelled up Wensleydale and pilots found they might as well try flying through a brick wall.

Meanwhile, Pepe Lopes had rounded the corner to the northerly face of Wether Fell rather later was able to build height there to achieve a longer glide to make the day's best distance of

TOK. (6.7 past start).

Upper Wensleydale afforded a bizarre spectacle as nearly 30 gliders struggled to improve their position points by making that next field. A hapless Post Office engineer was minding his own pusiness at the top of his pole when he suddenly sew several gliders landing in the adjacent fields. He was soon surrounded by a multi-national gaggle

of hang glider pilots each brandishing his landing witness form at the foot of the pole. He signed them all.

Back at the Conistone village hall briefing HQ the map was threatening to disintegrate as the monitors endeavoured to sandwich ever more position pins into the tiny space that marked the day's achievements.

Once the tangle was sorted out it showed an American lead of 1,011 points to Britain's 868, Brazil's 847, France's 518 and the Canadians' 263.

Meanwhile, one of the French team was reported found in Littondale, at 90 degrees to the prescribed route. It was a course also followed by wind dummy Jenny Ganderton who ran in front of the squall to make a fairly terrifying XC, the luffing lines on her Magic II snapping either in turbulence or in the ensuing exciting landing.

Graham Slater got a taste of things to come when he aggravated an old chest injury, pulling a muscle as he avoided a potential mid-air. He landed in the same field as Mike de Glanville to find the French captain also in agony — he

had pulled his back sitting in his car...

With one of the Brazillians also in trouble, it was a disgruntled local doctor who finished his rounds that night by packing Slater off to bed after a hot bath.

An onlooker might have been forgiven the next day for thinking hang gliding must be a terribly dangerous sport as the Canadians' Harvey Blackmore hobbled round in his plaster cast, acquired just before the comp. after he sprained his ankle jumping off "one of those stone fences you have round here".

Pot or no pot, Harvey was in fact the official Canadian reserve; a pre-competition meeting of team officials had decided to allow substitutions, but only in the case of injury and once substituted, a pilot would not be allowed to return to the comp.

It was therefore a considerable blow to the French already without Gerard Thevenot and Klaus Kohmstedt when de Glanville proved unfit to fly on



the second day and had his request to be allowed back in the team on the third day turned down in accordance with the earlier decision.

Thevenot and Kohmstedt had gone instead to Owens Valley to practice for the Classic and the loss of their captain effectively hammered the last nail into the French coffin, to be placed in the hang gliding mortuary alongside the ghost of their recent Bleriot Cup defeat.

But what of the Swiss team who had been invited to the Cup on the strength of their second-place showing at the world championships at Beppu? And why was Walter Schonauer, ninth at Beppu, there only as manager and reserve?

The Swiss arrived too late to get in any practice flying before the Cup and it showed. After their first day disaster, it was two days before Werner Gubeli learned to follow thermals back behind the hill and yet one more before Jurg Hermann learned the same trick which had caught out the French in last year's Bleriot Cup in the Dales.

Walter Schonauer told Wings! his team was without many of the country's leading fliers for a variety of reasons including academic examin-For his part, he was tired with competition flying, he said. "Perhaps in two or three years I will return."

But underlying the team's situation is a bizarre political wrangle that has split the sport in Switzerland ever since the Swiss Aero Club muscled in and attempted to set up its own national hang gliding body. At the same time, there have been wrangles over the team selection process in which some pilots have been selected on the basis of past rather than present performance.



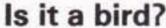
So what omens did this American victory carry on what had become a rather Mickey Mouse first day?

Brian Milton was perhaps a little hasty in declaring the result as proof of the American tactical pudding though there was no doubting two things: the American close-marking was not to the liking of some British pilots, and this young team was an efficient single-minded skilful unit that was going to prove anything but a walkover.

An American team without Rich Pfeiffer may sound a bit like baked beans without tomato sauce but those who had flown with Pfeiffer were quick to suggest that his thoroughly selfmotivated approach did little for team morale. "He's got a big ego and he's hard to work with in a team." said one.

In what suggests some ill-conceived calendar writing, the American Cup clashed with the South California Regionals, one of the USA's main meets on which hung a lot of points







No, it's Bulletman

- the new harness from Wills as flown by Bruce Case



had in the American Cup, but not as many.

Pfeiffer had reportedly ruled himself out of the American Cup because he wanted points to book his place to the World Championships next year. Ironically, he got no points in the regionals after his mid-air with Chris Price reported elsewhere in this issue.

So, the Americans had a nice bunch of guys, captained by American Cup veteran 25-year-old Jeff Burnett from New Hampshire.

"Flying conditions in New England are very similar to here," Jeff told Wings!. "We have small thermals and similar terrain. The only difference is that we have as many forests as you have fields and as many landing areas as you have trees.

"I think we have a very strong team," he said during the practice week. "It's not as if we have the best pilots - but a lot of pilots with more points are used to bigger conditions and desert thermals.

"Myself, Doug Lawton, Bruce Case and Stu for the US rankings. There were points too to be Smith are used to the east coast and scratching.

Before the comp, he saw the Americans' strength lying in open XC where navigation counted for less and, surprisingly, in coping with strong windy conditions where he expected the Sensor to come into its own.



Sunday June 13, Model Ridge, Carlton Bank

WHEN the Dales club first sat down with BHGA competitions committee representatives to talk about the American Cup, the problem of northerlies was raised...

The Dales club lacks a good northerly XC site and so a tentative arrangement was made with the North Yorkshire Sailwing Club to cover the unlikely eventuality.

On the basis that the impossible always happens, we should have realised, QED, that the unlikely was pretty sure to occur.

It is a long winding drive from the southern Dales to the Cleveland Hills where Harry Hodgeson and the rest of the North Yorkshire club welcomed and suffered the arrival of the American Cup charabanc.

An open distance XC task with a 10K minimum to score was declared. The French brought in Michel Katzman for the injured de Glanville.

The usual exit from the Model Ridge is to cross the gulley to the east and scrape up into Cringle bowl, some 500ft. higher. The British team today held back in the belief the day was going to get better. Then after they did take off, Slater, Hobson, Hughes and Bailey all landed and rested another half hour. Bob Calvert voiced his intention to file a complaint against Stu Smith for following him everywhere. It was hard to imagine the complaint could be upheld on any other than "breach of privacy" grounds.

Stu Smith was doing successfully after a day what league pilots had been trying for years to achieve - mark Bob Calvert.

So close was his marking that Smith seemed to have established some sort of umbilical extrasensory link with the British distance champion. He knew exactly how often Calvert looked at his watch as the master worked out the thermal cycle. Calvert hated it. But Smith was not to be put off.



"At one time he tried to lose me out front but he couldn't quite do it. All the rest of the time, I matched him turn for turn," said Smith. "He didn't like it — he yelled at me and everything.

"I didn't make any efforts to intimidate him and he made maybe a couple of efforts to intimidate me but it was obvious he had control — he is such a precise pilot I would not hesitate to fly close to him."

Ironically, on that day Calvert did get the better of Smith... for the first and last time. They had finished dead level on the first day.

Indeed, it was Calvert's — and Britain's — day with him taking first place with 29.75K, Mike McMillan second with 26.25K, Canada's Don Miller third with 25.35K and Graham Hobson fourth with 24.6K.

Said Smith candidly afterwards: "He out-thermalled me but the other things that hurt me were that my glider has a lot of adverse yaw and also I was really crazy and forgot to throw my ballast.

"For me he is obviously the best pilot in the meet and I have learned a lot from him.

"I stayed with him when there were clouds moving through and we were fairly high at about 3,000ft. but I didn't go because Bob knows the country and he made the judgement not to go."

Eventually he saw that Calvert had spotted a hole in the sky upwind followed by a low cloud street that was going to cut the sun off and that's when both went for it.

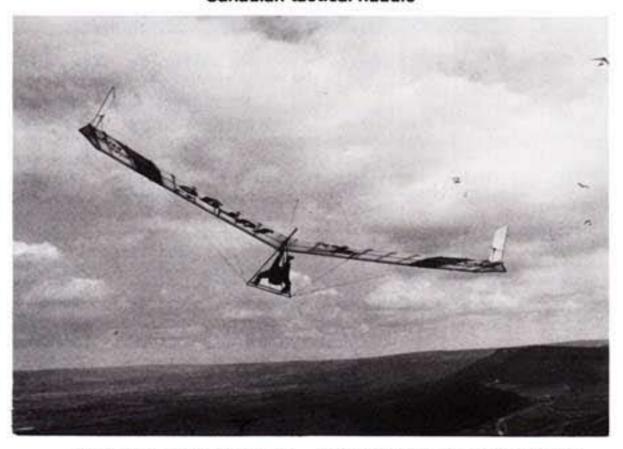
"I think part of the reason he waited was to see if I would get sick and he took a chance to try and lose me. When he climbed in a fairly steep thermal he could outclimb me."

Meanwhile, there were things happened apart from the Anglo-American tactical battle. There were also things not happening. Twice the Swiss Flashes made it to cloudbase...twice they used their amazing glide angle only to return to the ridge. Neither got away.

Appeals chairman Noel Whittall began the day with no intention of going XC but found himself



Canadian tactical huddle



Jurg Hermann on his Flash - alone as the rest leave Cringle

trying to wind-dummy the Swiss on their way. He went on to finish a respectable half way up the field which he reckoned showed a) that anyone could do it and b) that anyone lodging an appeal could expect to have it dealt with by someone who at least knew what was going on.

So at the end of the day the results provided Britain with a handsome win, their only one of the comp, by 1,373 to the second-placed Canadians with 928. Brazil

had 886, the USA 829, France 739 and the Swiss 451, so Britain moved into the lead with 2,241 to the USA's 1,840, and Brazil's 1,733.

Then came France on, 1,257, Canada on 1,191 and the Swiss on 451.

This day marked the start of a Canadian revival after the first day's disaster which saw them right up with challengers at the end of the comp. The loss of Harvey Blackmore had been a blow but in Dean Kupchanko and Don Miller particularly they were presenting a strong fight.

Reports that the Canadians were going to arrive with a team of UP-sponsored sandwich Mylar gliders coached by Pete Brock of UP himself proved to have been considerably exaggerated and any connection Brock may have had with the team had been old news some months previously. Indeed the team was largely self-financed with some support from Wardair and Jasper Tramways, a British Columbia cable car operator.

"We have got a really good XC team and I expect to see everybody flying the American Cup in Canada next year," said a confident Canadian manager Jan Matthews before the comp.

Monday June 14, Cringle Moor

WITH the weather reports brighter for the coast, chief marshal Jim "he never got it wrong right through the comp." Brown opted for the long trip to Cringle again, for an open XC with a 5K minimum to score.

Many doubting Thomases questioned his wisdom, saying as they left the sunshine of the Vale of York for the increasing sea-influence gloom, that the sea breeze would have killed it dead.

The difference between today and yesterday, said Brian "God" Ayton was that the airstream off the sea was now unstable and so although the first wave of sea air had already moved through, thermals would begin to build again.

Today belonged to Tony Hughes who was the one pilot who made it through the sea air to connect with a good cloud street that took him the best destance of the entire competition, 43 miles to Holme-on-Spalding-Moor.

Indeed, it could be said that the entire result hinged on that one flight as it both rescued a generally mediocre British result that day and slashed the value of the American distances.

Today was also TV day number two... it began badly. Graham Slater had provided a Puma twoseater for air-to-air shots during the comp. and the duty of transporting the machine the 60-odd miles to Cringle befell Trevor Birkbeck who hurriedly attached the trailer to his car. He was alarmed as he drove through Kettlewell just three miles down the road to see the trailer overtake him and head straight for a wall. Things might not have been too bad had it not taken it into its head to swerve at the last minute into the back of a brand new Vauxhall Cavalier, causing £500 damage.

The trike survived almost unscathed as did Tony Hughes, thanks to the efforts of others in the team bus in preventing him from doing his St. George bit and gallantly leaping out and catching the trailer single-handed.

Once on site, the BBC crew decided to take its regulation lunch break at the Blackwell Ox and returned to find everyone had taken off. They were lucky to catch Tony Hughes who had landed, and snatched a quick interview in which Tony predicted he would make 50 or 60 miles. Not far out, Tony.



Pepe Lopes — "it's cold here at Semerwater!"





Walter Lussi takes off on the Centurion at the Model Ridge

Brian Milton, in his Press briefing, said his team would stick with the same tactics despite the day before's rout. "Our policy yesterday was that we did the right thing and a really lucky hole came through for the British."

But today, Bruce Case would leave Bailey and stick instead with Mike McMillan. "Bailey seems to be going off form," said Milton.

The day's results would show that while Lawton got the better of McMillan, and Smith got the better of Calvert, Graham Hobson outdid his shadow, Bruce Case.

It was an arduous day's flying, with pilots taking the best part of three hours to make just ten miles.

Milton's comments afterwards were: "We had

them killed - they were outflown.

"Bailey blew it because he left lift - three of my pilots were nearly in the pits but they got away and we all thought Jeff Burnett had sewn up the day when he got more than 26K. I nearly had a baby there and then!"

Bailey's comments were rather less effusive: "The lift was very bitty. Jean Roussot flew out before me and wound his turn and lost 500ft. in half a circle and then I did the same thing myself the other diretion. From 3,000ft. and landing at 750ft, it doesn't take much time to reach the deck in that sort of sink."

Today was also the day Walter Gubeli got away on his Flash and made more than 12K. His colleague Jurg Hermann again went to cloudbase and turned back and was left alone on the ridge when the day finally died good and proper.

So the Americans took the day with 869, Britain made 808 with Tony Hughes accounting for 300 of that, Canada 650, Brazil 538, France 384 and Switzerland 325. That meant Britain now led the USA by 3,049 to 2,709, with Brazil on 2,271, Canada, 1,841, France 1,641 and Switzerland 776.

Tuesday June 15, Semerwater

THIS was the day of Brazil and the Great American disaster. Fired by their country's 2-1 defeat of the Soviet Union, world champion Pepe Lopes and co. learned how to go for it in the pouring rain as they set out, seemingly with Scotland - home of their next World Cup victims — the goal.

It was a pig of a day with a low cloud that saw some tops still tickled by cloud as the XC window, 5K minimum, opened.

The moderate SE wind was good enough to sustain the entire field on the ridge - just. The sky was jampacked and it didn't do much for the nerves when two US Air Force Phantoms screeched right through the middle of the pack, just one appearing to take evasive action as wind dummy Bob Harrison did a steeply banked 360 at the approaching noise.

Gradually the field got away, sucked from the ridge by the passing clouds...it would be hard to picture the ground pumping out thermals on such a dull day.

It was bitter cold on the ridge. It was pretty hot in the sky - Jenny Ganderton landed and complained bitterly that the wind dummy's task was not made easier by competitors who seemed to take delight in tipping the wind dummies from thermals.

Eventually the numbers in the sky had been whittled down to about 12 when the heavens opened. One of the great things about limestone country is that you get potholes and with John Stirk's large Typhoon and a 12ft diameter hole it was possible to make quite a cosy shelter for assorted wind dummies, marshals, Press and hangers-on. Beware, however, getting lumbered with the spot beneath the king post!

As the trickle through the king post hole became a torrent and we began to wonder seriously whether it was wise to lie beneath a metal pole on an exposed hill top in potentially thundery weather, we were amazed to see the last few gliders going for it in heavy rain beneath an ominously cu-nimby cloud. In the gaggle were most of the Brazilian team and, 20



The British team and the "Popembile". The Papal emblem on the door shows it was part of the Papal entourage - British Layland kindly loaned it to us so we at least had God on our side!

yes, the two Swiss Flashes going for it at last. Mike McMillan reported afterwards his vario showed 15-up on the edge of the cloud.

Brazil's Carlos Niemeyer went on to make 43.5K and Geraldo Nobre did 29.8, the two best distances of the day. Pepe Lopes made 14.5 after having to change his Azur for an identical one after the Mylar tore in the whiplash of a heavy top landing.

At the next day's briefing, comp director Derek Evans reminded fliers that cloud flying was against both air law and competition rules and any complaint upheld carried an automatic DSQ. Graham Slater, whose 22.7K was the best British distance, commented he had been flying at cloud base when a gap appeared and he saw two gliders 1,000ft. above him. No specific complaints were lodged.

On a day of changed American tactics, Graham Hobson lured Jeff Burnett and Doug Lawton over the back to Stags Fell where

all three went down for zero.

Tony Hughes pulled a remarkable tactical coup as he lured Bruce Case into a top landing. Top landing was one area in which the British had a clear advantage with few of the visitors ever really coming to grips with the technique.

Twice Tony made it obvious he was landing and duly the American followed. Once he saw the American was committed, Hughes himself landed and waited until Case's feet touched the ground. Then Hughes was almost thrown back into the air by three waiting wiremen, with a confused Case totally unprepared.

He went on to make 12.1K to the American's 9.7. Hughes later alleged Case had cut under him on a landing approach and his king post had actually brushed his harness. It prompted a stern general warning on airmanship from Derek Evans.

So while the Americans spent their waking hours following British pilots, the inevitable had finally happened: the Brazilians had sneaked through to win the day with 888 points even the Swiss beat the British and Americans, despite Walter Lussi and Peter Ryter both scoring ducks.

They got 751, Britain 641, Canada 531, the USA way down on 449 and France 306. That American disaster allowed the Brazilians to slip into second place overall on 3,161, within striking distance of Britain's 3,690. Then came the USA on 3,158, Canada 2,372, France 1,947 and Switzerland 1,527.



At this stage Pepe Lopes was showing a fairly impressive lead in the race for the Rogallo Trophy with 813 points to Tony Hughes's 763.

It was good to see the Brazilians doing well after being all but written off in the practice Carrying their gliders the 500ft. up Windbank had all but killed them one sunny day (yes there were a couple in practice week) and they went against all advice and actually left their gliders at the top on the offchance the wind might be on the hill again the next day - it wasn't.

For Pepe Lopes - hang gliding's answer to Zico - coming to Britain was perhaps less of a culture shock than for some of his

team-mates.



John Stirk on the Foster's Typhoon over Semerwater

"It's completely different here - you have

to carry your kite!

"In Brazil we take off 500 metres over forest and go high in the mountains. But I think here is very good for XC because you get to cloudbase easy and then you go, go, go! In Brazil you go up fast, yes — but you come down fast too."

For the 24-year-old world champion, the American Cup was just the start of a world tour that would take him to Owens Valley and then surfing in Hawaii and Bali before returning to Europe for Sansicario and the European Championships.

He is a lucky man in both hang gliding and Brazilian terms for not only does he enjoy sponsorship from Levi's but he has also been well-rewarded for his successess in both surfing and hang gliding. He earns his living at Ipanima beach where he lives at Rio and sells beach snacks and surfboards.

"I got money because I make a lot of surf boards and export them to Hawaii and Australia. In Rio my surf board was very popular — like

the Azur of surfing.

"I was three times Brazilian surfing champion. I was doing both sports good but not excellent. I prefer to hang glide in Rio because the surf in Brazil is not so big. I don't know how long I will hang glide but I hope I have a lot of experiences still to see."



Well, the Brazilians may have overtaken the USA, but there was no mistaking that night where the British hang-ups lay.

Australian ace Steve Moyes had just rolled into town with fellow Missile pilots Rickie Duncan and Stevie Gilmour. Now if you've got a problem who do you turn to if not an expert...or an agony aunt.

The conversation in the King's Head at Kettlewell that night went a little like this...

"Dear Moyesie, I've got this problem. This American keeps following me everywhere I go and no matter what I try and do I just can't seem to shake him off. He outflies me, he outperforms me. What can I do? I'm at my wits' end. Yours in hope, Superman, Blackburn, Lancs."

There was no easy answer, although Moyes was to show everyone the hard answer the following day with a piece of sheer brilliance.

That night did provide some welcome relief from the competition stress as Noel Whittall discovered what was allegedly a machine for testing whether you were over the limit.

I doubted its integrity as soon as I set eyes on it. What could blowing into a complicated set of copper tubes to turn a weather vane possibly have to do with the breathalyser? But it looked harmless enough as we watched its

owner blow hard and spin the wheel.

So muggins is guinea pig and doesn't he just get covered all over in talcum powder?! The whole pub remained in uproar while everyone tried their own theory as to how to avoid a plastering. Rob Bailey sucked it with predictably disastrous consequences. Others blocked off the talcum jets only to experience the dire results of back-pressure in the talcum chamber. Tony Hughes tried three times with brash confidence and got covered three times. Trust Graham Hobson to get it right first time!

A DAY that promised so much and gave so little. With a clear blue sky it all looked on for a better stab at the minimum elapsed time goal XC to Masham.

Wednesday June 16, Wether Fell

Brian Ayton predicted cloudbase rising to 4,000ft. but only weak to moderate thermals,

disjointed by windshear at 2,000ft.

Brian Milton confidently predicted the task would be bad for the Americans because everybody would reach goal and it would be hard to close the points gap.

His captain Jeff Burnett was fairly candid



Wellie throwing

about the day before's debacle: "I think there have been tactical errors on our part. We have been more concerned with the tactics than flying and that's hurt us."

The task, meanwhile, certainly wasn't going to be easy. The wind on the ridge was very light with very little cloud drift and though the day was cooking the thermals were clearly both hard to find and hard to work as Bob Harrison and Jenny Ganderton and as many other volunteer wind-dummies as could be found made repeated trips down. Only John Stirk managed to save his legs all day and wound his way to the clouds at least twice.

To emphasise the point that, if difficult, the task still remained possible, Steve Moyes — his Missile damaged at Semerwater the day before — borrowed Rob Bailey's Magic II and lobbed

off.

He looked to be losing it until he headed right out half a mile over the valley where he caught a zero, worked it for ten minutes making nothing back to the ridge and then worked his way first to cloudbase, then three miles back. And he still made it back to the ridge. "He was lucky," said many. Strange how some people get all the luck.

But the failure of France's Yvon Bernard and the Swiss Peter Ryter to get away when they eventually did try at nearly 3pm only emphasised the determination of everyone else to remain

hillbound.

It was sad that with the opportunity there to make a task of it, no manager was prepared to instruct just one or two members to give it a go. It would have cost little, for if no-one made goal, the take-off time became irrelevant anyway and there was nothing to stop a pilot making a bottom landing and carrying up.

In the event, even the home side waited for word on the bush telegraph that there was an east wind in the next valley and prepared to take off and go for it in the convergence.

The British suffered an acute attack of paranoia when it was in fact Jeff Burnett who took off first. They felt sure someone must have leaked the met news to which they thought

they were privy.

But Jeff Burnett is an intelligent flier and he'd been watching the sky. "We had already had one cycle from behind but I figured we had to do something to get the penguins off the hill. I saw Keith Cockcroft go up and I didn't want to get caught on the hill again. When I got up I saw it was already blowing northeast at Semerwater and I realised it was just going to be a straight glide."

On reflection a straight race to goal might have got people off the hill but could have caused

congestion.

A straight glide it became, with the landing placings looking remarkably similar to the first day's flying, with Burnett's early decision to go rewarded by first place with a paltry 4.2K. Many were the zeros, with three apiece for Britain and the USA and five for the poor Brazilians.

So Canada won the day with 748, USA 677, France 630, Britain 488, Switzerland 405 and Brazil (with Carlos Lopes in for the injured Luiz Niemeyer) 102.

That gave the overall positions that were to remain as the weather wiped out each remaining day.

THE Thursday looked most unpromising with a thick claggy mist everywhere. Ostensibly it lifted enough only to allow freeflying on the ridge at Semerwater once competition flying was called.

But with cloudbase a couple of hundred feet over the top and the Americans practising some rather impressive wing-overs, four British decided to pop over the back and see just what could be achieved in very marginal conditions.

"Quietly each of us sneaked away off the end of the ridge," said Bob Calvert. "Tony Hughes got away first and disappeared off the end of the ridge and once we knew he'd made it, Graham Hobson, Graham Slater and I followed."

They went over the back at Wether Fell with about 50ft and flew straight through the rotor. Tony Hughes recalled three vicious thumps, the first being the worst, that left him fearing he might even tuck. The rotor was so violent Bob Calvert's vario was left dangling on its back-up after he thumped it with his elbow.

Making cloudbase at 2,000ft. over Dodd Fell, the glide to the next ridge, Widdale Fell, cost only about 3-400ft. Having tried the north end of the hill and found it "horrific" they headed south. "It got more and more rotary and more and more windy and by bottle went," recalled Calvert. That was when Hobson caught up and the three watched as Tony Hughes disappeared over the back into Dentdale, followed by Percy Moss in the "Popemobile" for the fastest telepathic XC pick-up in history.

The other three went on to record a remarkable flight to Kendal, about 25 miles. The flight included an amazing scene of "being blown like leaves" in the howling wind up what was little more than a gently sloping moor. "We even had to soar ROUND this 6ft. TV aerial," said Calvert. After working up through gulleys in anything up to 40 mph winds, they connected with a wave system and topped out at 4,700ft. eventually landing at 8pm.

"The idea was to wind the Americans up," said Graham Slater. "What we were aiming at was trying to get more than 5Ks in those

conditions.

"We really stuck our necks out hopping across onto Dodd in that wind and it paid off. It proves that if you really try something, it can be done."

So with the pressure off, the crack British team at last showed its real metal. So sad then, with four teams in with a chance, that

that was the end of flying.

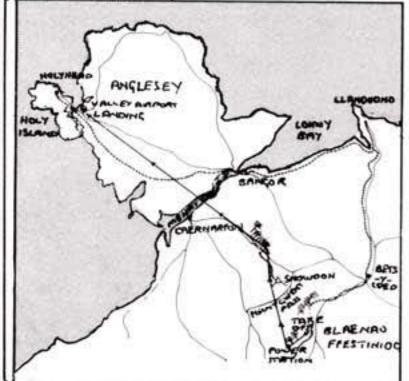
Friday marked another TV visit and was therefore both rained and blown away. Saturday, on the contrary, gave us 1 mph on the fell tops and while the wind dummies tried to test out a triangle task, there was never really a chance. An impromptu football match saw Brazil win, I think (some of us had a bad night at the Yorkshire evening on Friday). Bob Harrison won the wellie throwing.

On Sunday the competition was called off at 12, with no suggestion of an improvement as

the rain fell.



Robert Bailey tickling trout



Malverns record — 71 miles to the sea

MARC Asquith and I rigged our Demons at Kettle Sings, Malvern Hills, an easterly with take-off 1,100' ASL.

The wind was about 10° off and blowing 30+ mph. Birmingham Met office had forecast not more than 15 mph with cloudbase at 7,000ft. — good XC weather.

I had been in the air for 50 minutes and was really annoyed with myself at not having gone for it.

I eventually left with a nice, big thermal and four or five 360s later I'm over the ridge with 1500 ATO.

So you want to fly Snowdon?

(or to hell with the train!)

TO a League pilot a flight from Snowdon may not be anything special, but to a week-end pilot it obviously is, judging from reports from people who have managed

to get to the top for a fly down.

Having heard all about the aggro involved in getting up by train, I thought it would be a good idea to look at other possibilities. the Starting with the O/S Snowdonia National Park map I planned a few "flights of fancy" in advance of a two week holiday in May/ June.

On Sunday, May 30, the Met. at Valley gave us 15 knots at 2,000 feet, southeast, and very hot. By 10.15 Bill Church and I were rigged up at Gloddfa Ganol, Blaenau Ffestiniog.

I had rigged on a ledge lower down, and ran over the edge at 10.30. The take-off is about 700 feet above the landing field, with about 200 feet to the top. I very soon found a good thermal, and at a 1,000 feet above take-off flew crosswind, south west, to the Moelwyns, and over the pumped storage scheme dam.

I turned N/W and set off for Snowdon, about 6.5 miles. The wind was very light, and there was not much lift, the sun being still too low to produce much activity on the north west side of the Moelwyns.

I crossed the Nant Gwynant Pass between the two lakes, exactly on course for the south-east bowl of Snowdon, at about 3000 ASL.

I flew straight into it with the vario now on zero. There was very little sign of wind on the lakes but the cloud shadows were moving from the south-east and I felt sure that the bowl would produce plenty of lift, as it was now nearly midday with the sun full on it. As the vario began to lift, I followed the spine on my left, with a casual wave and "good morning" to the stream of 22

by John Higham

As I approached the summit I looked up to see a row of people lining the edge who had obviously seen me flying below in the bowl. The lift increased, and was a steady 4-up as I reached the top, turning into

The wind was so light I could fly forward, with 5-up on the vario at min. sink. The area of lift extended far out over the bowl and the only time I lost any height was during a few mild wingovers to entertain the trippers. At about 12 o'clock I decided to leave towards Rhyl, north east across the south-east face of the range a bad mistake! I circled over the summit, rapidly reaching 5,500 ASL. What a view! I was still able to see the south east face below me. I should have known there would be no wind lower down! I lost 2,500 feet in the glide over the Llanberis Pass to Glyder, only to find no wind and no lift. "Hell, I've blown it!" I turned back across the ridge and right (north) onto the Llanberis Pass.

Almost at once it got very rough, and just as I was starting to worry about mountain/valley winds I got a good thermal which took me high enough to reach the south-east face of Elidir (3,000 feet), above the slate quarries at Llanberis. I flew along the face and called: "Is there any bloody wind?" to some hikers below me. "None at all!"

However, towards the end of the face it got a bit rough and I turned into a thermal which eventually took me back to 5,000 feet. What a reprieve! I worked very light thermals for the next half

hour, looking for Anglesey in the haze, and very slowly losing height. Down to about 3,000 feet I saw the yellow sands at the northeast end of the Menai Straits. The clouds had almost all faded away, and just as I was giving up hope of crossing the straits I saw a cloud developing. small Things improved quite a bit after this, and I eventually crossed the Straits at about 4,500 feet, about one mile southwest of the Britannia Bridge.

I thought that Mona airfield was closed on Sundays (oh dearl). Down to 1,000 feet I got 2-up off Llangefni and found myself drifting southwest. The lower wind was northeast, although the cloud shadows were still from the southeast. As I slowly gained height I suddenly saw a runway through the haze, and at the same time a small light aircraft appeared, and made a high wide circle above me. I turned down wind towards the biggest field I could find and landed, at Cefncwmwd,

A young man on a bicycle arrived, having seen me land. He was suitably surprised to hear where I had come from, being a pilot at Mona Flying Club. He assured me there would be no trouble and went off to find a car with a roof rack. No sooner had he left than the club chairman arrived. The plane I had seen was flown by an instructor, and had been called up to warn me that I was near an airfield. I was taken with my glider to the Mona Flying Club where I was made very welcome.

by the A5 at 1.30pm.

I had a very good tea at the Flying Club and signed the visitor's book, including origin of flight and type of aircraft. My thanks to the chairman, Ken Pattinson,

Distance: 23½ miles.
Duration: 3 hours.
Glider: Large Azur.
Instruments: Ball vario, Thommen altimeter.

by Jack Rayne

At 5,000 ft, looking at the clouds there are some likely looking ones to the north west so off I go, working zeros and one-ups. 5,600 ATO (6,700 ASL) comes up on the altimeter — over a mile height gain. Just north of west is my course which will take me north of Hereford.

Down to 4,500 ATO, spotting a cloud down wind sends me off in that direction. In a short while the vario read 2 to 5 up — then 10-up. It was really difficult trying to stay with it. Without warning, the right wing drops, then the nose. I go weightless just for a second or so, without doing much myself the glider levels out. Taking a few seconds to compose myself, I turn back towards where I think the thermal is. For the next few minutes I'm thrown about as I try to stay with it. At 5,000 ATO I've had enough, having THOROUGHLY frightened myself.

Crossing the hills at Kington, the terrain ahead flattened out — this was indicated by the meandering of a river over the now greener ground. With no sign of any thermals I relax to take in the view.

Below me and to my right there was a piece of moorland about ½ mile across. I deflected my course to fly downwind of it. It worked — I got the best thermal of my flight, a steady 5+up at 4,000 ATO. it fades to a 2-up. I widen my 360s then wham — the vario reads 10-up. Tightening my 360s, eyes glued to my pellet vario. The pellet was oscillating from side to side at the top of the tapered tube. I felt sure that it was going to drill a hole and pop out of the top. The 10-up eased back to a 5 then 2-up and zeroed at 6,200ft. ATO. (7,300 ASL), cloud base.

Working the zero for a while, the vario started to read 5-10 up and I felt the air getting cooler as the cloud started to close in on me.

I lost my bottle, pulling the bar to my knees, I still have a 1-up, I held it there, the muscles in my legs twitching with the tension of pushing against my stirrup.

Two or three minutes later I popped out of the cloud into the clear blue sky. I eased the bar out and sighed with relief.

What I saw next made me more apprehensive
— mountains that stretched as far as the eye
could see.

It was not that they were high — just intimidating. To my left were large reservoirs surrounded by very dark rocky looking ground. A steep-sided valley connected the reservoirs to a largish town (Ryder) below me.

Visibility was about eight-ten miles so it was impossible to see how far it was to the other side

Looking at my altimeter, it read 6,000 ATO (7,100 ASL). It would be criminal to wind all that height off.

I noticed two cars going reasonably fast along what I'd earlier thought was a track into the mountains. This gives me new heart so I make my mind up to follow the road into the barren terrain. My vario read 1 to 2 down. At 5,000 ATO and a few miles into the mountains the vario reads 1 up 360ing for what seemed ages gave me 600ft more height. The road below turned to the south, went into a steep-sided valley. My progress over the ground seemed to have speeded up, this was probably due to the air speeding up over the higher ground.

Remembering the wind speed at take-off, it would be hazardous to land on top. The valley I was now following had steep sides — the white water in the largish stream told me the flat-looking bottom to the valley was in fact

390 PRESTON OLD RD CHERRY TREE HEARTY CONGRATULATIONS YOUR EPIC 112 MILE HANG GLIDE FLIGHT FROM NEWTOWN TO WARMINSTER ON SATURDAY WE ARE PROUD OF YOU KINDEST REGARDS BEVERLEY SNOOK CHAIRMAN ROYAL AERO CLUB R.R.R.A.

 Bob's congratulatory telegram from the Royal Aero Club

The perfect XC day

BOB CALVERT looks at the weather on April 8 when he did his 112-mile flight from Sarn mid-Wales. With kind help from meteorologist Brian Ayton.

The synoptic situation

AT 1200 GMT a cold front from Penzance to Calais was moving south leaving the UK covered in a cold, very unstable northerly airstream.

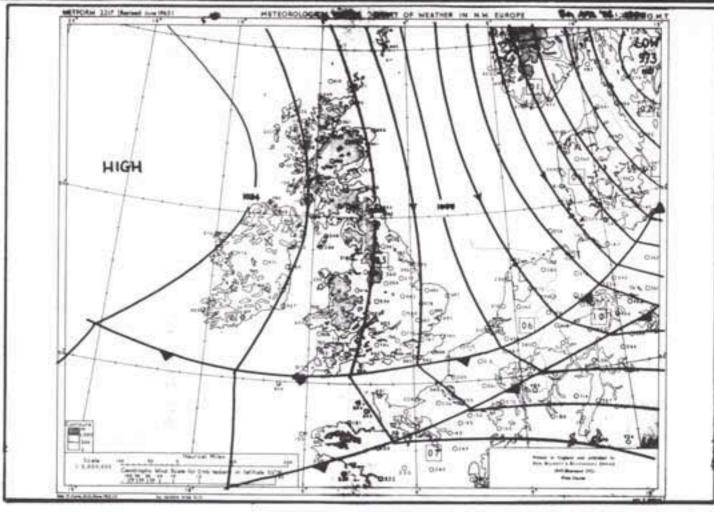
A ridge of high pressure was extending eastwards from the Atlantic lowering the depth of instability in the west. The airmass was Arctic Maritime in origin, gradually warming in the lowest layers as it moved southwards from the polar seas and consequently becoming progressively more unstable.

Tephigram

THE tephigram shows the midday sounding launched

from Aughton, near Liverpool. The winds moderated during the afternoon as the ridge extended eastwards. The solid line is the dry bulb temperature, decreasing height at super adiabatic rates in the lowest 45 mb (1300 ft) and near dry adiabatic rate from 965 mb to 790 mb (1300 to 6500 ft).

Above 790 mb a marked inversion caused subsidence in the ridge prevented any further ascent of air and the cumulus to spread out into stratocumulus. The winds were constant in direction with height and there was very little wind shear, i.e. change of velocity with height. All these factors are conducive to the formation of strong



The solid line on the tephigram represents the air temperature and the dotted line, the dew point the increased separation of the lines above 790mb reflects the temperature inversion which causes the cumulus to spread into strato-cumulus.

Cloud base occurs at the meeting of the Dry Adiabatic Lapse Rate curve plotted from 8C (surface temp.) with a constant moisture line drawn from the dew point at ground level. With grateful thanks to Derek Warner, Met. Office, RAF Leeming.

well-formed thermals and thermal streets.

WITH the wind between WNW and N, away from windward coasts and on the high pressure side of the airflow, the cloud was well broken and limited in development, facilitating good surface heating and a steep lapse rate. Many of the previous notable XC flights have been flown in just these conditions and will, I predict, offer the best

possible opportunity of a 200-mile flight in the UK. now! The more we under-

In the first League I was amazed to see how quickly the standard of XC flying is improving. The dominant factor in XC flying is no longer a pilot's ability to thermal but the ability to assess the weather conditions so as to fly as fast and hence as far as possible.

I am convinced it's possible stand the air in which we fly, the further we will fly. Similarly, the next generation of XC flights will be outand-returns which will also require expertise in assessing weather conditions.

quite steep. Ahead of me I could just see forestry plantations and then green fields.

I make it over the green fields with about 1,000 ground clearance but still no where to land as the fields are far. I headed off south west into a valley on a three-mile final glide. was now below the mountain ridge on my Fearing rotor I kept my course as far away from it as possible without jeopardising my chance of making a landing field.

I arrive at my landing field with just 2 00 ft above the ground. Turning into wind, I got thrown round and had to work hard to keep the glider on an even keel.

Ten feet above the ground, the right wing picks up and full weight shift has no effect. The glider hit the ground and turns over. The next thing I know I'm on top of the sail looking at the sky.

Two young lads are on the scene fairly quickly. "Where am I?" "Trawcoed," they said. "Where's the biggest town?" "Aberystwyth - just down the road." Aberystwyth I couldn't believe it. I had not seen the sea because of the haze.

Marc drove me the 140 miles back to Coventry. Thank you. Sorry for spoiling your birthday!

Date - May 11 Best height gain - 6,200 ft ATO Max height - 7,300 ASL Time in the air - 41/2 hrs. Time from the ridge to landing - 3 1/4 hrs. Previous best distance - 14 miles.

As luck would have it

SATURDAY April 3, 1.00pm. After an hour's flight in scrappy and ill-formed early thermals, I wait to see if conditions will improve.

The forecast: wind SW backing S-SSW, 15-20 kts. decreasing 5-10kts. to Unstable to 10,000ft, with convection, cloudbase around 2500ft. A check with Lossiemouth flight planning had revealed no purple airways, or other trouble. Rosehearty range inactive. It all looked good, all we now needed was - lift!

By 1.40pm the cu.s were not dying quite so quickly downwind of the hill, so off went. A big suck accelerated me down and away from the hill, it was there somewhere! Wallop. Two tight 'S' turns and back level with the hilltop, able to 360. A dozen later, I was at 4,000' AMSL. I don't know if I then dawdled out of the weakening thermal, or it overtook me, or I'd risen to its top, but the lift almost by Jes Flynn

stopped there.

The cloud above was huge, flat, and very gentle looking, but with patience, light lift, and little downwind drift, twenty minutes later put me at cloudbase 5,500' AMSL. Downwind all appeared dead or dying, and frantic Mk.1 eyeball scans - for birds, smoke, large brown patches in sun, anything - eventually found a column of smoke 5km. east.

To its north, another, this one hugging the ground and heading for the first - due south.

Sea-breeze - just the job. I sped off toward it, 45° crosswind. Having arrived, I found the smoke ponged, and the lift light. watching other smoke piles, it was clear that the seabreeze was very erratic in its penetration and progress, poking in every 5km or so. slowly zig-zagged

eastwards, from one patch of convergence to another, at the higher cloudbase of 6,000' AMSL

Soon arrived Fraserburgh, on the N.E. tip of Scotland. Nowhere to go! Turning south, an into wind glide towards Peterhead was in virtually dead air, but one last goodie carried me out to sea, at 4,000' AMSL and in 4-6 up I returned to land, not far from St. Fergus gas terminal, from where the thermal had originated! Take-off: Knock Hill, (near

Keith Morayshire), at 13.40. Land: Kirkton,

Peterhead, at 16.20. Time: 2 hrs 40 mins. (Slow,

Distance: 57km, 35.5 miles. Eqpt:

Solar Wings Typhoon, good machine, Southdown cocoon & parachute, comfortable, Gilbert Roberts vario/alt. - the best. NOT a pair of Long-Johns, wish I had! Suunto compass - unused.

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Second-hand Glider Which?

A LOOK this month at fourth generation gliders which make a good choice for the post-P1-plus pilot. Again, sound advice when buying second-hand, is to seek the opinion of someone who knows and, preferably, has no commercial axe to grind.



The Atlas, pilot Robert Bailey

Atlas

THE original fourth generation, partly double-surfaced, machine, first appeared on the market in 1979. Manufactured by the well established French firm La Mouete, the Atlas quickly became popular with League pilots because of its superior sink-rate and glide at speed.

This increase in performance over other machines of the time was mainly due to its clean aerofoil section maintained by pre-formed battens and 30 per cent double surface. Later Atlases also had a Mylar insert in the leading edge pocket which helped clean up the area between each batten.

Rigging is quick and easy utilising a sliding centre box system. The airframe is strong and well made but uses some components and tube diameters not readily available in this country.

Performance is good all round, although the Atlas loses out in stronger winds as do all the gliders of this generation — although they don't suffer from a lack of penetration quite as severely as the single surface machines e.g. Super Scorpion, Solar Storm etc.

Handling is good with nice positive pitch but the Atlas also cuts through gusts which would cause a more billowy glider to nose up. Roll can be a little heavy, although when properly co-ordinated with plenty of pitch input the glider is pleasant to fly.

One last point is that although the Atlas was the top competition glider two years ago it is now considered to be an excellent glider for a post P1 pilot providing s/he has had a little previous soaring experience.

'Star-rating' comparison

RIGGING

PERFORMANCE

...

...



The Cutlass, looks like Len Gabriels on the spot

AIRFRAME

SAIL

KEY - **** Excellent *** Good ** Average * Poor 0 Aful

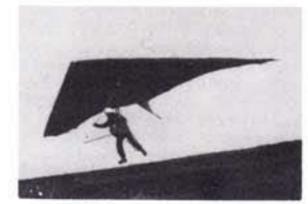
Hilander

THE Hilander, manufactured by Flexi-Form Skysails of Manchester is basically an Atlas copy. The Hilander uses preformed battens and has approximately 30 per cent double surface, the only major difference being in the rigging which uses plug-in cross-boom ends rather than a sliding centre box system.

Performance is very similar to that of the Atlas although the average Hilander doesn't have quite such an impressive sinkrate.

Handling again is very Atlaslike but has a slightly knotchy feel in roll which requires plenty of pitch co-ordination to overcome.

The Hilander is also a good post-P1 (plus) glider and can be picked up comparitively cheaply because it never quite achieved the excellent reputation of the Atlas.



Jack Rayne on a Hilander Vulcan

THE Vulcan from Hiway Hang Gliders of Tredegar was designed to supercede the Super Scorpion. As it happens, the Super Scorpion still sells as well as ever but now to the Post-P1 market.

The Vulcan is much like a Super Scorpion to look at but has a higher aspect ratio, much tighter sail and more double surface than its predecessor. The general standard of finish is excellent with all parts bright anodised, plastic caps on nuts and bolts and a neat sliding centre box system making rigging quick and straight forward. Unlike other fourth generation machines the Vulcan doesn't use pre-formed battens, something that the Hiway designer didn't like at the time!

Performance isn't quite as good as the other machines of this generation, although min-sink was as good as the Super Scorpion and the top speed MUCH improved, due to lack of double-surface, the

G/HANDLING

HANDLING

Vulcan lags behind the Atlas and Hilander at speed.

Handling is very pleasant although there is a delay between pulling the bar in and the glider speeding up. This is probably due to the huge control frame.

Roll is light but requires some coordination to turn quickly. This was something that people who had previously flown a Super Scorpion found difficult and offputting enough to give the Vulcan a bad name. Quite wrongly in my opinion!

Finally, back to the control frame. In order to make roll control as nice as it is, the Vulcan has a HUGE tall control frame. This means that to the pilot the pressure required to control the wing is very light but because of the longer lever arm, the attitude of the wing doesn't alter much without shifting a lot of weight. The size of the control frame also makes ground handling tricky but with any wind the glider is easily launched with the harness straps tight.

The Vulcan is a good glider for a competent post-P1 pilot and can be picked up relatively cheaply due to its unwarranted unpopularity.

Cutlass

THE Cutlass, from Skyhook Sailwings, Oldham, is again very much an Atlas copy.

The finish is generally good with neat, tidy sailmaking and a well-made air-frame, most parts bright or red anodised. Rigging is straightforward with plug-in cross-tubes, but uses the normal Skyhook split-in-half bottom bar, with the lower rigging wire running through the centre.

Performance is very much on a par with the Atlas and Hilander, although the handling isn't.

Pitch is generally precise and positive but roll is decidedly heavy to the point of being unpleasant in roughish conditions. As with the Atlas and Hilander plenty of pitch co-ordination helps, but strong arms are still required to turn the Cutlass.

Again the Cutlass is a reasonable post-P1 (plus) glider but thought should be given to the heavy handling. Also, the Cutlass seems to hold its price very well and a secondhand one will be quite expensive compared to similar machines from other manufacturers.



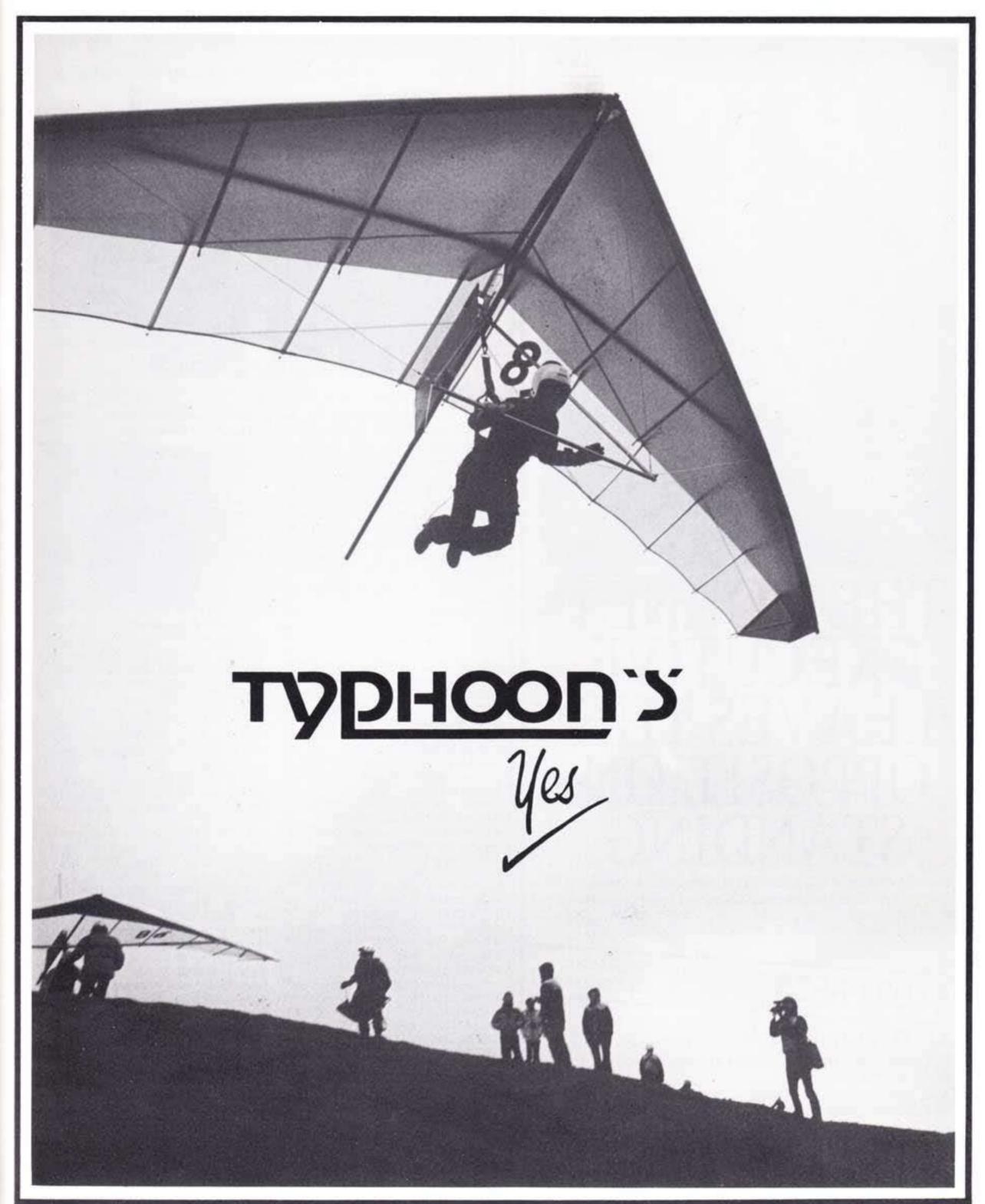
The Vulcan

24

GLIDER

Atlas Hilander

Vulcan Cutlass



MANUFACTURER: SOLAR WINGS PHOTOGRAPHER: MARK JUNAK PILOT: JENNY GANDERTON





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PPPower PPPower

Power for many hang glider pilots means using an engine as a supplement to gliding.

September sees the first soaring trials at Owens Valley,

Powered soaring & miracles

IT'S finally here...well, sort of. I'm referring to first hand flight experience in a self-launch, inexpensive, ultralight that has real soaring capabilities.

I am not saying that it is the only ship in the world meeting the test of light-weight, self-launch, and soaring performance. I've pleaded with all the manufacturers of ships which look like they might meet that criterion to please let me fly and evaluate their machine...and I have met with a startling lack of success. We can not believe the claimed L/D or soaring capabilities that have been written in the ads of any manufacturer.

Thermal

Let's start with a couple of "beliefs" which do not seem reasonably refutable. Ultralights with king posts and scads of bracing wires do not have a reasonably good cross-country soaring capability although they all can soar cross-country in downwind, very strong thermal conditions.

More and more I am coming to the sad but necessary decision that a partially or completely enclosed pilot is a necessity. This isn't true in hang gliding. Soaring flights of over 150 miles have proved this. But in hang gliding, the pilot is at least somewhat streamlined by the fact that he is flying prone.

Also the hang glider has neither wheels, nor engine, nor other additional drag and weight producing components.

The hang glider can also land almost anywhere, and this is an extremely important reason that it can perform so well on crosscountry soaring flights.

In March, Tasso Proppe wrote that after a thorough search for a homebuilt lightweight, self-launch soaring machine, he had finally selected the Wanderer, designed and built by Mark Smith.

Mark brought the Wanderer to Porterville during the "fly-in" there in April and I was extremely impressed by the ship's appearance and performance. We made a date for me to attempt some soaring flights at Ocotillo Wells in Southern California.

I was comforted by the fact that the Wanderer does have rudder pedals which actuate a vertical rudder which is hinged on a vertical



Mark Smith

stabilizer. "Oh boy, finally I can treat an ultralight exactly like a very light airplane," were my thoughts.

A climb was made to 2,000 feet and the engine was shut down. The speed was momentarily reduced, from 40, which had been used to climb, to 22 while at the same time a thin piece of cable was pulled. Eventually, after several tries, the prop stopped parallel to the wing and inside the wing for maximum reduction of drag.

At the time of engine shut down (11:30) the ship was over the lowest foothills and perhaps four miles from the dry lake. And as if it had been programmed that way, a thermal was encountered. next half hour was spent trying to find the best climb speed, (which seemed to be 35) trying both left and right hand 360s in the general thermal area, in sightseeing (visibility was 80 miles), in keeping within range of the field, and in having fun. After all, we soar to have fun.

The engine could not be restarted in the air, because the cockpit was too small for convenient pulling on the rope-starter, so it was vital to not stray too far from the lake. As altitude was gained, we could venture ever further from home.

As the ship reached 5,000 feet, the cool air and shortsleeve shirt dectated a halt to further climbing. This was unimportant because the Wanderer had already beautifully demonstrated that it could climb very well, and was totally controllable in thermal turbulence.

Then Tasso Proppe, who is in his 70s flew the machine.

While Tasso was flying, a dust devil on the ground caught a taxiing PP Power PP Power PP

California. Veteran glider and hang glider pilot GEORGE WORTHINGTON reports on a microlight with true soaring capabilities... and witnesses a miracle.



The wreckage of the Wanderer

MX (Quicksilver type made by Eipper = formance) and pulled it gently into the air about 8 feet, and set it down upside down. The pilot was unhurt. The ship was quite bent up and my awareness of dust devils and their extreme danger to hang gliders and all ultralights was instantly and rudely renewed.

Another one sent a vertical cloud of dust up at least 800 feet. Tasso took the opportunity to fly through the centre of this giant, at about 400 feet. Mark, seeing this, expected the worse, and groaned out loud: but Tasso is an old hand at judging lift of all forms. He was not visibly buffeted at all, and had a climb rate of 2,500 feet/min while in the dust devil, with throttle on idle.

Said Tasso: "From the viewpoint of the fellow who wants to shut the engine off and soar, it has got all the potential for doing so. It's a quantum step upward from the Mitchell Wing."

I asked Mark if he had done much engine-off soaring in the

"Yes I have: I very seldom land with the engine running, because I want a sailplane first, and a motor-plane second, and that's why the geometry is laid out as a sailplane. But it falls into the ultralight category because of its weight...only 190 pounds empty.

Frantic

"Most of the people flying ultralights are aerial surfers, and they care about nothing except flying with the motor on," said Mark.
"To turn the engine off is to invite disaster when you're flying 'an airfoiled rock'. At four to one, you don't have any options where you land. So they have a tendency that if the engine quits, they go into their survival mode, and that's where we come on."

It was my plan to fly the Wanderer in soaring-flight at least one more time in the afternoon but fate intervened.

Mark climbed into the Wanderer and took off. Ten minutes later there were frantic gasps and moans from a dozen throats. I looked up in the direction indicated and saw the Wanderer at about 400 feet above ground, spinning toward the earth with one wing gone. As I

watched I saw a chute come out and fully blossom about 150 feet above the desert floor.

The ship had landed upside down. The steel construction above Mark's head had acted like a "roll-bar", and he was only bruised. A hand had a bad cut, from the fact that it had been entwined in the lanyard connecting the chute to the ship. I felt as though I'd seen a miracle.

pieced together explanation of the wing failure; Mark had been in a steep turn, and had, at the same time, unknowingly allowed the speed to get too low. The ship stalled and spun. Mark found himself pointing straight toward the ground. He didn't want to build up too much speed and so he unwittingly pulled a little too hard and a little too fast back on the stick, which created a load on the wings which the structure could not tolerate. A wing broke off, and the rest was inevitable.

The question inevitably arises: "Did Tasso and I have great good luck that the wing didn't fail on our earlier flights? "The answer is "no"; because neither Tasso nor I would have dared to allow the ship to enter the risky region of the stall-spin. Both of us flew super cautiously, limiting our bank angle, and watching our airspeed very closely. You can't stall and spin, if the speed and bank angle are properly controlled.

Training

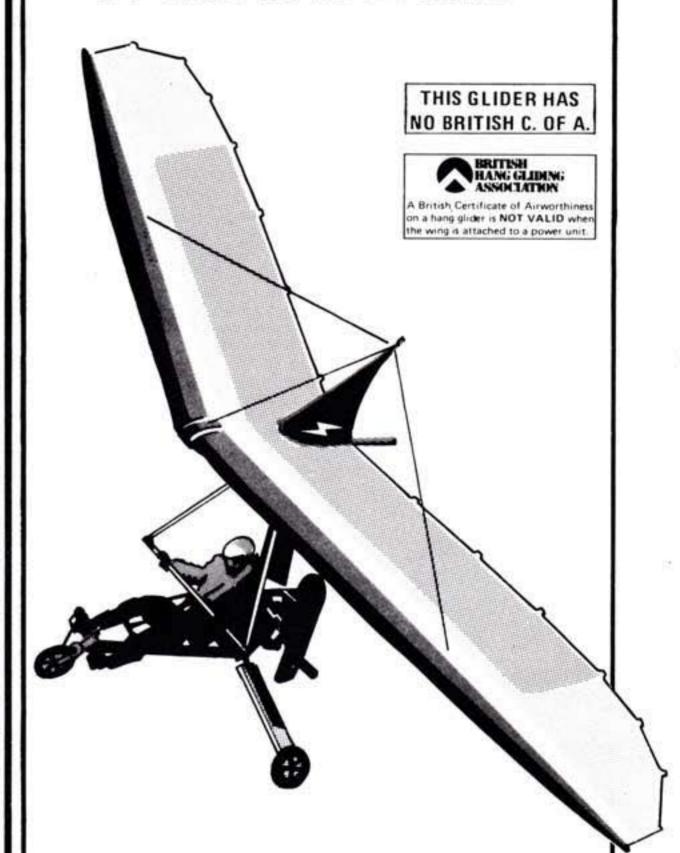
My personal recommendation to Mark is to study the failed parts for indications of unexpected rupture... but if none are found, to rebuild exactly as before, with a warning placard stating that "this ship must not be spun".

It is very likely that the ship can be spun safely... but not by pilots who have never had spinrecovery training. Mark had had no spin training whatsoever.

In conclusion, the Wanderer is unique. Finally, after all these years, I have found and flown one low-cost, homebuilt, self-launch air machine that can really do a creditable job of engine-off soaring. Now, after having found one, maybe I'll have the good luck to find some others.

The Wanderer kit will sell in the States for \$4,295.

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Southdown Sailwings Limited, 82 Goldstone Villas, Hove, Sussex. Telephone Brighton 732007

Travel advice

Lindsay Ruddock has volunteered to take over the job of BHGA overseas travel adviser following the resignation of Len Hull through pressure of work.

Lindsay, an active flier of several hundred hours standing, has flown at more than 50 sites in Europe and Africa and has twice flown in Kenya's Keno Valley. He lives in Englefield Green, Surrey, and should get the go-ahead to take over early this month.

June lottery

The winners of the 500 Club lottery for June 1982, are: —

R.A. Schwab £56.80, S.J. Marnier £28.40, S. Abbott £14.20, Western Counties Hang Gliding Club £.852, J.I. John £7.10, J.D. Webb £7.10, D.A. Jordan £5.68, J.P. Whitney £5.68, D.F. Proctor £4.26, S.R. Edwards £4.26.

This makes a total of £142 in prize money and a like amount for BHGA funds.

• Thanks Percy!! What a painless way to help the BHGA: I recommend it — Ed.



ADVERTISING rates on the classified pages are as follows:

Members' small ads are 12p a word, minimum charge £2.40. Small business ads are 15p a word, minimum charge £3.50. Please specify required classification.

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All small ads should be sent to Sylvia Howard, Commercial Editor Wings!, 4 Somerwood, Rodington, near Shrewsbury, Salop.

For your own safety, if you are purchasing a secondhand glider, 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.

Soaring Courses on the Isle of Wight

still a few places!

Write or phone for details Mike McMillan, Rose Cottage Clay Lane, Newbridge, Isle of Wight Calbourne 488.

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Edburton, Nr. Henfield, Sussex. Telephone: Poynings 526

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CHEROKEE medium. First class example of this classic P1+ aircraft. Low airtime, kept carefully. Realistically priced at £320 (including spares). Phone Hemel Hempstead 48265 or 63278.

SIGMA FLOATER 195 (large), v.g.c. White, used twice, suit beginner. £500 ono. 12 Frythe Way, Cranbrook, Kent. 712469 evenings only.

SUPER SCORPION C for free flying or power. Short breakdown. Kept in garage. Chuck in seated harness. £395 ono. Tel. 0942 726104.

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WILLS XC. Good condition. Yellow/ white. Suit 9-11st. £150 ono. Phone 01 226 8861.

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SKYHOOK SAFARI, medium, Preformed battens. Ideal P1/intermediate glider in very good condition. Phone Taunton 81633.

CHEROKEE, medium. Excellent condition, £300 ono. Suit ambitious P1. Tel. Sheffield 340267, room 40.

HIWAY SPECTRUM, ideal for beginner with B-bar, harness and helmet. v.g.c. Cut down for easy storage on car. £300. Telephone 01 592 8263 evenings.

FLEXIFORM SPIRIT (large). Very good condition. Would suit beginner/ intermediate pilot. Complete with seated harness and bag. £200 ono. Phone Nottingham 787761, ext. 324 (work) or 620771 (home).

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DEMON 175. Only 8 hrs airtime. Brand new condition as only a few months old. Two tone blue with blue airframe. £680.00. If it's a Demon you want this must be seen. Genuine sale. Will explain. Tel. Wolverhampton 791217.

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SOUTHDOWN FLOATER 196. Purpose designed for the intermediate pilot. August 1981, as new condition. £420 ono. Ring Grimsby 824238.

SEALANDER, large, perfect for triking. 1 year old. £575. Phone Rotherham 73579 or 62000.

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VORTEX 120. Large airframe. Never pranged. White with shades of blue. Plus prone harness, £300. Phone Brighton 551158, after 7pm.

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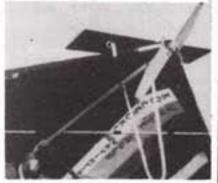
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Registered (G-MBFT) reinforced 330cc SUPERTRIKE/LIGHTNING 195 combination, clumb rate 1,000 ft per

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ULTRA SPORTS TRIPACER, 250cc Excellent condition. Very reliable. £650. Tel: Brighouse (0484) 716069.

CHARGUS T250 SKYTRIKE, Immaculate condition. Very low airtime. C.A.A. registered. Fitted with all extras. Winter ASI and aircraft altimeter fitted in console. Complete with professionally built sprung road trailer with all lights etc. £875 cash. No offers. First to see will buy. Owner going back to hang gliding. Phone Ian Hayes, Basingstoke 51332 or evenings 62536.

Schools

SUSSEX COLLEGE OF HANG GLIDING, 18b Queens Rd., Brighton, Teaching, Prone and top landing. Power too (on proper airfields). Spares, repairs and sales. F.L.A.C. Hiway, Lightning, Sigma 12 metres, £350. Lightweight Mini Floater, £575. GYR Marauder Super Scorps (2) virtually new at £600) etc. SSC wanted part-ex.

Wanted



WANTED. Arbee audio VARIO, Sheffield 340267, room 40.

WANTED. Modern glider e.g. Demon, Comet etc. in exchange for 1978 Honda Cx500 low mileage. Approx. value £650. Tel. Holmfirth (W. Yorks) 7156.

Dan-Air Celtic Cup

Wales win (the flying)

THIS was the third Celtic Cup, the second in Wales and the second sponsored by Dan-Air Services.

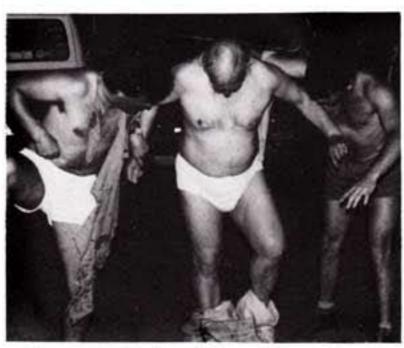
It promised to be highly competitive with large contingents from both Ireland and Scotland and was centred around the Pandy Hotel, five miles north of Abergavenny and directly beneath the Pandy ridge.

Day one (Sat. June 5)

THE met. man brought some miserable faces at the briefing with a lapse rate of 1°C/1,000ft up to 6,000ft and a light and improbably wind with a slight SSE drift at 2,000ft.

This forecast was particularly bad because we haven't got a decent southerly site in south Wales. But, after the 16 Scots, 15 Irish and 32 Welsh had registered we decided to give it a go at Pandy — an easterly ridge that will take south east.

The task was open XC with a minimum of five miles to score. There were towering cumulus clouds everywhere which was strange considering the forecast



The unacceptable face of hang gliding — from left "Summo" wrestlers, Freddie, Welsh undresser Bob McKay, and Randle.

Martin Pingel

but one by one pilots took off and invariably went down in only weak lift.

By the end of the day only a handful of pilots including Philip Merton, Bill Pain, Joe Cullen and myself made anywhere near five miles. However no-one actually did and so the scores stood level at zero.

That evening the Irish went wild after realising that the beer

was half as cheap as in Ireland and naturally tried to drink twice as much to the delight of the landlord, Mr. Bob Graefe.

By the end of the evening the Irish were in full swing they had strung up Pat "Tex" Laverty under a railway bridge, and the sight of Bob McKay stripped to his Y-fronts "Sumo" wrestling with one of the Irish boys was one I'll never forget.

The Irish also demonstrated with great expertise the old Celtic custom of ripping shirts off people's backs, a Welshman fell asleep propped against a car and "got ill" and the landlord was on the verge of calling in the riot squad. But apart from this, the evening was a credit to hang glider pilots!!!

Day two (Sun)

THE Irish awoke and were all

Words — Martin Pingel Pictures — Tim Williams

complaining about the amount of valley mist but after a few Alka Seltzers this soon dispersed. The met. man gave us more to be cheerful about — a south west airstream and a frontal system passing through with unstable air behind with a good lapse rate — whoopee, it was off to Merthyr, our westerly facing ridge that will just take a south west.

On arrival the wind was very light and southerly but with small cumulus clouds forming further to the west. It was decided to run XC again, with a window open from 11.00am until dark! You could have as many attempts as you wished.

Conditions rapidly improved and Neil Edwards on a Predator wind dummied it, but only because the television boys were there, and proved to us that the thermals were working well.

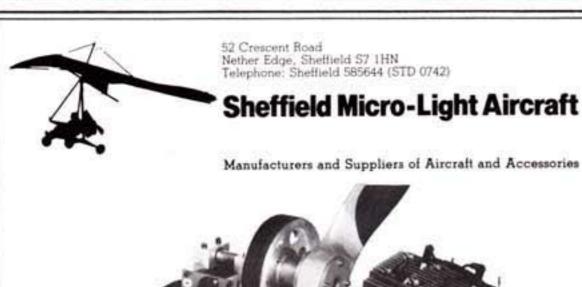
I was first to make the break from the ridge — well someone had to show the Irish which way to go — and made 24.9 miles landing like a sack of spuds five miles past the Pandy Hotel.

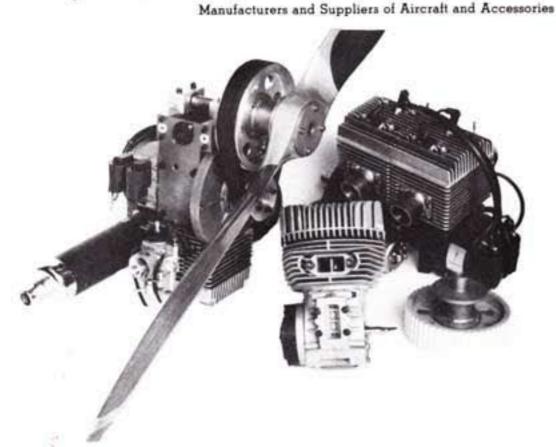
As I de-rigged, feeling quite pleased with myself, something caught my eye, it was Richard Newton lining up for a landing just two fields further on, a distance of 25 miles, and as I looked skywards my heart sank as I saw two gliders very high. It turned out one was Pat Malloy from Ireland who eventually made 29.2 miles and the other was Richard Armstrong from Scotland, 30.4 miles.



The top five pilots from each country were extracted from each task. These were then positioned in order and allocated team points ranging from 150 for first place to 10 for 15th.

			sk 1 n XC			
Task	Name	Country	Miles	Wales Pts	Ireland Pts	Scotland Pts
1	J. Cullen (Typhoon)	S	39.4	-	-	150
2 3 4 5 6 7 8 9 10	 Kibblewhite (Magic 2) 	1	39.2	-	140	-
3	P. Merton (Typhoon)	W	36.8	130	-	-
4	C. Johnson (Demon)	w s	36.8	120		
5	M. Hebden (Demon)	W	36.8	110	-	-
6	R. Armstrong (Demon)	S	30.4	-	275	100
7	P. Malloy (Magic 2)	1	29.2	-	90	-
8	R. Newton (Magic 2)	W	25.0	80	-	-
9	M. Pingel (Demon 155)	w w s	24.9	70		100
	B. Walker (Demon)	S	20.7	-	-	60
11	M.McManus (Demon)	1	14.0	-	50	-
12	N. Broderick (Typhoon)	0.1	8.7	-	40	-
13	I. Kirker (Typhoon)	11	7.9		30	- E-2
14	B. Dainty (Cirrus 5)	S	7.1	-	-	20
15	D. McKenzie (Typhoon)	S	5.3	-	-	10
osition	after Task One			510	350	240
		Tas	k Two			
	(Timed Go	al - 4.5 miles)		
			Time			
1	M. Asquith (Demon 15	5) W	28mins 3secs	150	-	-
2	P. Malloy (Magic 2)	3	29mins 7secs	-	140	_
3	T. Warren (Lightning)	w	30mins 9secs	1340	-	-
inal te	am position			790	490	340





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Glass fibre wheel spats £25 per pair.

Glass fibre trike front fairings £75

Glass fibre Mirage and Scorpion front fairings £85.

Dual trike tuition to BMAA certificates of competence.

Hang gliding tuition to Pilot 3. BHGA registered school. HIA instructors.

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requirements.

Specialised machining facilities available



Maxie McManus, Ireland on Demon

In all 29 pilots got away with distances ranging from four miles by Angus Pinkerton to 39.4 miles by Joe Cullen of Scotland. Ian Kibblewhite, the New Zealander from Ireland, came a close second with 39.2 miles and three of the Welsh, Philip Merton, Chris Johnson and Mark Hebden, had an incredible flight taking over four hours and all eventually landing in the same field 36.8 miles from take-off.

Recoveries were fairly swift although one or two did get forgotten — sorry. — but everyone was back by 9pm. That evening at the pub was a complete contrast to the night before with pilots satisfied to sup their beers and talk endlessly about their XCs. A fair number of pilots had achieved personal best distances and Brian Dainty from Scotland made his first XC with a creditable 7.1 miles.

Other XCs worth mentioning were; Bill Walker 20.7 miles, Martin Hann 19.8, Ceri Davies 17.5 and Tom Warren 10.6.

Day three (Mon)

THE met. man really had a brain storm on the third day forecasting N-NE 15kts becoming S-SW 15kts. When asked whether it was going to back or veer he replied he wasn't sure. Another forecast gave us SW 10kts so with the alternative of climbing Hay Bluff on the offchance it might be north we decided to give it another go at Merthyr and hopefully a repeat of the day before.

It was extremely hot and what wind there was kept switching from east to south-west. Basically it was rising on the sunny slopes and it was hoped it would work its way onto the face as the day went on.

The task was a timed goal distance to Tredegar cemetery (dead centre) 4.5 miles away.

Points ranged from 150 for the shortest time to 10 points for fifteenth, if you didn't make it,

you scored zero.

The day became so hot that dreaded dust devils started to decimate the rigging area. Bob McKay, with his usual quick wit, renamed the site "Dai Owens".

A number of gliders sustained serious damage as the dust devils lifted them — even with pilots lying on top — and turned them over.

One incredible sight was Richard Kenward desperately holding the bottom bar of his glider as a dust devil spun it above his head and then dumped it breaking both leading edges and a cross-tube.

The task eventually got under way but with a light southerly wind everyone went down except for three who managed to work weak lift away from the ridge and crosswind to the goal. Mark Asquith was first with a time of 28 mins 3 secs, next was Pat Malloy — 29 mins 7 secs — followed by Tom Warren on 30 mins 9 secs.

The prize-giving turned out to be as unpredictable as the weather — half the Irish team turned up with fluorescent green hair (very patriotic) and then showered all the winners with instant spray streamers. To top it off, the organiser, yes that's me, had a Celtic Cup full of Champagne and beer tipped over my head followed by the dreaded green hair spray.

It was all in good fun and everyone went away feeling that the unique and friendly atmosphere of the Celtic Cup competitions was still intact and that it would continue the same way in the future.

Prizes given at the event were: Trophy plus £50 airline ticket vouchers went to Pat Malloy (best Irish pilot), Joe Cullen (best Scot) and Tom Warren (best Welshman).

A £50 voucher was also given to lan Kibblewhite for the best XC with 39.2 miles (Joe Cullen's 39.4 miles was in fact the best distance but he had already been presented with a prize) and Brian Dainty was also given a £50 voucher for the best XC novice — 7.1 miles.

Ronald "the pig" Gillam was presented with a drogue chute for performing the worst landing, breaking his arm in the process, and finally all the competitors were presented with a small engraved plaque to commemorate an unforgetable occasion.

No! minister

THE BHGA is to meet aviation minister Iain Sproat next month to discuss licensing requirements for powered hang glider pilots.

Also invited are the British Microlight Aircraft Association and the Popular Flying Association.

But prospects of achieving any improvement in Civil Aviation Authority requirements for the granting of group D licences to BHGA members do not look

The meeting follows a decision by BHGA council to seek its own meeting with the CAA after the BMAA voted to exclude the BHGA from talks. Council was concerned at an apparent failure on the part of the BMAA properly to represent the interests of powered hang glider pilots as opposed to those flying machines with three-axis controls.

The main bone of contention is a requirement — in the newly published category D supplement to the CAP 53 private pilot's licence rules — that microlight pilots should make an 80km cross-country flight to gain their full certificate.

BHGA chairman Roy Hill said he considered the requirement both irrelevant to the needs of casual trike pilots and beyond most hang glider pilots who liked to attach a trike unit to their glider as a secondary pursuit.

"There are no people with more experience of flying powered flexwings than hang glider pilots," said Mr. Hill. "Yet the system's been set up basically by three-axis control pilots who do not understand the concept of powered hang gliding."

He denied suggestions the BHGA was trying to make a take-over bid for the control of microlight flying. "I would be very happy if the BMAA made proper provision for all power and that means that we must have a power endoresment for our instructors and people (PIIs) must be able to convert to powered hang gliders themselves."

BMAA chairman Graham Andrews was not available for comment.

Don's record

DONNY Carson broke the Scottish distance record to take the two awards for Scottish pilots in the Scottish Open "fly-off" at the Cairnwell on July 3, after four Scottish pilots drew for second place in the Open "proper".

place in the Open "proper".

Donny — who flew 38.7 miles to the sea at Montrose — takes the trophies for the best Scottish pilot and the best Scottish XC.

THE BHGA is considering purchasing a light industrial "unit" at Inkpens near Newbury to provide premises for a new national headquarters.

An emergency meeting of BHGA council approved in principle the scheme which would provide three times the space of the present leased premises at Taunton and offer scope for meetings, lectures and commercial activities.



Gray prize

BETTINA Gray has widened the scope of her Gray Prize to include "all branches of artistic and communications" effort.

The £150 Gray Prize and trophy were first awarded last year for the best article on hang gliding published in a newspaper with more than 25,000 circulation and were won by Wings! editor Stan Abbott.

Announcing details of this year's prize. Bettina told Wings!: "If someone wants to write a symphony about hang gliding then even that will be eligible — so long as it advances the sport of hang gliding."

While there are no formal entry restrictions, bar the October 15 closing date, the stipulation that the entry should advance the sport will favour entries not drawn from the established hang gliding Press.

Bettina hopes the award will be accepted for presentation by the Royal Aero Club although nothing has been finalised.

Bettina has been involved in hang gliding from its beginnings 11 years ago and her thousands of photos have appeared in magazines the world over. She has illustrated 12 books on the sport and has herself travelled the world covering hang gliding meets. Her pictures have been exhibited at the Smithsonian Institute.

Entries for the prize and requests for further information should be sent to Bettina Gray, Gray Photo and Press, PO Box 32, Rancho Santa Fe, CA 92067, USA.

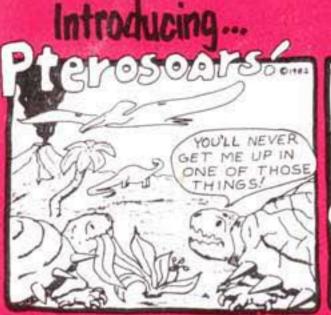
 Picture shows Bettina presenting Stan Abbott with the first Gray Trophy at the Dales American Cup.



Tom Dean, Ireland, on Comet



Colour & b/w prints of British team plus b/w prints of American Cup available now

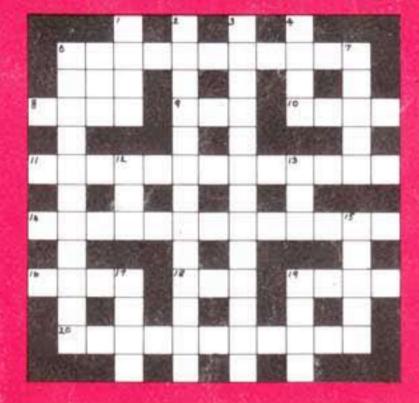








SOLUTIONS to Stan Abbott, 72 Hartley Avenue, Leeds LS6 2LP by August 6. Sender of the first correct entry opened wins £10 credit from Mainair Sports. You can photocopy the grid or write your solution clearly if you don't want to cut your Wings!



PRIZE CROSStubeWORD

CLUES No.10 by Bazantez Min Sink

- 6. Conserves potential energy. (1,3,7)
- 8. Get it out of a slot. (4)
- 9. Out, not in, but out, (3)
- 10. Satan beheaded is still vile. (4)
- 11. Sink one and feel better. (1,7,5)
- 14. £1,000. (4,4,5)
- 16. A little devil with his father's tail. (4)
- 18. A stamped addressed envelope returned (3)
- 19. Has less fattening centre. (4)
- 20. Accident Investigation Branch invoices the Civil Aviation Authority, (3,5,3)

Luffing

- 1. King of the mail. (4)
- 2. Don't, or you will upset the Reds. (3,4,6)
- 3. Sailmaker. (3,2,3,5)
- 487. All sites should have one. (4,5)
- 6. Snaoty Aussie lass (5,6)
- 12. Floating cross-tube necessary here. (3)
- 13. Holds you up. (3)
- 15. Ze uplift. (5)
- 17. Recommended in poor flying conditions. (4)
- 19. Food detested by pilots. (4)

Annual Draw

The BHGA annual draw prizewinners were: 1st (£1,000) B, Bancroft, R.A.F. Headley Court, Surrey: 2nd (£250) Mrs. W. Nisbet, Lerwick, Shetland; 3rd (£125) R.I.Ward, Redcar, Cleveland; 4th (£75) Hilary Boyce, Lurgan, Co. Armagh; 5th (£50) P.A.Brown, Chorley, Lancs.

In the Sellers' Competition:

1st. equal (165 each) — John
G. Walker and Gary Phillips
who each sold 1165 worth of
tickets. 3rd (120) Bill Hamilton
Sold (80 worth of tickets.





Fédération Internationale Aéronautique





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Commercial Editor — Sylvia Howard, 4 Somerwood, Rodington, nr. Shrewsbury, Shropshire (Upton Magna (074 377) 365).

You can get Wings! every month by joining the BHGA or on subscription of £12 a year. For overseas subscriptions, send Sterling International Money Orders — £12 surface mail or £25 airmail — for your annual subscription Membership details will be sent on request. Address ALL QUERIES to the Taunton Office.

The views expressed in Wings! are not necessarily those of the association, its council, officers or the editor.

All contributions to the magazine are welcome. Articles should be typewritten (double-spaced), one side of the paper only where possible. If not typewritten, they should be CLEARLY written, with plenty of space between the lines.

Photographs should bear full captions and any material to be returned should be accompanied by a stamped addressed envelope. Any other material will be kept and filed for future use.

The Editor reserves the right to edit contributions.

If your Wingsl does not arrive, or if you change your address, please contact the member-

ship secretary at the Taunton headquarters. Please give FIVE WEEKS notice of change of address and in all correspondence quote your full name, address and MEMBERSHIP NUMBER (where applicable).

If you, your club or any hang gliding activity gets written up in a local or national paper, please send a cutting to the Taunton office for our cuttings collection (this applies to the UK only).

The BHGA Council

President, Ann Welch OBE; Chairman, Roy Hill (Longworth (0865) 821129; Treasurer, Percy Moss (0926-59924).

Members: David Bedding, (0844-7186); Diane Hanlon (051-652-5918); John levers (049-525-4521) Mike Watson (0895-833176); Terry Prendergast (029673-8033); Jim Taggart (0874-4046); James McMenemy (09804-6147).

Officers and staff: Principal Executive Officer; Barry Blore (0235-834033); Secretary; Chris Corston (0823-88140); Training Officer, Bob Harrison (0706-53755); Medical Adviser, Dr. Dunstan Hadley; BHGA Solicitor, Anthony McLaren, Membership Secretary, Janet Hayes; Record and FAI Award Claims, Rick Wilson; Radio Communications Officer, Dave Smith.

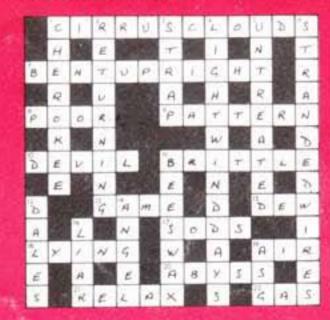
Record and FAI Award claims, Rick Wilson (0734) 21099; Radio Communications Officer, Dave Smith; Airspace Co-ordinator, Ted Frater.

MAY SOLUTION



May winner - John Bevan, Droitwich.

JUNE SOLUTION



June winner published next month