

# Britain's clean sweep

Magazine of the British Hang Gliding Association

SEPTEMBER 20, 1982

## Wings!



2nd - Graham Hobson

1st - Tony Hughes

3rd - Robert Bailey

European Hang Gliding Championships & World Open, Millau, France

*'This result really puts British hang gliding on the map'*  
— Robert Bailey (captain)

## FLIGHT BRIEFS

### Towing report

Gerry Stapleton has completed his investigations into towing resulting from Brian Woolorton's fatal accident and a report has been presented which is expected to lead to firm recommendations on towing procedures at the next BHGA council.

BHGA Principal Executive Officer Barry Blore is organising a meeting of European representatives of the international hang gliding confederation (CIVL) which expects to make recommendations on towing practice soon.

### First Aid course

The Army Hang Centre is running a First Aid Course for the St. John Ambulance Certificate from November 19-22. Anyone can attend.

The cost will be around £10 depending on how many enrol and the instructor's and examiner's fees are to cover the First Aid Manual and St. John registration.

If you would like to attend, send £10 deposit and your name and address to: AHGC, Sennybridge, Brecon, Powys, LD3 8PN.

### Latrigg, Keswick

Due to a dispute over the land at the top of Latrigg, near Keswick, no flying should take place for the time being. Only three individual pilots have permission to fly the site and anyone wishing to fly in the area should obtain details of alternative sites from a club contact.

Steven Barringer,  
Cumbria HGC

### Scorpion grounded

The Civil Aviation Authority has grounded Scorpion micro-lights of the type which crashed at Headcorn, near Maidstone, on August 25 with the loss of two lives.

WELSH XC League at 24.8.82.  
1 Martin Pingel, total 100 miles.  
2 Philip Merton, 84; 3 Tom Warren, 67.7; 4 Richard Newton, 63.3.

Martin Pingel

## Big John's ten grand

TWO months after Dave Harrison and others climbed to a new British high of 9,500ft., John Duncker has become the first pilot to beat the ten-grand barrier in Britain. And from the same hill.

Big John, he tips the scales at 19 stone with his flying kit, climbed to 10,400ft. ASL after taking off from Wether Fell, Hawes, Wensleydale.

The August 31 flight lasted 1 3/4 very cold hours, writes John in a

report to be published in full next month, and was achieved on a Hiway Demon 195.

Wind on the WNW hill was 20-26mph at take-off and somewhat stronger on landing. John described the steady 4-5-up lift as like "flying in oil". Unfortunately, he was not carrying a barograph and thus will presumably not qualify for the prize awaiting the first proven ten grand.



Steve Thompson pic

SOUTHDOWN Sailwings Ltd. have developed a sliding hang point which does away with the moving parts on the traditional French Connection.

It comprises a rail along which the hang point slides, its movement "damped" by rubber concertina "shock absorbers".

Keith Reynolds of Southdown, flew with one on his Lightning II at the Sheffield League and was very enthusiastic about the device. It does away with the complicated setting-up of the Connection and costs £50 inc. VAT. Skysports of Brighton will be the main distributor.

## Sliding hang point

### Dates data

THE international hang gliding confederation (CIVL) is to act as a central "clearing house" for 1983 competitions dates.

It is hoped national member associations and other competition organisers will notify all dates to CIVL to minimise clashes which are growing annually.

The co-ordination work will be done through BHGA Principal Executive Officer Barry Blore in his new role as Secretary of the CIVL Bureau, and will be carried out at the BHGA's Taunton office.

Next year should see the first FAI-blessed world towing championships, over water at Cypress Gardens, Florida.

Terry Prendergast wishes to thank all those who contributed to the fund in memory of Howard Edwards.

### Rich pickings

RICH Pfeiffer came out on top in the ten-day US Nationals at Crestline, California with Chris Price and Eric Raymond tying for second place, reports Bettina Gray.

Greg Dewolf, Mark Bennett and Mike Arambide tied for third place while British ex-patriate Bob England gave Pfeiffer one of his toughest times in the one-on-one comp. England was flying the new Streak he has designed for the Bennett company and had about nine wins out of 12. He is awaiting clearance to work full time for the company.

Debbie Renshaw became the first woman to achieve five wins.

### Skysports grounded

SKYSPORTS, the Abergavenny hang gliding school with headquarters at Lightwater, Surrey, has been deregistered by the BHGA after investigations by training officer Bob Harrison.

Complaints alleged included unsatisfactory gliders, instructor irregularities and unsatisfactory training. The deregistration, agreed by BHGA council at its September 12 meeting, will last until deficiencies are made good and for a minimum of one month.



The Winners

## Geordies flop at Mere!

BHGA Clubman's Mere saw a record entry of 148 pilots — 16 clubs fielded 26 teams at the association's annual Wiltshire jamboree.

Northumbria's monopoly of the Club Shield was ended by the Dover and Folkestone B team. Second was the club's A team, with Northumbria third and Mercian B fourth.

Steve Goad won the XC prize on a distinctly non-XC weekend, while Andy Wilson won the distance knock-out on a Magic II, with Graham Deegan second on a special Magic II. P. Rolinson won the single surface class and M. Kelloway was second. Time precision winner was Mike Driscoll and Bunny Smith won the Bogrog trophy.

• Mere picture special next month.

### 'Good vibes' on power

BHGA representations on behalf of trike pilots to aviation minister Ian Sproat and CAA officials have met with a sympathetic response, report chairman Roy Hill and councillor Mike Watson.

The main areas of concern are the assimilation of hang glider pilot qualifications into new licence requirements, and airworthiness requirements. Now the BHGA has been asked to make formal proposals and anyone interested is asked to contact either Mike or Roy.

## Financial fears

BHGA treasurer Percy Moss has reported a "worrying" financial position, with the association currently overspending at the rate of about £300 a month.

Only lottery and fighting fund revenue is keeping the books balanced, he told council.

Projected figures suggest Wings! will end the financial year (in December) as much as £2,000 overspent, largely because of a short-

fall in advertising revenue. Editor Stan Abbott told council the picture may not be as black as painted, as the most expensive months were now past and there were a number of outstanding debtors. Council voted to allow a maximum overspend of £2,000.

Meanwhile, much of the treasurer's onerous workload is to be transferred to the Taunton office under Ruth Kohlman.

# Wings!

Wings! is edited and designed by Stan Abbott and published in the second week of each month by the BHGA. Additional sub-editing by Martin Robinson.

## Editorial material ONLY to:

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Leeds,  
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Tel (0532) 451891

Cover picture by Stan Abbott shows the three leading members of the British team on the winner's rostrum at the European Championships at Millau.

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Pages 31-32 — John Pendry 2nd, Peter Waterworth 3rd, Bob Harrison 11th, Darren Arkwright 12th, Marc Southall 16th, John Fennell 18th, Trevor Birkbeck 19th...success for the 'C' team at Sansicario, by RICHARD IDDON.



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# Hargreaves goes top

PETE Hargreaves has finally knocked Robert Bailey off his perch and is leading the XC league and in a reasonably strong position.

Robert has to fly 54 miles to regain his title and make it a hatrick?

Don't forget... those lucky people who wish to be selected for the National League 1983 will have to get flying! The qualifying people will be chosen from the final XC league table.

As my post is being relayed through Taunton, late entries can be given to Bob Harrison.

by Dave Harrison

May I remind you of the entry requirements:-

- 1) All flights to be over 10km (6.2miles)
- 2) 6 fig O.S. map refs. of T/o and landing including prefix letters, indicating the 100km squares. The Approx distance flown. If possible, the calculated distance given in both km and miles. The conversion to be 0.6214, not 5/8.
- 3) Name and address of witness

of landing and T/o. No statements are required — just the name and address is enough with a telephone no. if poss.

- 4) Name of your club.
- 5) A note about any restricted airspace circumnavigated, if applicable.
- 6) Your name printed clearly. I usually can't read signatures.

For people who have entered the XC League but haven't seen their name in print yet, don't worry: I hope to print the full table at the end of the year. So far there is a total of 128 competitors!

## National XC League Positions at 8/9/82

Name	Club	1	2	3	Total
*1 Pete Hargreaves	N.Yorks	42.8	41.4	66.2	150.4
*2 Rob Bailey	Dales	51.9	44.6	43.6	140.1
3 John Higham	Sheffield	23.5	23.7	64.3	111.5
*4 Jim Brown	Dales	17.2	25.4	63.7	106.3
*5 Michael Carnet	Southern	18.9	61.1	25.2	105.2
*6 John Fennell	Thames Valley	25.3	41.8	34.4	101.5
=7 Jes Flynn	Moray Eagles	35.5	24.9	39.7	100.1
=7 Martin Pingel	S.E.Wales	26.8	48.4	24.9	100.1
9 Robin Rhodes	Northampton	37.3	32.9	22.4	92.6
*10 Johnny Carr	Southern	60.9	9.9	16.4	87.2
=11 Jack Rayne	Mercian	71.0	14.4	—	85.4
=11 Mark Asquith	Mercian	24.5	22.2	38.7	85.4
13 Simon Ogston	Angus	9.3	23.8	50.0	83.1
*14 Donny Carson	Highland	20.9	20.1	38.7	79.7
*15 Bob Harrison	Dales	17.9	23.2	35.9	77.0
*16 Brian Godden	N.Yorks	21.3	19.4	35.0	75.7
17 Digby Rolf	G. Cayley	23.0	26.1	22.0	71.1
18 Tom Warren	S.W.Wales	11.1	43.5	13.1	67.7
19 John Hammond	L'Bro. Students	24.2	6.3	36.3	66.8
20 Darren Arkwright	Pennine	51.8	14.4	—	66.2
21 Richard Armstrong	?	18.3	16.0	30.4	64.7
*22 Alan Smith	Wessex	19.4	26.3	18.4	64.3
*23 John Stirk	Dales	14.0	20.3	29.5	63.8
=23 Richard Newton	S.E.Wales	19.4	25.5	18.9	63.8
25 Joe Culler	Lanarkshire	9.4	14.8	39.4	63.6
26 Mark Hebden	S.E.Wales	36.8	24.9	—	61.7
27 Steve Hudson	Sheffield	24.2	16.8	19.1	60.1
28 John Meredith	Thames Valley	18.2	40.9	—	59.1
29 Ceri Davies	S.E.Wales	20.3	20.8	17.5	58.6
=30 Mark Dale	G. Cayley	18.3	14.2	24.6	57.1
*30 Pete Waterworth	Avon	29.1	12.0	16.0	57.1
*32 Marc Southall	S.E.Wales	31.0	12.3	10.2	53.5
33 Jenny Ganderton	Dunstable	24.0	15.8	13.5	53.3
*34 Len Hull	Sheffield	20.1	19.5	13.5	53.1
35 Sandy Nicol	Peak	18.7	24.1	10.2	53.0
36 Donald Mackenzie	Lanarkshire	18.0	11.5	23.0	52.5
37 Kevin Winter	Avon	28.1	23.4	—	51.5
38 John Rankin	Lomond	13.2	381	—	51.3
*39 Phil Huddleston	loW	49.8	—	—	49.8
40 Ian Slater	Sheffield	29.3	19.4	—	48.7
41 James McMenemy	Thames Valley	27.3	21.1	—	48.4
=42 John Hudson	Pennine	18.5	28.1	—	46.6
=42 Noel Whittall	Dales	8.6	29.5	8.5	46.6
44 Julian Hardman	Mercian	21.6	23.9	—	45.5
45 Michael Hibbit	Thames Valley	23.2	13.8	7.6	44.6
46 Bill Newton	Southern	19.6	12.9	12.0	44.5
47 Nigel Moor	S.E.Wales	20.7	22.0	—	42.7
48 Malcolm Hurst	?	22.9	19.3	—	42.2
49 B.J. Harrison	Southern	13.2	27.4	—	40.6
50 Peter Robinson	Wessex	23.4	16.8	—	40.2
51 Richard Iddon	Pennine	21.0	18.6	—	39.6
52 Mike Tomlinson	S.W.Wales	26.0	12.5	—	38.5
53 Simon Murphy	D & S Condors	24.0	14.0	—	38.0
54 Robert Hooker	Northumbria	37.4	—	—	37.4
55 Dave Clayton	Southern	10.5	12.6	13.5	36.6
=56 Malcolm Clee	Sky Surfing	11.7	15.9	8.9	36.5
=56 Tony Fillingham	Dales	11.1	9.0	16.4	36.5
58 Neil Clark	Loughbough	7.5	17.9	10.4	35.8
=59 Rob Hobbs	?	6.2	13.5	15.7	35.4
=59 Simon Todd	Longmynd	24.7	10.7	—	35.4
61 Richard Sheppard	Peak	11.2	13.5	10.6	35.3
62 Dave Harrison	Dales	10.9	24.0	—	34.9
63 John Hunt	Avon	33.9	—	—	33.9
64 Martin Hann	S.E.Wales	17.1	16.7	—	33.8
65 Dave McRobert	Avon	9.0	16.8	7.9	33.7
66 Chris Taylor	Cumbria	18.3	15.1	—	33.4
67 Paddy Yeoman	Sheffield	25.7	7.6	—	33.3
68 Jerry Whitehouse	Pennine	6.3	8.7	18.0	33.0
69 Graham Deegan	loW	32.0	—	—	32.0
70 David Walter	Sheffield	31.9	—	—	31.9
71 Dave Cheeseman	Avon	29.8	—	—	29.8
72 Gordon Holmes	George Cayley	9.6	8.1	12.0	29.7
73 Dave Freestone-Barks	Peak	28.9	—	—	28.9
74 Kev Turner	Sandiver	16.6	10.6	—	27.2
75 Andrew Fawcett	Lanarkshire	26.1	—	—	26.1

\* Denotes League pilot

## LATE NEWS

# Tragic death of the 'Old Man'

GEORGE Worthington, one of the truly great figures in world hang gliding, died on September 9 in a micro-light accident in Owens Valley, California.

Bettina Gray reports that George was flying a Wanderer of the type he wrote enthusiastically about in July Wings! when it apparently suffered a mid-air failure.

George came into hang gliding from the sail-plane world and has at one time or another held every single world record for male hang glider pilots. He was a tireless writer and worker for the sport worldwide whose loss cannot be adequately expressed in words. A full tribute will appear in next month's Wings!



Bettina Gray pic

## X-word winner

The winner of the August Crosstubeword was L.S.Williams, of Putney.

KEITH Nichols is resigning as USHA competitions boss, reports Bettina Gray.

UTAH's Francis Peak has emerged as a likely venue for the next American Cup, reports Bettina Gray.

## New members

BHGA council has co-opted two new members — Dave Clayton of the Southern Hang Gliding Club whose responsibilities will be towards training, and Dales club chairman Noel Whittall who will work with the Wings! committee.

## Mid-air

Steve Hudson and Rick Green of Sheffield Club survived a mid-air collision at Bradwell Edge on September 15, with facial injuries/concussion and broken arm, leg/concussion respectively. No details of the circumstances yet available.

# Big 'NO' for registration

## Thin end of the wedge

Dear Stan —

I was HORRIFIED, and at a COMPLETE LOSS to understand why the Pennine Club (my club) committee voted in favour of compulsory glider registration.

My feelings on this subject are very strong and as follows:-

For the sake of the hassle-free flying that we already enjoy we must keep the number of things that we are compelled to do to an absolute minimum.

For registration to work you would have

to have large ugly letters stuck to the sail of your hang glider and notify somebody every time you sold it.

I don't see that we need registration as I believe we are managing very well without it. I certainly don't believe the argument that the advantages of being able to find the names of site offenders or glider robbers are worth the loss of any one of the basic freedoms that we have to fly in an unhampered way.

For those who say that we must introduce some sort of registration or else the CAA will impose it, I say that we can

reasonably say to the CAA that we have operated over the last nine years without problems to anybody — our record proves it!

And, as such, we can rightfully resist most strenuously any movement on their part to impose registration on us.

Mark my words, this is the thin end of the wedge which could mark the beginning of the erosion of our freedom as hang glider pilots.

GRAHAM HOBSON  
Manchester.

## Representative?

Dear Stan —

I was disturbed to read the results of Roy Hill's registration circular — he states that a small majority were in FAVOUR of registration. This result appears not to concur with the opinions of all the pilots I have spoken to — from all parts of the country. — who are at least mildly, if not vehemently, opposed to the concept of registration.

May I suggest that whilst it is quite appropriate for club secretaries to deal with general administration, where an issue (such as registration), could potentially jeopardize the liberty (and finances) of ALL members, the BHGA should address itself to ALL members. I don't feel that a few dozen circulars and a few lines in the back pages of Wings! is sufficient for a debate of this magnitude.

SIMON TODD, Telford, Shrops.

## Disturbed

Dear Stan —

The North Wales club is very concerned at rumours that sail identification (sail numbering) is to become mandatory. Such things increase our apprehension of the constraints on free flying that seem to be dissipating much of the joy we once felt in this sport.

All our members are disturbed that BHGA Council is overly concerned with power, and exhibiting little concern

for the ordinary hillside pilot.

If an involvement with powered hang gliders makes it necessary that suitable wings be identifiable whilst in the air, then perhaps this can be used to our advantage. We suggest that, after a certain date, ONLY power-suitable wings are marked prior to sale. Thus any unmarked wing sold new after a certain date can be assumed to be unsuitable for power.

BILL HUYTON  
Chairman NWHGC.

# Height is not always safety

Dear Stan —

As the school CFI mentioned in Mr. Delmar Bicker-Caarten's letter to Bob Harrison (July Wings!) I feel compelled to write and voice my personal disquiet about the opinion he raises in his letter; hopefully preventing other novice pilots from endangering themselves.

As I see it Mr. Bicker-Caarten's main shortcoming is his inability to appreciate and act upon his own limitations, both physical and as a pilot.

On the particular day he refers to the wind was crossing the slope slightly and was gusty with moderate thermal turbulence. The conditions themselves limited flying to an altitude well below the main ridge!

As I had not seen Mr. Bicker-Caarten fly personally and knew that he flew fairly sporadically, combined with the fact that he was also flying a more advanced machine than his own early second generation glider, I was obviously reluctant to recommend that he launch himself from a 200ft. — 300ft. cliff edge.

I asked him to make some lowish flights first from about 120ft. and as the day went on he progressed slightly higher. Although he flew quite smoothly he was warned on several occasions

by two individual instructors to increase speed more before initiating turns or flying crosswind.

The point I would like to make is that greater altitude doesn't necessarily reduce the possibility of an accident due to shortcomings either in pilot experience or ability.

The only cure for these problems is plenty of practice combined with taking heed of knowledgeable advice.

Although it is obviously possible to recover from serious pilot errors, such as tip stalls, given greater altitude, the consequences of any momentary indecision or lack of confidence can have far worse results than a deflated ego.

Finally, the article to which Mr. Bicker-Caarten refers is not addressed to novice pilots, it is to warn soaring pilots of the problems of scratching close to the hill. Certainly it points out that increased air speed is essential when flying close to the ridge — something which Mr. Bicker-Caarten admits himself was one of his problems.

PAUL FARLEY,  
CFI Welsh Hang Gliding  
Centre.

• A letter in similar vein was received from Michael T. Price of Sydenham, London — Ed.

# Model code

Dear Sir —

The report by Tim Moran on Gordon Thorne's collision with a model glider (June Wings!) has come to our notice.

Any accident involving physical contact between a flying model aircraft and a hang glider (or anything else for that matter) must give

cause for concern. The circumstances of this accident are not reported in detail, but we can assure your members that the model controller

could not have been a member of the Society of Model Aeronautical Engineers as current third-party insurance cover is mandatory on our members.

It would further appear that the mutually agreed Code of Practice for joint usage of slope airspace agreed between our two bodies was not in operation.

The reference to the World Speed Record for R/C gliders is inaccurate and does nothing to improve relations between fellow aviators.

The land speed record for wheel-driven vehicles stands at 659.341kmh. God forbid that any report of a motor vehicle accident on the M.1. quoted such a figure, both are irrelevant in such a context. The land speed record wasn't run on the M.1., nor was the glider record achieved on a local slope!

ROY NUDDS  
General Secretary,  
Society of Model  
Aeronautical  
Engineers. Leicester.

# 'UNFAIR' RAP FOR MILTON AND HIS MEN

Dear Stan —

I think the criticism of Brian Milton and, to a lesser extent, Keith Cockroft and "L' Equipe Atkinson" because they made their services available to foreign teams during the American Cup is quite unfair.

While I am realist enough to appreciate that politics and personalities are involved, I think an elementary principle was overlooked: not only is it sensible to hire local experts when involved in sporting pursuits, it is also normal.

What is the difference between the manager of the British Ski team being Austrian, and the manager of the American hang gliding team being British? Is it immoral for the winner of an international golf championship to have been advised on club selection by a local caddy? Is it inciting treason to hire the best ghillie on a Scottish salmon river?

Fortunately, the days of gentlemen vs players are over; if a man has accumulated knowledge and skill for which others are prepared to pay, then he should be able to sell such skills on the free market without having to justify his choice of employer thereafter.

NOEL WHITTALL,  
Chairman, Dales HGC

# How parachute landings may

# drag

Dear Stan —

Whilst there is no question that carrying a parachute is an extremely wise idea, perhaps some more thought should be given to the aftermath of the incident which has caused you to use it.

Some people actually enjoy jumping out of aeroplanes for the sole purpose of using their parachutes, and, while one can but wonder at their motive, one can at least learn from their experiences. With beginners, they do not jump if the airspeed at ground level is more than eight knots, as they consider it too dangerous otherwise.

Now hang gliderers are quite happy to fly when the windspeed is considerably more than this, and, should the need to pull the parachute arise in such a windspeed, there is little question that the subsequent vertical impact will be much lessened.

However, there will be a considerable horizontal component to the impact, and should the parachute not deflate, a sideways force of some hundreds of pounds would immediately be exerted upon the aircraft and pilot, this force often being connected by a karabiner which cannot be released. It is easy to visualise being gaily dragged across the countryside.

Although I have heard several different people say that they consider

a parachute to be a life-saver, I would be rather disappointed if I survived a "scary" involving the use of my parachute, only to break arms, legs etc., after landing.

I would like some form of parachute release, which was

totally failsafe in that it would NOT unintentionally release. A sharp knife falls into this category, if the webbing support strap is not wire reinforced.

Happy landings,  
MIKE WATSON.  
BHGA Council.



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.

## Contact register

Dear Stan —

Would it be possible for a central contact list to be started for mid-week flyers. I am sure that I am not the only person who has turned up at a site to find flying conditions ideal, but no-one else there, and so have not flown.

What I would like to see is a central register, possibly at the Taunton Office, to which people could phone and leave their name and telephone number, the dates, and areas in which they intend flying. By cross-reference, it should then be possible

for flyers to make contact, and make final arrangements.

ANDY BUCHAN  
Cobham,  
Surrey.

**'Mettle'  
Mickey  
taker**

Dear Stan —

I enjoyed reading your report on the American Cup, and I hope you will forgive me for pointing out a syntactical error before one of your very literate American contributors (like RICK MASTERS) does so!

You keep saying "metal" when you mean "mettle"; the word means spirit, vigour or determination — a natural quality for success.

I don't know what you have that is made of metal and worth showing, but you'd need to show your mettle to expose it in public!

PETER WARNER  
Westminster.

STUART PROSSER,  
Abingdon.

little strangely in turns) and I found the reason in the bottom side rigging. Someone had tied a knot in it! Any deformation in a wire, a knot being an extreme form, will reduce its strength: this wire could have snapped at any time.

So here was a glider with inherently unstable roll characteristics and two critical structural members in danger of imminent failure. It had been flown, earlier in the day, in 30mph plus winds and neither the pilot nor anyone else on the hill had noticed these potentially lethal defects.

Whilst this glider may, hopefully, be an extreme case it led me to wondering how many other gliders we see flying may be structurally unsafe. (Recently, I have 'collected' a Spirit with its pre-formed keel fitted upside down, another with its deflexors wrongly fitted, a Comet with frayed bottom rigging and innumerable gliders with bent and/or fatigued uprights, deformed thimbles and badly corroded bolts etc. etc.)

I, now believe that all pilots, especially club Safety Officers, should be encouraged to make regular spot checks of gliders on the hill: particularly those belonging to visitors and newcomers to the sport. Even a visual once-over when wiring someone off would help. This should, certainly, lead to a greater awareness and interest in the airworthiness of our gliders and may even prevent a serious accident.

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JOHN BOWMAN  
Middlesbrough

# Towing error

Dear Stan, —

Regarding the recent towing incident which resulted in the tragic death of Brian Woollorton.

As is so often the case, a few "newsy" paragraphs in Wings! can fuel rumour and speculation and in this case may serve only to reinforce many people's prejudice against towing per se.

This must be particularly true when the reports are contradictory: — static winch (June) fixed line (July) — or run counter to all previous information.

Can the BHGA really condone fixed-line towing after all the articles in Wings! spelling out the dangers? See for example: The Big Wind Up —

Sept. 1981, The National Tow Meet — Nov 1979, or particularly Paul Baker's report in Wings! No.6 1979 on the towing accident at Little Rissington.

In five or ten years time, towing by winch or microlight will be commonplace but meanwhile we still have much to learn — not least that past mistakes must not be repeated.

Of those in this country with the most experience of tow-launching hang gliders, one at least is on the point of giving up entirely.

Please don't let his hard earned knowledge go with him. If necessary, pay for an authoritative Wings! article on the current state of the art. For Brian Woollorton's sake.

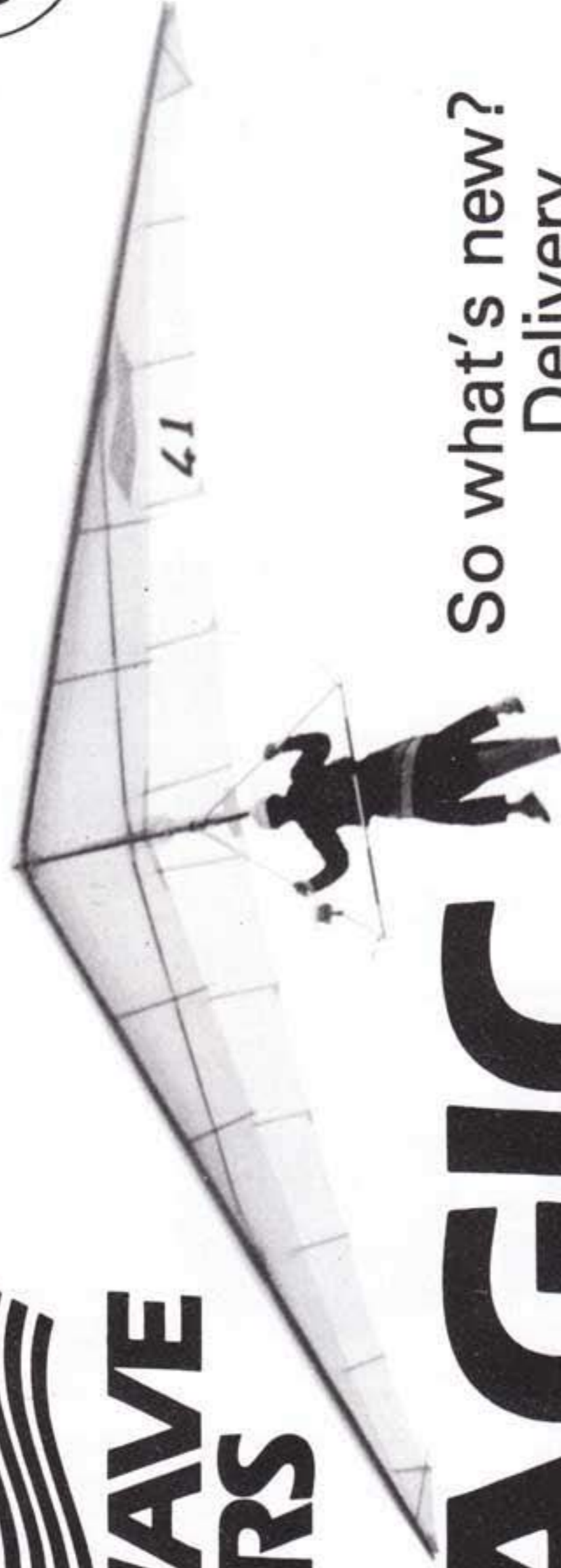
STUART PROSSER,  
Abingdon.

PETER WARNER  
Westminster.

JOHN BOWMAN  
Middlesbrough



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Isle of Wight PO31 7UT  
Telephone Cowes (0983) 296042

\* At the time of writing:  
Daimon £958  
Azur £980  
Typhoon £949

photo — Steve Thompson

Picture shows Mike De Glanville on Finals.

# Mill Hill: the lessons

THE Mill Hill saga has dragged on for many years and the first threats to ban hang gliding there in fact precipitated the formation of the SHGC.

Basically, in the early days the site at Shoreham, Sussex, was over-used and little regard was paid to local residents or the parking/access on the narrow road leading past the top car park. A public inquiry was instigated in 1976 which came down heavily biased against hang gliding.

## INVALID

It recommended to the Home Office that a bye-law be made. The Home Office were prepared to accept a proposal for a bye-law although they initially would only approve the control of hang gliding on the grounds of nuisance or annoyance.

They eventually passed a wording which was put to the test at the Frank Taryjarni case. Because the then wording was very obscure, at the eventual Divisional Court appeal the judgement proclaimed the bye-law invalid.

## By Adrian Whitmarsh, Southern HGC

We were free to fly again! However, Adur District Council made an amendment to their bye-law which the Home Office eventually approved. They agreed to the introduction of wording making it illegal to take-off, land (except in the case of emergency) or fly directly above Mill Hill in such a way as to cause a nuisance.

The legal test of this came in the Magistrates' Court in November 1981. Our solicitors argued successfully that ADC could not amend an "invalid" bye-law — the nett effect being the bye-law was still invalid. We continued to fly.

ADC predictably appealed and this came up in the Divisional Court on June 22 this year. They won the appeal as this court proclaimed the previous Divisional court did not mean the WHOLE bye-law was invalid — only the part which was obscure and was subsequently amended. The bye-law is thus perfectly valid as now written. You can now retire. One round each!!

Seven pilots had been summonsed but in fact the case against only two had

commenced. ADC agreed to drop the other five if we pleaded guilty to the two. This we had to do. The result was they were found guilty and fined £5 each! ADC then asked for costs of £450, but the court saw fit to award them nothing! So at least we had come off with minimal expense.

The important point throughout is that we kept requesting meetings with ADC to try and agree a licence for the club to fly the site under strict rules — similar to ones we have negotiated with other local authorities/land owners. We pointed out that they were spending a lot of ratepayers' money on unnecessary costs — we have estimated this at in excess of £60,000.

They absolutely refused to even listen to us.

Finally the result:- **It is illegal to hang glide at Mill Hill.** We must stress that although the two pilots so far prosecuted had minimal fines which the club paid in addition to their legal expenses — in future anybody caught flying and taken to court could face fines of £50 for each separate violation i.e. £50 for take-off, £50 for landing, etc. So it is with much regret that we must advise ALL BHGA members

that Mill Hill is CLOSED as a hang gliding site.

There is one SMALL glimmer of hope. At an informal discussion with two councillors recently we received a "gentleman's agreement" that if we let the whole business quieten down and try and stop flying, if we went to the council in about six months with licence regulations in the form of a PROPOSAL to the Leisure and Recreation Committee they would put it to the vote.

## REGULATE

My mind is split over whether this will get us anywhere because until now ADC have been pig-stubborn in their attitude. But we must try. So we will start formulating our proposal. In the meantime we must stress again: **Please don't fly at Mill Hill.** Otherwise our small foot in the door will be kicked out.

I still think a lot of the problem is education to the layperson, including councillors, what hang gliding is currently about and what it has, and can, achieve.

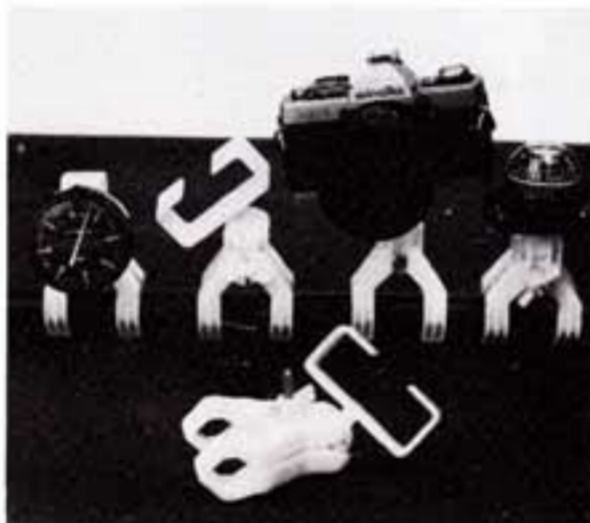
ADRIAN WHITMARSH

## New clamp

SIMON Murphy is marketing a natty little device for use on hang gliders and ultralight aircraft. "Wonderclamp" allows instruments, cameras, or what-have-you to be attached to tubes of up to 2" diameter.

Exhaustive evaluation on Simon's special test vehicle (a ten-speed racing bike, ridden briskly over Devon lanes!) shows that weights of about a pound can be carried safely.

Retailing at £2.28 inc. VAT, Wonderclamp provides a simple means of attaching those compasses, altimeters, ASI's, light varios etc. which have previously been secured with hose clips, elastic or string! All the pilot has to do



is to cut and drill the instrument mount to take his chosen instrument.

Wonderclamps will also be available from Adventure Sports Equipment, Hungerford Hang Gliding Centre, Mainair Sports, Sky Systems, Ultra-Sports and others.

## DON'T PANIC

MERCIAN club members had a frightening electrifying experience in the Malvern Hills, writes Paul Venus in the club's newsletter, Soar Point.

In the lull before a thunderstorm as pilots prepared to fly down to safety it was discovered battens could be made to squawk like a vario in the charged air simply by moving them up and down.

Then a glider started to buzz and everyone's hair stood on

end. "There was a sharp crack and what felt like a slap on the head and everyone's hair was flattened." In seconds the 15mph easterly became a 30mph westerly, the hail came and vicious forks of electric white lightning started small fires.

All pilots survived to learn these lessons: if it looks like thunder, don't fly, lie down, don't shelter under a tree or glider, secure your glider to the ground and **DON'T PANIC!**

Flexiform  
Sky Sails  
Skyline



Announcing the re-introduction of a new improved Skyline.

An intermediate hang-glider with a well proven reputation.

Perfect for the beginner.

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THIS GLIDER HAS  
NO BRITISH C. OF A.

# Airworthiness and

Articles by MIKE COOK and ELIZABETH KILKENNY, lecturer in flight mechanics and research assistant respectively at the College of Aeronautics, Cranfield Institute of Technology.

THE rapid development of hang gliders over the last ten years or so has been largely of a trial-and-error nature with little reference to the theoretical implications.

It is commonly acknowledged that, despite the fact that the mechanisms of the less desirable characteristics of hang gliders are reasonably well understood, there is a need to expand the theoretical background to match the state-of-the-art.

To emphasise the point, the longitudinal static stability of the average hang glider is marginal as shown in the diagram, where the pitching moment coefficient variation with incidence is shown for a conventional aircraft (Jet-stream windtunnel model) and for a typical 3rd generation hang glider as measured with the test rig.

For the aircraft to be stable the slope of the graph of pitching moment coefficient plotted against incidence should be negative and it is clear that this is hardly the case for the hang glider, which operates around neutral stability in its working incidence range (incidence greater than  $5^\circ$ ).

□ □ □

The familiar sporting hang glider has, of course, evolved over the past 20 years or so and has its origins in work carried out by NASA to devise a method for the safe recovery of space vehicles and similar objects.

The result of this early work was the flexible parawing which is a kind of parachute which has a loosely controlled lifting capability in addition to the drag retarded descent.

This concept was rapidly developed into the semi-rigid parawing, or Rogallo, which gave rise to the delta wing hang glider of the 60s. The rigid frame of this machine comprised little more than tubular leading edges and keel with a cross-boom to fix the planform — the wing itself being a single layer of covering of sail cloth or similar material — and possessed very poor stability characteristics and consequently did not handle well and were difficult to fly.

As most of the problems are

## The Cranfield research

APRIL saw the start of a three-year research programme at the College of Aeronautics into the aerodynamics of hang gliders to try and identify characteristics influencing stability and, hence, general airworthiness.

The work is being carried out with the support of the Civil Aviation Authority, the Accident Investigation Branch of the Department of Trade and the BHGA.

All measurements and observations are being carried out on full size gliders using the mobile test rig built on a Citroen CX2400 estate car. The rig is on loan to the college for the duration of the programme and is being operated with the assistance of BHGA councillor Terry Prendergast.

Numerical data for research purposes is being recovered as a by-product of the standard BHGA certification tests and more specialised investigations will be carried out using a Falcon IV glider specially obtained for experimental purposes.

A fatal accident to a power-assisted hang glider prompted the CAA and the AIB to take a closer look at hang gliders. The result was they jointly commissioned and funded the test rig to study more closely the characteristics of hang gliders.

Having completed the accident investigation the rig was passed to the BHGA who maintain it and control its use, and from whom it is on loan for the duration of the research programme.

Preliminary work began 18 months ago as an M.Sc student project reported by J.T.Sweeting and now research grant funding for three years has been provided by the Science and Engineering Research Council.

Development of the data analysis computer software is at an advanced stage and it has been well tried in an analysis for the AIB. Continuing work will develop and establish the test rig as a valid source of aerodynamic and stability data for routine glider testing and look more closely at the static stability of the hang glider, the influence of wing camber and twist and the effects of side

slip so as to obtain a better understanding.

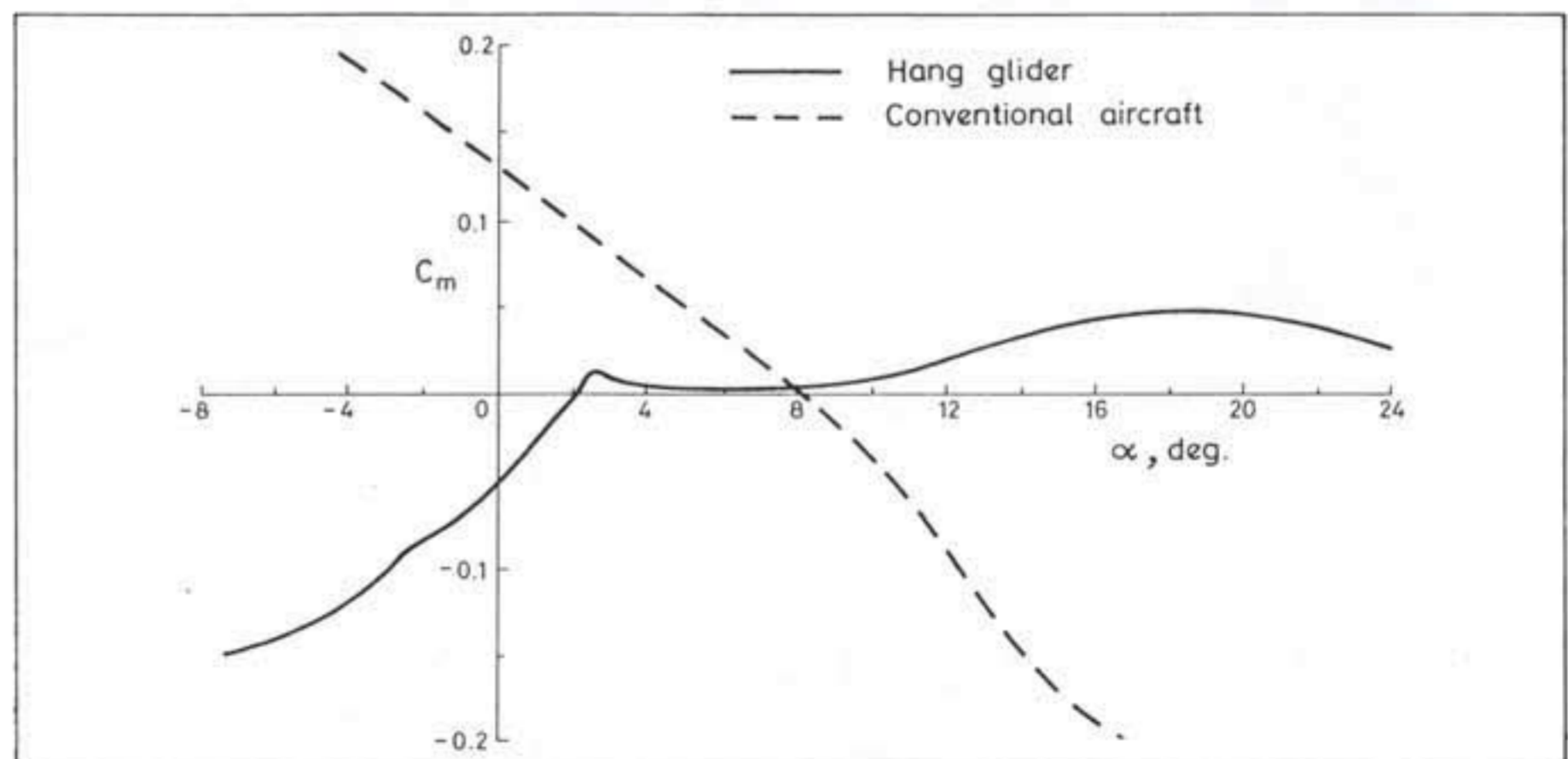
An attempt will also be made to define stability criteria along the lines of "stick-fixed" and "stick-free" criteria as applied to conventional aircraft.

Hopefully, suitable stability criteria will be developed along with the tests necessary to demonstrate compliance which should eventually lead to safer hang gliders.

The BHGA is very keen to introduce improved standards of airworthiness for gliders together with a standard test procedure using the rig which will be applied to all new gliders in the UK and the research programme should contribute significantly to this aim.

Reference:- Sweeting J.T. — An experimental investigation of hang-glider stability. M.Sc Thesis, College of Aeronautics, October, 1981.

Acknowledgement:- This article is a revised and edited version of an article on Hang Glider Airworthiness by M.V.Cook which first appeared in Aerogram, the newspaper of the College of Aeronautics in May, 1982.



Variation of pitching moment coefficient with incidence

Note:- the graph relates to information from the Falcon IV

associated with the flexibility of the wing surface it is not surprising that during the evolutionary process the most notable changes have resulted in much stiffer wings. Other changes have been directed at improved performance, flying and handling qualities and current gliders are much more akin to a rigid tail-less aircraft

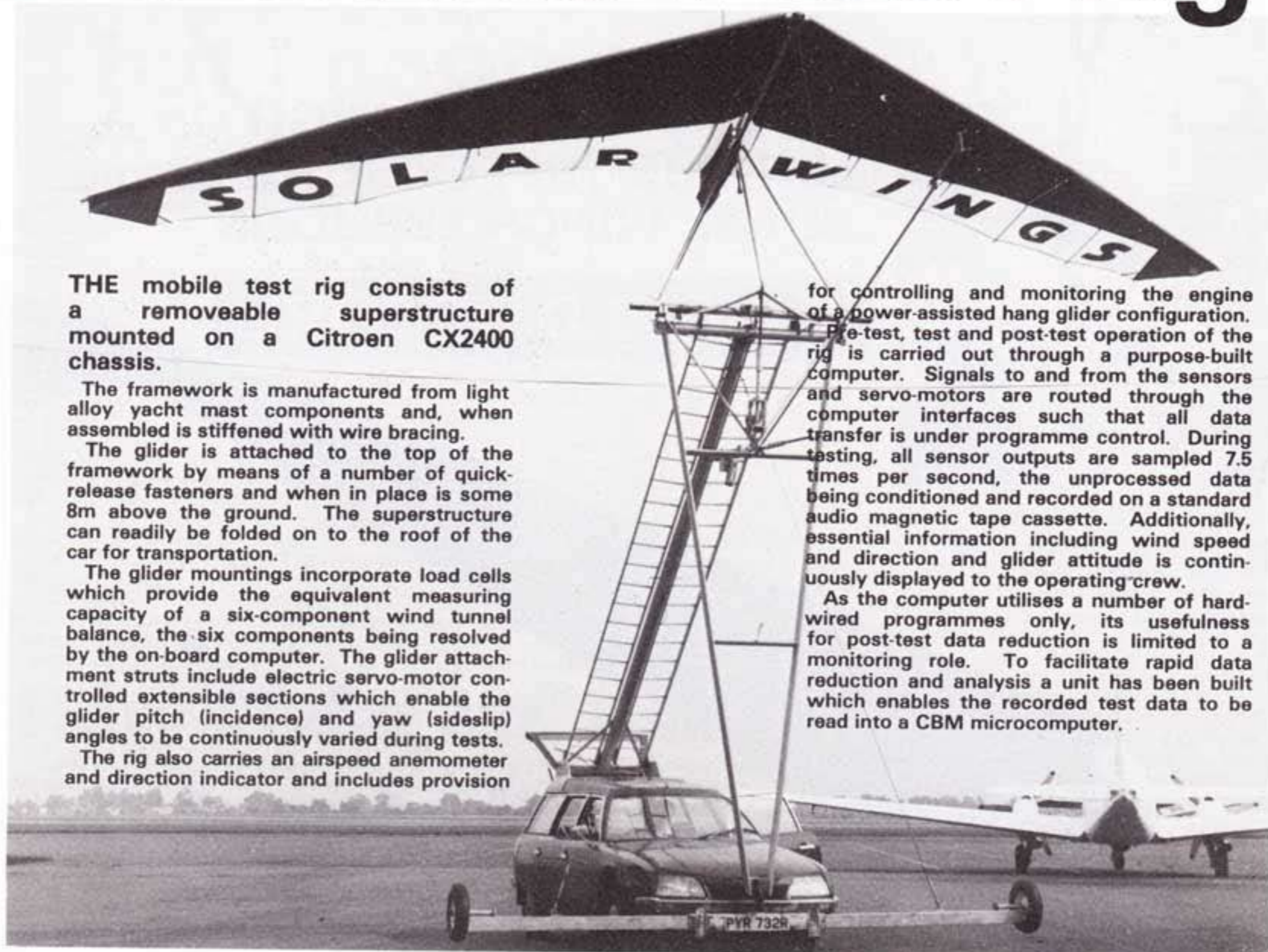
configuration.

The wing is double-skinned, has shaped stiffeners to provide fixed camber, shaped leading edges and wire bracing which ensures a reasonably constant section with much improved stiffness. Drag is reduced by housing the main structural members within the wing and

minimal sweep with large aspect ratio contribute to a generally improved performance and controllability. The rapid improvement in performance is readily appreciated when the glide slope of 3 to 1 of early gliders is compared with a typical slope of 10 to 1 for current hang gliders.



# the BHGA test rig



**THE** mobile test rig consists of a removeable superstructure mounted on a Citroen CX2400 chassis.

The framework is manufactured from light alloy yacht mast components and, when assembled is stiffened with wire bracing.

The glider is attached to the top of the framework by means of a number of quick-release fasteners and when in place is some 8m above the ground. The superstructure can readily be folded on to the roof of the car for transportation.

The glider mountings incorporate load cells which provide the equivalent measuring capacity of a six-component wind tunnel balance, the six components being resolved by the on-board computer. The glider attachment struts include electric servo-motor controlled extensible sections which enable the glider pitch (incidence) and yaw (sideslip) angles to be continuously varied during tests.

The rig also carries an airspeed anemometer and direction indicator and includes provision

for controlling and monitoring the engine of a power-assisted hang glider configuration.

Pre-test, test and post-test operation of the rig is carried out through a purpose-built computer. Signals to and from the sensors and servo-motors are routed through the computer interfaces such that all data transfer is under programme control. During testing, all sensor outputs are sampled 7.5 times per second, the unprocessed data being conditioned and recorded on a standard audio magnetic tape cassette. Additionally, essential information including wind speed and direction and glider attitude is continuously displayed to the operating crew.

As the computer utilises a number of hard-wired programmes only, its usefulness for post-test data reduction is limited to a monitoring role. To facilitate rapid data reduction and analysis a unit has been built which enables the recorded data to be read into a CBM microcomputer.

## The test rig — a history

The test rig first arrived at Cranfield in July 1981. A number of difficulties arose in operating the rig, the most serious being a structural problem with the pitch control strut which was made of aluminium and bent in use the following September and put the rig out of action.

The weak parts were replaced with steel, but not until February, when the BHGA could collect the rig to carry out the modifications. The computer was then recalibrated to allow for the alterations and modifications were carried out to eliminate data-recording problems highlighted during rig operation by the AIB and at Cranfield the previous summer. The work was complete at the end of April, but

before any more gliders could be tested, it was necessary to ensure that the recent alterations would not affect results obtained. To do this, the Falcon IV glider previously tested on the rig was used. The glider attachment fittings on the rig were also improved since the slackness in them allowed at least 5° of pitch flexibility in the system.

Results from the Falcon IV tests proved successful, but it was also necessary to carry out a complete calibration of all the individual components of the rig. Windtunnel calibrations of the anemometer and yaw vane were carried out and some problems highlighted which are now being resolved.

Work on the computer calibration is under way and it was hoped all the calibration work, including the tare drag evaluation tests, would be finished in August so the testing of gliders waiting to go on the rig could begin.



The on-board computer installation

## The future

The BHGA test rig opens up an exciting future in understanding how our aircraft perform. Besides the airworthiness benefits, the rig will make it possible to work out accurate polar curves for gliders detailing varying aspects of performance over the speed range.



# It's Official!

## 16,168' HIGH ON A MAINAIR TRI-FLYER TRIKE and SOLAR WINGS TYPHOON

**A WORLD RECORD**

CONGRATULATIONS TO  
Bob Calvert who flew the  
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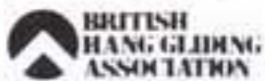
- Kits
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330cc Full Cockpit Tri-Flyer connected to Flexiform Striker Wing  
**THE FASTEST COMBINATION IN THE SKY**

## TRI-FLYERS

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



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on a hang glider is NOT VALID when  
the wing is attached to a power unit



**MAINAIR SPORTS TRIKE CENTRE**  
SHAWCLOUGH, ROCHDALE, LANCs. ENGLAND OL12 6LN

SEND LARGE SAE FOR INFORMATION

Remember those heady XC days back in spring when the thermals boomed in clear blue cumulus-dotted skies? JOHN FENNELL and NOEL WHITTALL recall.

# Lousy connection — but I got there!

*Weather forecast (at 11.00am. Friday April 23): A ridge of high pressure dominates the area, after a cold, clear start, cloud will increase then clear again towards dusk. Wind N-NW light to moderate. Temp. 13-15°C. to ground frost at night.*

WITH that forecast it was worth re-arranging the day to get out to the Gribbet and I arrived on site at 1.00pm. to see Graham Roberts flying back from Pilot Hill at great altitude writes JOHN FENNELL.

The sky was clear blue and pilots on the ground were grumbling about turbulence.

It also transpired that someone had already gone for it and was last seen circling very high several miles downwind. The wind was off to the left and at times felt quite fresh. My intention was to use the day to sort a newly acquired 'French Connection' so the bumpy conditions were not exactly welcome. I got the glider rigged and the connection reset just as clouds began drifting over.

## How I beat Mr. Bailey!

MAY 9 on Wether Fell (WNW) was a good day — bags of thermals were making 2,000 ft. height gains routine, and Tim Taft got sucked into cloud at 3,000 and didn't like it much. He described to me his efforts to escape, and I remember saying that if I found myself in that position I was going to pull on downwind and to hell with it ..... An hour or so later I was to remember that conversation.

True to form I was busy eating sandwiches after having tried to tune my new Typhoon S when a group of about half a dozen Dales fliers went for it.

The wind then switched 90° to the hill and I thought that was it for the day, even though the sky still looked perfect. Although predominantly southerly, the breeze flew more or less onto the hill from time to time, and I went to the edge, finally launching into a puff which wasn't more than 45° off. It was thoroughly evil, and I could imagine the glee with which all my mates were standing on the edge waving "bye-bye Noel" as I went down. After a period of scraping during which the Typhoon felt very big indeed, I eventually flew into some solid, if rough, lift and immediately circled in it. Up we went, and at 200ft. above the top I briefly considered landing while the going was good.

Now normally I set my altimeter to zero at take-off, but this day I had taken Rob

Bailey's advice given during his excellent XC teach-in the previous clubnight, and set it to 1900ft. so that all my flight heights should have been above sea level. I had also phoned ATAS, which confidently predicted cloudbase at 3,000'. My altimeter reads 3000' per revolution, and cloudbase on the day was actually nearer 6,000' than 3,000. The nett result was that for most of my flight I was performing rather inconclusive mental arithmetic and didn't really know exactly how high I was at any given moment. So much for the clear headed Knight of the Sky image.

Cloudbase was rapidly reached, by which time I was of course well behind the ridge and committed.

Cloudbase was fine, but fear followed moments later when I was well and truly engulfed. The conversation with Tim was recalled and I did indeed pull on mightily, knuckles white and knees a-quiver until eventually I was relieved to see Semerwater gradually re-appear. After that I kept about 300' below the white stuff for the rest of the flight.

Calculating that with a southerly element in the breeze, the thermals would be better on the northern side of Wensleydale, I struck off towards Nappa Scar, where sure enough I made cloud-base again before going on down to find another thermal at Aysgarth.

Within seconds I knew the connection was still wrong. It was too far back and the glider kept wanting to pitch up. Never mind, I'd got the time right for once and within five minutes was 1,000ft. over and well in front of the ridge. Pushing on upwind I reached the village in front at 2,000ft. plus. (I'd never done that before!) and tried to sort the sky out in terms of drift and cloud base.

Looking back I saw Mike Hibbit and Dave Cheeseman literally blast off and sky-out over the ridge within minutes. Both are likely to XC at the drop of a hat so there was the prospect of some company if an XC was to be done.

Flying back to the ridge I was joined by Dave and once or twice we were going round together shouting to each other.

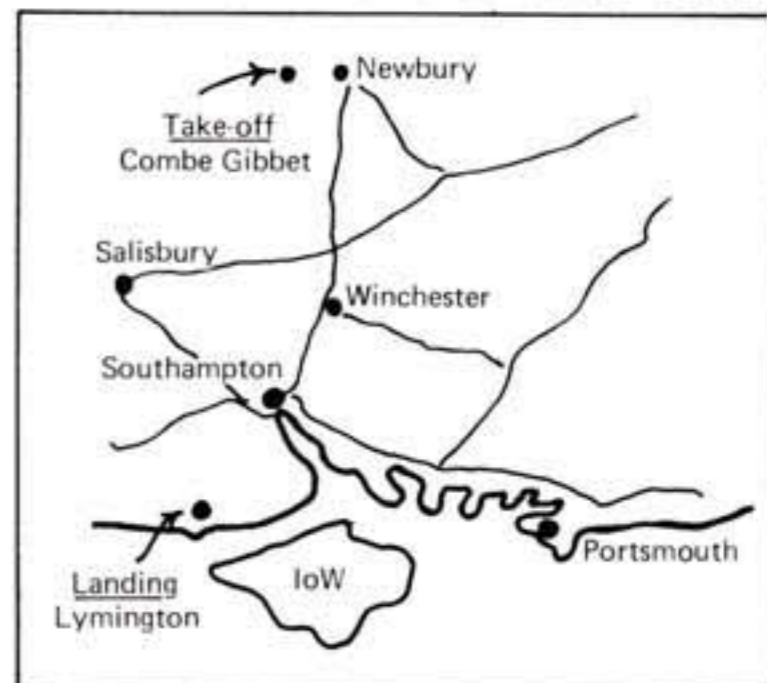
Dave eventually cleared off upwind and I began thinking of landing to fix the bloody connection. On the way back to the ridge another thermal grabbed me and I thought "what the hell — the harness isn't that bad", and made my decision to go. The blob was no better than half a dozen others I'd had, but the sky had become more cloudy with light stuff downwind and heavy stuff upwind.

That was the last time I got really high — I found several other thermals, but couldn't hang onto them for more than a few hundred feet. Eventually Catterick, Leeming and the A1 came into sight. I would have liked to go directly over Catterick airfield, as it looked like a classic thermal generator, but gliders were a-tive so I took the safe option and went a mile or so south. Working on the principle of push out in lift and pull on in sink, I eked the miles out to land eventually just before a largish town which turned out to be Northallerton. Although pleased to have done a flight which I then guessed to be about twenty miles, I was a bit disgusted with myself for not finding better lift in the Vale of York. I almost didn't bother to get a landing witness because I was so sure that the gang who had left the hill earlier would all have reached the coast at least! Imagine my elation on eventually returning to the hill when I found that I appeared to have managed a few miles more than everyone else.

I had made one or two short cross countries before, but never into double figures. Certainly there's nothing quite so exciting, challenging or satisfying. I reckon that a mile over the ground is worth an hour on the ridge now!

The distance eventually turned out to be 29.7 miles.

Noel Whittall.



Ten minutes later I was well over the back under a big black cloud and watching the altimeter window change to 3000ft. That bit of lift eventually got me to 5,500ft. ATO by which time I'd flown past Andover and had a fright from a helicopter, it got bumpier and much colder at cloudbase and soon it was time for the next decision.

My track was to the southeast beyond Southampton and into possible airspace problems with that city's airport and I recalled the aggravation of two years ago when someone landed a hang glider there. I would have been sure of 25 miles but it would have counted for nothing if airlaw had been violated.

Over to the west the sky still looked good with curtains of sunlight flashing down between the cloudstreets. It's an amazing sight and I can thoroughly recommend it.

Turning due west with nearly 6,000ft. on the altimeter! pulled on full speed for what seemed ages to get right across Hampshire and leave Southampton way back to the south east.

I'd lost 3,000ft. flown through four downs and four ups. Crossed three blue and blindingly light valleys and two dark and cold cloud streets. I hit the third area of lift and recovered every foot of lost altitude.

This street followed a peninsula out into the Solent and disappeared beyond the Isle of Wight. The Gribbet is 900ft. above sea level which put me nearly seven grand above the ground — wow! (never done that before either). It was now after 4.00pm. and I turned downwind and cruised to the coast to arrive with plenty of height to find a landing field.

I guessed the town on the coast was Lymington and as John Meredith had done the run recently, I knew I'd done 40 miles at least.

There weren't many good looking fields but I eventually picked one about half a mile inland. I go the glider lined up and slowly, approached the field when the vario needle swung again and sure enough, I was under another big, lifting bit of the sky. I kept the glider going towards the field and arrived over it back at 4,000ft.

I'd previously looked at the Isle of Wight and dismissed in a second all thoughts of reaching it.

Now though, with obviously enough height, what should I do? I even thought I could see gliders flying on the island.

I decided not to try — and anyone who says they would have — you do it and I'll believe you! I eventually landed at Lisle Court within yards of a disbelieving RAF officer.

It was a good trip, but all down to having a glider with remarkable speed and glide performance. The wind was 340° on take-off but I landed west of the Gribbet after 42 miles.

Distance: 42.08 miles  
XC time: 2 hours  
Best height: 5,900ft. ATO  
Glider: Typhoon S 180  
Instruments: Skydeck  
Equipment: Graham Slater harness, French Connection.

— SWITZERLAND —

**'Veillez nous excuser du sale tour....'**

"PLEASE forgive us for the dirty trick we played on you at the American Cup, writes Didier Favre in Vol Libre Magazine.

Leading pilots, mostly French-speaking, withdrew from the Swiss team for the American Cup in England in protest at the way Erwin Schmidt — president of commission sportive (the national governing body equivalent to the Royal Aero Club) — had made the team "his own" after its success in Japan.

Success, it seems, had gone to his head and the only effective protest was to withdraw, with the result that the Swiss barely rated and finished last.

— USA —

**Rocket probe**

**GEORGE Strother, vice-president of Weedhopper of Utah, believes heavy air pollution may have killed company founder John Chotia.**

He believes Chotia could have been flying the company's Rocket prototype near stall when coughing or sneezing caused him to lose control and crash into a field.

Chotia was suffering respiratory problems at the time of the accident a year ago. Meanwhile heavy R and D demands have slowed the test programme on the rebuilt Rocket copy which Strother believes will show the same results as tests on the original Rocket.

*Glider Rider*

— USSR —

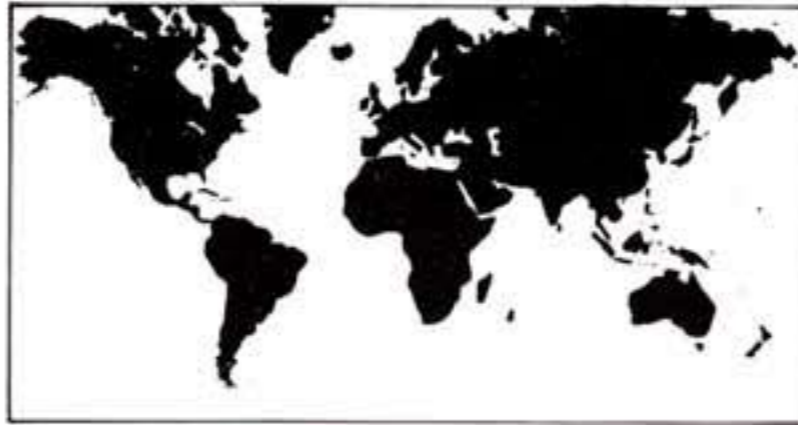
**Teach yourself to fly a "Deltaplan"**

**ALFRED PORTER looks at a book on hang gliding in his native USSR.**

WHEN Chris Corston appealed for somebody with good knowledge of Russian to read a Russian book on hang gliding, sent him by Soviet flyer Mr. Kobizev, I couldn't help but follow my instinct and telephoned him. To actually write a review in my second language was a far slower business.

I read the book the day it arrived, and re-read it a few times since. I could have written this review long ago, but I found it quite difficult to convey my feelings on reading this small book with its drab appearance, written in extremely un-inspiring Soviet paper-slang by a committee, or shall I say "Troika" of Messrs. Zheglov, Ribkin and Matsepuro.

**COSMOPOLITAN**



**The monthly Wings! round-up of overseas news**

Who are these comrades, I have not the slightest idea, but none of them was, probably, among the first Russian hang gliding activists. Mr. Kobizev was, as Mr. Gokhberg and some others. But you can't publish in the Soviet Union a book at will.

It is a very long bureaucratic procedure, and the end product is a creature with many fathers, filtered through different committees, written and re-written to accommodate opinions of many specialists, and party bureaucrats, and — in this particular case — of bureaucrats of a most unpleasant breed: these of DOSAAF.

DOSAAF is the Voluntary Society of Help to Army, Air force and Navy. It is presided over by retired generals, who instinctively disapprove of anything new. All air sports in the USSR can be undertaken only in the DOSAAF framework, and that means in framework of direct utility to brass. If you wear glasses, you will never get a lesson on a glider, since you are of no use for Soviet Air Force.

The arrival of this book means that hang gliding is now recognised as a useful means of preparing young men for military service in airborne brigades or the air force units. It took them almost a decade to realise that, since the history of our sport started in the Soviet Union in 1972. It seems strange that a group of enthusiasts was building and flying a hang glider that year just next to where I was working on the same thing — and yet I first learned of this only now, from this very book.

But then I remind myself that publicity in such an undertaking then was definitely the best way to invite the KGB to come and destroy your machine and then to question you of where exactly you had intended to fly away...

And where, Comrade Bird Man, were you thinking of migrating to?

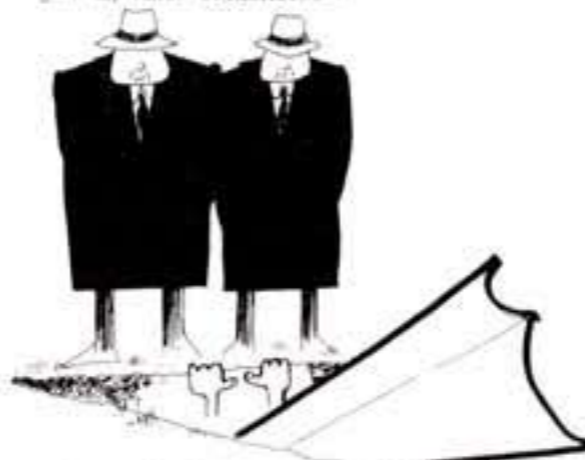


...where had you intention to fly away...

The appearance of this book means that hang gliding is now incorporated in the "militarily-applicable sports".

Its language is as bright and colourful as a car maintenance manual. Being spoilt by books by Ann Welch etc. you would never find mental strength to struggle through these unreadable pages. There are some funny spots, though — for those who have a first hand knowledge of Soviet life and mentality. I couldn't help laughing when reading a chapter on First Aid. It starts with analysis of hang gliding traumas, based on... foreign statistics of accidents. It must seem crazy for you, who read in every issue of WINGS! full details of any serious accident. But in the USSR only good news is news, and everybody knows that air crashes happen only in the dirty world of capitalism...

Come out, Comrade, and explain your Capitalist tendencies...



...air crashes happen only in dirty world of Capitalism...

But, on the other hand... this small book consists of many chapters, and each gives elementary, but useful knowledge. Theory of flight, principles of the flexwing, how to build and test a hang glider (important in a country with no Hiway or Flexiform), meteorology, ground training, flight training etc.

It gives you — in its own, rough, rude, very Soviet way — all these things that here, in the West, you get with much more pleasure and indefinitely more respect to yourself, from many different books.

Some things you can not get here — like very useful notes on the design of a hang glider. Here, in the West, every firm keeps its secrets for itself through fear of competitors. We should not forget that in the Soviet Union most hang glider pilots (and there are as many as 5,500) have to build their craft themselves.

Many are aircraft engineers, aerodynamicists etc. Many, of course, paid with their lives and limbs for progress of this sport. I found it

quite interesting that with all that think-tank force, a "new" glider — recommended by the official magazine to local enthusiasts as the standard machine to build — was openly copied from some three to four year-old obscure French design.

— YUGOSLAVIA —

**Muscle power**

**YUGOSLAV inventor Ivan Bakjac believes that by flapping wings man can fly.**

Against a backdrop of complex technical charts illustrating the flight of birds and bees, the former air force jet pilot explained to the annual world inventors' exhibition in Geneva just how he planned to do it.

He was looking for backers who would advance him the money to start the project — "5,000 or 6,000 dollars would be enough," he said.

Mr. Bakjac, a 50-year-old aeronautics fanatic who started flying gliders at 15, displayed a small balsa-wood mock-up of the machine he believes would enable man to take cheaply to the air, using muscle-power.

The working model had a man standing on a rudimentary fuselage, making the wings of his machine flap up and down by a series of 'knees-bend' movements, transmitted to the wings by a system of expanding and contracting pistons.

"It's not so tiring as you may think. In my system, the energy is used to pull down the wings. They spring back by themselves," he said.

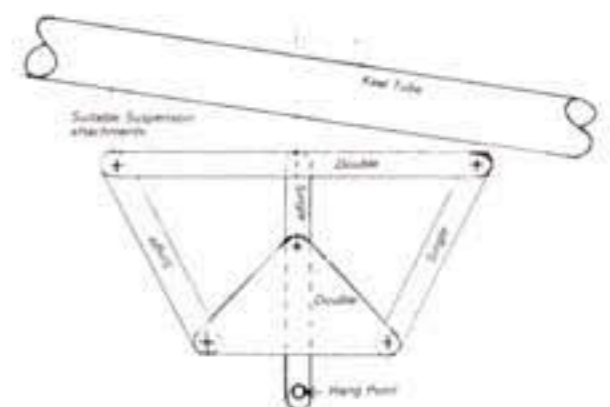
"I would take off roughly the same way as the hang glider people, by running down a slope with a vertical drop at the end," he said.

"The distance you fly would depend on your fitness. Some people might be able to fly only for 10 minutes. Younger and fitter people for two hours."

— ZIMBABWE —

**Zimbabwe 'Zwing'**

**R.W. FOSTER has designed this adaptation of the French Connection with supine fliers in mind.**



All points marked with a cross are pivot points, secured by aircraft bolts.

Picture of Jim Pudroza by Paul Skeets



A pre-Gryphon Miles Handley machine many years ago at Devil's Dyke. Now becoming a poorly-controlled free-for-all?

# What is the cure?

Dear Sir, —

For the past year or two, the BHGA has been constantly endeavouring to find ways and means of increasing membership to sustain itself.

Yet membership has not increased: it has decreased — certainly our club membership has dropped to a quarter of what it was when I joined.

Yet I firmly believe that 70 per cent of the people who occasionally or regularly fly the South Downs are not SHGC full members. I seem to be out of sympathy with the majority of flyers when I point out the vital need to adopt an attitude towards general society which will retain our previous sites. I mean: — battle resolutely against oppressive councils.

I mean: — put our views coherently and logically to press and radio repeatedly.

I mean: — behave with extraordinary consideration for the public on and near sites.

I mean: — use airmanship of high standards — BETTER than anyone else's.

I mean: — don't fly drunk.

I mean: — don't show off.

I mean: — don't fly too close or dangerously.

I have raised specific cases at our club. Some of these have reached the BHGA. Generally, there is not enough impetus for even flagrant cases to reach an effective conclusion. Our only noticeable reaction is to a death and that reaction doesn't last long, whereas, the memory of the public and petty administration over even small incidents is as elephantine as their methods.

I can only suppose that not enough hang gliding people care about what happens to the sport.

Behaviour like the following is having a serious adverse effect on the image and very existence and survival of hang gliding.

1. A pilot with his original school instructor present took off on a "cliff launch" in strong conditions from a tiny site crowded with members of the public. It was his first flight on a Spectrum. The nose went up and he turned back, crashing into the crowd, hitting a small child.

He did not report the incident to the club for 24 hours.

The site is now lost. The incident was reported in all the local papers. The Sussex authority has been requested

that all hang gliding on all West Sussex sites be stopped and action is being taken.

This bad pilotage and publicity has reflected to Mill Hill, Beachy Head and Ditchling sites. (High and Over is not a club site and is now closed).

2. In the past month in the Southern area a pilot turned downwind and crashed trying an impossible downwind top landing from too low. He has had several crashes. Beachy Head top landings are cited as being for P2 only. He is not P2.

3. A pilot repeatedly flew low over a car park at Devil's Dyke when the area was very crowded. He had been drinking. Another pilot asked him to come down. There was an argument. The flyer made a fumbled, badly-controlled belly landing missing four spectators by less than two feet. The two pilots fought in front of the crowd.

4. The landing area became

blocked by groups of the public. Flyers continued to exercise their "skill" landing among them. Other pilots parked their gliders across the landing area.

5. A pilot landed in the trees on the same day at the Dyke. Many others landed in crops.

6. Pilots drink at lunch time and then fly.

7. A relatively new pilot with a new glider stands at take-off. The wind is over 450 off. An instructor observer is holding the nose and talking to him then walks away saying: "I should take-off a bit further along." The pilot moves a little way and uncertainly prepares to go from a similarly poor departure point. Another instructor-observer fortunately took this pilot 200 yards round the corner for a proper take-off.

8. Fifteen to twenty people have outlanded in crops. Most try to evade the £10 fine due the farmer (a club rule). A lot are not club members.

9. One pilot said he couldn't afford to be a member (as he stood in the corn at Firle) because he had just bought a brand new D.S. machine.

10. The BHGA accident system demands incident reports for any change and that includes copyrights. Again, no cases in the last few weeks were reported. Many occurred.

11. What does the rest of the BHGA see as the problem and the cure?

Comments, please.



by Eddie Horsfield

Gliders over Mill Hill — bad publicity reduces the chances of ever flying there again. See also page 7

VINCE HALLAM  
Safety Officer,  
Southern HGC



SA pic

# Massacre

## A ducking for the champ

**BRITAIN's national team made history at Millau, taking first, second, third and fifth places at the European Championships.**

Sure, the British were reigning World and European team champions, but never had there been an individual Gold to show for that collective success.

So great was the magnitude of the victory that it hardly mattered that the other two team members placed relatively low down the rankings — in just four days the team built a rock-solid winning margin of 31,133 points to the 25,246 of their nearest challengers, the Swiss.

The victory had everything that the more marginal result which brought the American Cup back to Britain in June lacked: teamwork, professionalism, hard work, dedication, an atmosphere conducive to kindling those sparks of individual brilliance that win competitions.

It owed a lot to the British League training ground, particularly the recent emphasis on Open XC in marginal "gulley-gobbling" conditions.

But, without detracting in any way from the team's performance in the air, if there was any one single reason for the achievement it must be the superb management of Len Hull and Brian Godden who with captain Robert Bailey, galvanised a real team effort and spirit from six self-motivated individuals as well as building a solid back-up team of helpers.

They gave special prizes for individual achievement — or hard luck. Graham Hobson got a pink teddy bear for nearly making goal, which became the envy of the team!

□ □ □

## Standing on the dock at Southampton...

□ □ □

It all began like a scene from Cliff Richard's Summer Holiday as the Brits gathered by the magic team bus on the dock at Southampton beneath a warm evening sun.

Six days later, as the European Championships were due to start, we stood on a cold windswept hill in the south of France and watched while a wind dummy got thrashed in the rotor over Millau.

By that evening a depression had wedged itself over the area, locked

## by Stan Abbott Pictures by Norman Lomax

between two stable highs. And the rain came. Exactly one week after departure we sat in the magic bus at our campsite as the deluge pummelled the roof and thunder crashed overhead. It was like sitting in the Black Bull cafe at Hawes during a rained-off Dales League.

The magic bus marked a new departure in team transport and became the immediate envy of the other teams as we sat in comfort sipping tea. With owners Dave and Shirley Bazeley it had got us to Millau non-stop by 3am Sunday.

Millau lies about 1,000ft. above sea level in the gorge of the river Tarn. The Tarn and other rivers have scoured deep gorges in the Larzac plateau and other "Causses" which lie about 2,300ft. above sea level. The flying is from the plateau edges where the steep limestone cliffs are soarable on the sunny side.

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## Red tape rules OK!

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The area offers excellent scope for big triangular distances and the practice days saw the team exploring various routes round the turn-points planned for the competition, while Bob Calvert went open XC to the coast, about 40 miles. Landing areas in the turbulent, sinky narrow gorges are few and far between.

One practice day — after a weak front went through the night before — showed the full potential of the area with booming 15-up thermals. A fresh northerly "Mistral" created radical conditions at take-off where the wind became increasingly crossed and rotated over the trees. Team manager Len Hull came close to looping as he took-off in dead air straight into a booming thermal. There were numerous uprights bent at take-off.

But it was in the behind-the-scenes bureaucracy that most of the pre-competition "action" took place. The French team, already beaten by the British at the Bleriot Cup and the American Cup, were clearly in no mood to end up losers again. But their point of attack had not been foreseen.

The team comprised the familiar faces of captain Robert Bailey, Bob Calvert, Tony Hughes, Mike McMillan, Graham Hobson in for the unavailable Johnny Carr and Michael Carnet, individual best at the Bleriot and a member of the team that went to Owens Valley.

This, then, was to be Carnet's third appearance for the British

team but his first in a contest under FAI auspices. FAI rules state that a pilot has to have been resident in a country for three years before being eligible to fly in the national team. Come registration time, the organisers would only register him after Barry Blore — in Millau for a CIVL meeting — had given a written guarantee that Michael had lived in England for three years. That, you might think, would be the end of the matter. But come the next day things have changed. "There have been objections," say the organisers who are now trying to make his registration conditional on production of a residence certificate. It is an impossible request.

"You all know as well as I do that Michael's lived in England for three years," says an exasperated Len Hull pointing out a glaring loophole in their argument: the French version of the rules requires a residence permit, while the British "translation" asks only for "evidence" of residence.

The fact that Michael's registration had initially been accepted adds moral force to the argument and his name eventually appears on the team sheet subject to confirmation from Ultra Sports of the date of his first employment there. The French fail to register an official objection within the hour allowed and a telegram arrives from Brighton the next day.

All's well that ends well, but there was a distinct feeling the French would have been glad to have won by flying five on six. Add to this the fact that we ended up camping because we could raise no-one by phone from England to arrange the "gite" accommodation we were after, the fact that the French always seemed to arrive at



pic by Dave Bazeley

## Michael Carnet and Tony Hughes go punk

take-off first, the fact that the landing fields weren't where they were shown on the map, that the French all had their own pick-up vehicles, and you began to wonder whether it was all by accident.

The official opening day saw blazing hot sun, blue thermals and the call of duty which had contestants marching through Millau to watch a dual flight into the municipal stadium. Next day saw strong southerly winds with an advancing cold front whipping up the wind on the tree-surrounded take-off at Puncho d'Agast, an impressive limestone spur between two valleys that towers 1,500feet over Millau.

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## Meteorology for boy scouts

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The idea is to get the comp. underway with an open XC, with pilots flying in three pools of 32 but the wind dummy gets a real thrashing in worsening conditions and flying is eventually called.



Brunas take-off — the fences kept back an estimated 2,000 spectators

# at Millau

SA pic

Michael Carnet asks if anyone knows how to tie a bowline because if they don't the wind and smoke in the valley are combining to produce a perfect 3-D illustration.

And so the rains came and we took the opportunity to do a bit of sightseeing and check out the chances of getting a glider down in one piece in the gorges that plunge 1,500 feet in a magnificent tree-lined V. Like the canyons in Owens Valley they are to be respected and, reportedly, only crossed with plenty of height in hand.

On Saturday August 28, the third European hang gliding championships finally got off to an albeit hesitant start. It just had to be good — post frontal and a baking sun.

In light winds in the south of France, the convection flow established by the sun on shining the slopes is usually enough to overcome the prevailing drift. With a forecast of northerlies, flying was nonetheless set for the westerly take-off at Puncho, the task being to round two crosswind turnpoints and then go for open distance. But the wind dummies were barely maintaining as the wind freshened from the north.

Yet there seemed no real justification for what followed as the organisers declared at the amazingly late hour of 3pm that the task would now be open XC from the northerly take-off at Brunas.

Apart from the fact that the sun was just moving on to the face at Puncho, there was the minor inconvenience of moving 100 gliders all the way across town and getting them rigged and off the hill when the window opened at 4pm. By hook and not a little crook everyone survived the multi-hairpin journey intact despite scant regard for things like traffic lights.

But as if to add emphasis to the criticisms voiced, Gerard Thevenot and two others simply took off and flew the two miles across the gap. The mayhem on the road was nothing to what followed.

Mike de Glanville was trying to steal a slight advantage avoiding the scrimmage at the main take-off by lobbing off a lower area just to the right.

There were conflicting reports as to exactly what happened next. Mike said afterwards in hospital that he remembered looking right just after take-off in case he clipped a bush and then, wham: a big thermal under the left wing turned him fully downwind into a gully to impact about 50 feet down the steep slope.

His faired uprights and Double Darlet (French Connection for roll and pitch) might also have hindered his control on take-off, he said.

Mike's condition didn't look good. Thank God that in the end it came down to a shattered elbow, broken finger and various cuts and

bruises. "I was sure I was flying to the coast as well that day," he said.

The accident doubles the Glanville family's bad luck at Brunas — exactly one year and a week previously Caroline de Glanville broke her arm when a spectator grabbed a wing wire as she came in to land.

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## The nightmare continues...

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It was tragic for Mike and a bitter blow for the French team. Next day, the British proposed that in the interests of sportsmanship, only the top five scores of each team should be counted. The proposal was applauded but declared to be not allowable under the rules.

They say accidents come in threes, and sure enough barely an hour had passed before every hang glider pilot's nightmare became

Nummelin, who would have flown again that day had he found new uprights in time, said later he had practised deployment hanging in his harness at home and had pulled his chute instinctively. Brederode appeared to have struck his kingpost with his wing after falling out of a thermal. The Portuguese were not the only pilots at the meet with seemingly little thermalling experience. The general pandemonium on the hill saw pilots actually dropping their equipment. Pepe Lopez lost his map on take-off and Robert Bailey, the coolest guy on the hill, trod on his sunglasses.

With a trip to the coast very much on, the British briefing had been about squeezing that last ½K to the furthest point of land. But, in the event, no-one made the beach. Klaus Kohmstedt got nearest with a flight of nearly 70km, while Gerard Thevenot was 400 yards behind. Robert Bailey on his new Mylar Azur flew a blinder to



The team, from rear (left): Graham Hobson, Tony Hughes, Rob Bailey (capt); front, Len Hull (manager), Brian Godden (asst.manager), Michael Carnet, Bob Calvert, Mike McMillan.

Note Graham Hobson's teddy bear in the bus window and Colin Lark, bottom right

reality as people watched in horror as two gliders collided 700 feet above the ridge. One pilot, the Finn Antti Nummelin, pulled his chute almost immediately, climbed into the A-frame and made a very controlled descent. But Portugal's Vasco Brederode appeared to snag a parachute shroud on a batten and his glider, one leading edge broken, spun at sickening speed like a sycamore leaf.

First on the scene after Nummelin was British team helper Neil Clark who found Brederode badly stunned. But it hardly seemed to help matters when six ambulancemen arrived to restrain him by sitting on him and pumping him full of sedatives.

He was later airlifted to Montpellier but a feared chipped vertebrae in his neck proved to be a misdiagnosis and he was suffering nothing worse than severe shock.

notch the best British distance — 63.1km — and a slap-up meal from the local mayor.

With Bob Calvert, Graham Hobson, Michael Carnet and Tony Hughes also doing good ones, the British totalled 9,232 points to Hungary's 7,677, Italy's 6,552 and Switzerland's 6,385.

The Hungarian performance was a particularly creditable one — flying thinking in Hungary is very progressive with all competition work being cross-country since 1977 when the world's first XC meet was staged in Hungary.

Add to this experience a cohesive team approach second only to the British, and remember that this team's gliders included two-year old Demon copies, and the Hungarians are clearly an emergent power to watch in the hang gliding world. More on hang gliding in Hungary next month.



And a champagne ducking for Mike de Glanville with his plaster of Paris cup for the unluckiest pilot

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## The camera keeps mum

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Sunday should have belonged to Michael Carnet but proved instead to be a triumph of rules over commonsense and sportsmanship.

The task was a cracker — take-off from Brunas, work crosswind to a turnpoint then downwind to a goal at Les Infruts. There were to be 1,000 points for distance and 500 for position, a system which didn't really bring great reward for pilots making goal over those who nearly made it.

With high pressure and fairly stable conditions the three pools were clearly going to be won and lost on who caught the first thermal away from the ridge. Three categories of pilot were envisaged: wafflers, who worked it high and made off across the plateau to the turn point; burners, who would go hell for leather down the ridge but risking an outlanding; and wuffos, who would just blow it!

There was a big risk of going down without catching anything, a fate which looked to have befallen Holland's Jos Vermeulen until he hooked one on his final approach to the bottom landing.

Michael Carnet decided waffling would be the way to go: "In my group, everyone was struggling on the ridge. I took any kind of lift just to get high.

"Really high over the plateau there was no wind — once I was up there it was easy to make the turn point."

Then, disaster struck... "I took five photos and after my fifth one I realised my camera was jammed and I couldn't take any more. I realised then it was all or nothing — I either made goal and got max points or only got the points for flying to the turn point."

His heart in his mouth, Michael eked out the distance to goal chased by the Swiss Philippe Briod and the classy Japanese ace Matsuo both of whom he eventually "dumped" after luring them into sink.


Turn to page 18



**For Demonstration or Tuition**

Breen Aviation, Enstone, 060 872413 / Airsports, Dublin, 852856 / Eurowing, E. Kilbride, 03552 46498 / Essex Airsports, 0706 55131 / Airsports, Aberystwyth, 097084 289 // London Ultralights, Hitchin, 0462 52103 / Medway Microlights, Roches Ely, 0353 740534 / Scottish Microlights, Dundee, 0382 819861 / Airsport Diffusion, Lyon, France, 171 837 7480 / Southern Lamyman, Spilsbury, 07903 249 / Cairnwell H G, Braemar, 03383 628 / Gotha Club, Turin, Italy, 011 580181 / Zeilvlieg Sch Valencia, Spain, 96370 9500 / Ashman, North Hampton, 0604 858274 / Perestrello, Lisbon, Portugal, 19664573 / Ulm, Jour Eurowings SNC, Susa, Italy, 122 2473 / Skyriders Muiden, Holland, 029423942 / Parafun International Copenhagen, Denmark





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# Millau Massacre... (from p15)

He made the field with a final glide that saw him in with just 35ft. to spare and fully half an hour ahead of Tony Hughes, the next to make it in his pool.

But, tragedy... when his film was processed it was a glorious blank from start to finish and there began the frenzied task of marshaling witnesses, who had seen him round the turnpoint, ready for an appeal to the jury.

From the outset, it appeared the appeal was doomed — little more than a charade and a waste of the 300FF deposit. One of the French juryman commented: "I have my own opinion but the French team has instructed me how to vote." Another would confirm only that he had seen Michael at the pylon but not that he had been in the correct quadrant.

So, simply from providing evidence of achievement, the camera became the linchpin of the whole competition. The camera may not lie but it sure can be a real mean bastard.

Graham Hobson learnt a nasty lesson about what comes down when something goes up in a big way: he reached 6,500ft. in probably the day's biggest thermal. But the big one seemed to leave everything else dead and he never found the tiniest blob that would have carried him safely to goal.

It was back to Puncho the following day for a similar task — a 31.4km course involving a flight to a turn point up the ridge and a more-or-less downwind leg to goal in minimum time from take-off.

The entry was split between two take-offs to make sure everyone got away in conditions that were not super-buoyant.

Hobson, Calvert, Bailey and Hughes all furthered their cause, although in Tony's case only after a fairly dramatic failed take-off which did little good to his unfortunate ground crew of Brian Godden and Paul Frain. It emphasised just how mean and deceptive the take-off — a relatively narrow break cut through the forest — could be if the wind was even slightly crossed.

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## Gone fishing!

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So, after three days, Calvert led the field ahead of France's Gerard Thevenot, followed by Bailey, Hobson and Hughes and the British already had a lead of more than 5,200 over the Swiss.

The next two days were bad news for hang glider pilots and the fish that live in the rivers Tarn and Dourbie as the British team got well and truly hooked on fishing while a gale blew.

At one end of the scale, Robert Bailey invested in £50 worth of spanking new fishing gear while Colin Lark — on a hang gliding pilgrimage to Europe — made his tackle from a branch, a reel of nylon and two pip-pins.

Such was the dedication of the team to this new-found pursuit that they quite simply refused to believe

me when I came to tell them the XC window was due to open in an hour's time. Only Len Hull could coax them away from the trout and barble to the top of Brunas, only to be told soon afterwards that the winds further south were too strong to permit a task.

On Thursday September 2, the team tied the ribbon round the trophy they had gift wrapped the first three days with outstanding individual performances from Graham Hobson and Tony Hughes.

The conditions — windy, weak thermal and evidence of wave — posed a real tactical problem. Were they going to get worse or better? Should the team get off while the going was good or should it spread its options?

Michael Carnet and Graham Hobson went early — early enough for both to get back to take-off



You should have seen the one that got away! — Graham Hobson, Colin Lark and Tony Hughes



Michael Carnet — unlucky



Mike McMillan — ready for altitude!

in time for a second attempt before the window closed.

Robert Bailey set off to explore the potential of the wave bars but didn't go with it. Mike McMillan did and made the day's best height. But striking off downwind for the next bar he encountered nothing.

It was gulley-gobbling that eventually won the day in classic British League style. It was the day pilots with bottle enough dis-

covered you could go into the gulleys and soar the rotor. It was the day Tony Hughes lost his luffing lines in turbulence and ended his flight with an "impossible" landing on a tiny patch of green in the bottom of a forested canyon.

"It was an extremely difficult flight requiring a huge amount of nerve and not a lot of skill," he summarised with an earnest look

on his face which, for the first time I can recall, actually bore a look of fear.

"There were two choices facing every pilot — cross the plateau where your height above the sea was always going to be greater, or to go for the mountainous region to the west where there was a tremendous variation in relief but also tremendous turbulence.

"In the Pinouse mountains, the valley bottoms are only 200ft. ASL and the highest peaks are about 3,500ft. The technique when there are no thermals around is to use ridges but when you have a situation where the wind is accelerating down to the coastal plain, the further south you get, the more dangerous it becomes."

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## Big Daddy

□ □ □

Quite apart from increasing penetration problems, the turbulence created by upwind ridges just a few hundred yards away was becoming horrific — gusting lift followed by weightlessness and gruesome sink.

Checking his map for another ridge into wind, Tony crossed a col not too sure what he would find on the other side. He found the worst turbulence yet and after breaking his luffing lines and losing nearly 200ft. in a succession of dives he picked a tiny poplar-lined field by a vinyard and braced himself for a tree landing. Somehow, the glider crashed through the poplars and deposited him in once piece in the rotor before groundlooping for good measure.

"Trying to get the most of those thermals was like trying to beat Big Daddy in a wrestling match," he commented.

Graham Hobson's second flight took him along a similar track, with Germany's Josef Guggenmos, Matsuo and Pepe Lopes. The latter two decided descretion to be the better part of valour and landed before the worst of it.

Graham thought he'd got off kindly when he found himself perfectly lined up just feet off the deck. Then suddenly a mean sneak

thermal lifted one wing, lobbed him through a gap in the trees and deposited him up to his thighs in a river, his vario bubbling pathetically under the water.

The next day was ultra-stable at Brunas and repeated attempts to make the 10km minimum distance met with no success. Calvert and Thevenot got nearest.

And so, as we sat it out on Puncho the next day in a steadily increasing gale, the flying was abandoned for this and the next, final, day thus throwing the outcome — fittingly — back into the hands of the bureaucrats.

The competition rules had stated a minimum of five scoring tasks for the championships to be valid and it needed the assent of CIVL to waive the rules... a task requiring some intercontinental phone calling.

The outcome was a fair one — the four flying tasks had involved many times the airtime achieved in the Mickey Mouse World Championships in Japan last year.

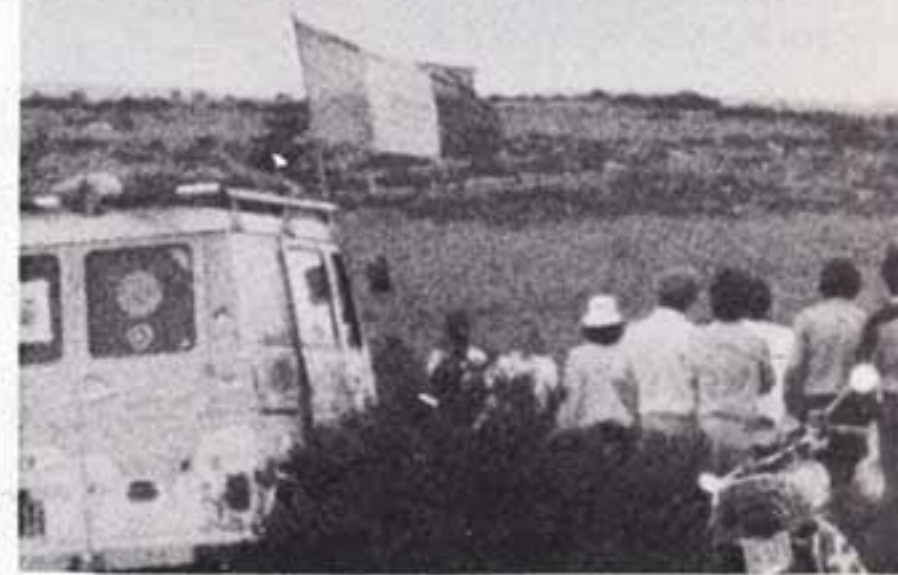
In summary, it was an excellent comp. in which the organisation, sadly, was not quite up to the quality of the task-setting. Any of the British party could have made a better choice of site on some days than the organisers and the official pick-up system had the team out til five in the morning after the first day and was duly abandoned.

Sincere thanks, though, for the long hours of graft put in by those who voluntarily grounded themselves to run it all and I, for one, would like to return to taste again the excellent flying Millau has to offer for the average punter as well as the ace.

On the glider front, the Azur was the dominant wing in both number and achievement. Gerard Thevenot seems so far to be the only European manufacturer to have really got to grips with Mylar sailcloth.



Bob Calvert kicks into prone — note camera and map, now the competition pilot's stock in trade



Deployment: the Finn, Antti Nummelin is making a controlled descent but note, to the right, how Vasco Brederode's chute has snagged and failed fully to deploy — picture by Dave Bazeley

### The head 'Banga'

There were few innovative designs to be seen in this, probably the last comp. in which the non-weightshift Class II features as a separate entity (you were guaranteed a medal if you simply FLEW a Class II glider at Millau.) The Steinbach Spot placed its designer in 23rd place and includes the interesting feature of a billow shift which is mechanically operated by a

cam actioned by the movement of the hang point.

It was good to see Walter Schoenauer with a stronger Swiss team than that seen at the American Cup. The Swiss at Millau were hardworking and well-disciplined as were the Norwegians who placed third.

The French obviously suffered from losing De Glanville, but they really must learn to work as a team if they want to beat the British. Mike believes a team approach can be counter-productive and cramp the style of the individualists. Yet who could be more individualistic

than Tony Hughes or Bob Calvert? And they work as a team.

Finally, a word for Banga, the French orange juice in cartons that provided part of every British flier's iron rations. Michael Carnet taught the team the advertising jingle which Tony Hughes would chant religiously at 5,000ft. Who would share a thermal with a crazy Englishman like that?

Anyway, he got thrown in the fountain for his efforts at the prize-giving which ended, fittingly, in a torrential downpour which lasted two days after the magic bus began the long trip home.

G.B.	31133
Switzerland	25246
Norway	23907
France	22909
Hungary	21788
W.Germany	20768
Japan	20451
Austria	18121
Italy	17522
Belgium	16044
Yugoslavia	14948
Sweden	14179
Spain	13844
Holland	13157
Denmark	10830
Finland	10305
Brazil	6757
U.S.A.	5805
Monaco	5519
Portugal	2279

Thanks from Len Hull to the following for their help:

Protec for help with the flying suits  
Rick Hall, Neil Clark, Stan Abbott, Colin Lark, Paul Frain and Robin Mills.  
Shirley and Dave Bazeley and their marvellous magic bus.  
Simon Murphy for his Wonderclamps.  
Red Funnel Ferries.  
Airwave Gliders for their supply of spares.

## Results

Place	Cl.	Name	Team	Pts tot.	Glider	46	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
						1	Dornauer	Austria	3443	Hornet																																									
						2	Shimand	Japan	3396	Cosmic																																									
						3	Meyer	Switzerland	3338	Fun																																									
						4	Bricoli ER	Italy	3188	Azur																																									
						5	Johannessen	Norway	3175	Duck																																									
						6	Muller	Switzerland	3036	Azur																																									
						7	Olmos	Spain	2947	Azur																																									
						8	Merk	Hungary	2947	Denever																																									
						9	Vermeulen	Holland	2938	Sensor																																									
						10	Dagn	Austria	2783	Millie																																									
						11	Korosi	Hungary	2769	Denever																																									
						12	Konavec	Yugoslavia	2713	Piranha																																									
						13	Paller	Italy	2672	M.Comet																																									
						14	Arguelles	Spain	2642	Typhoon																																									
						15	Sorensen	Denmark	2629	Azur																																									
						16	Daxer	Austria	2628	Missile																																									
						17	Brouic	Yugoslavia	2613	Piranha																																									
						18	McMillan	G.B.	2601	Magic II																																									
						19	Nemelin	Finland	2560	Azur																																									
						20	Vanspyker	Holland	2473	Azur																																									
						21	Fersini	Italy	2389	M.Comet																																									
						22	Lesage	Holland	2326	Puma																																									
						23	Mandozzi	Italy	2273	Fledge																																									
						24	Kustrin	Yugoslavia	2158	Firebird																																									
						25	Brams	W.Germany	2103	Bullet																																									
						26	Miyazaki	Japan	2069	Cosmic																																									
						27	Bricoli ST	Italy	2060	Azur																																									
						28	Futagami	Japan	2042	Cosmic																																									
						29	Schmid	W.Germany	1992	Falke																																									
						30	Pannekoek	Holland	1914	Typhoon																																									
						31	Kwindt	Holland	1908	Vampire																																									
						32	Enervi	Finland	1891	Puma																																									
						33	Mychanen	Finland	1804	Demon																																									
						34	Veciana	Spain	1802	M.Comet																																									
						35	Yamamura	Japan	1796	Cosmic																																									
						36	Costa	Portugal	1710	Zenith																																									
						37	Klemencic	Yugoslavia	1649	Piranha																																									
						38	Vaitinen	Finland	1622	Azur																																									
						39	Salmisen	Finland	1601	Azur																																									
						40	Landshoff	Holland	1598	Azur																																									
						41	Dehon	Belgium	1588	Rival																																									
						42	Lorentzen	Brazil	1587	Duck																																									
						43	Fontbosch	Spain	1515	Typhoon																																									
						44	Vres	Yugoslavia	1407	Concorde																																									
						45	Borreman	Belgium	1316	Comet																																									
						46	Gomez	Spain	843	Typhoon																																									
						47	Husso	Finland	827	Azur																																									
						48	Costa	Portugal	569	Demon																																									

# Two — up triking...

DETERMINED to make the most of the good triking weather, Ali Milne and I decided to give our Puma a good airing. We had had this flight in mind for a few months and were soon to embark on a flying holiday round the north of Scotland.

On July 20 we took off, with an extra 80lbs of fuel and luggage, we were to have no back up team, and headed slightly cross-wind over Dundee towards Montrose. The sea breeze was very light so the opportunity to soar the cliffs at St.Cyrus was missed, but a cut-back in power allowed us to glide silently along the beach much to the surprise of the unsuspecting bathers.

Our proposed fuelling stop was to be Stonehaven, and as the South Aberdeenshire countryside slid by, 2,000ft. below, this soon came in sight. On landing in our chosen field, we realised that the smooth green grass hid many ruts and stones which would make it rather unsuitable for a take off with a full payload.

But the problem was soon overcome, as Ali took off alone and hopped over some trees to land on a nearby football pitch.

Refuelled and refreshed, our next stop was Huntly, on a route avoiding the Aberdeen SRZ. The weather ahead looked foul, with a 1,700ft cloudbase and black ominous clouds. Passing Durriss and on

**Dougal Scott and Ali Milne 'doubled their memories' when they took their Puma for a 200-mile journey across Scotland. Dougal reports.**

towards the town of Inch, we were soon to alter course and follow the railway line through the hills, and our first overnight stop.

A friendly farmer stored the Puma in his garage and gave us the use of his Land Rover. With the first 100 miles behind us a few well earned pints were called for.

### THERMALS

Next morning was fine and



The view flying over Ben Mac Dui at 6,000ft.

despite the headwind, the flight to Aviemore was on. Climbing steadily away from Huntly, two RAF Jaguars spotted us but the expected turbulence never arrived.

Great booming thermals were everywhere, and 2,500ft was soon reached. Turning westerly, we flew up the Spey valley which with the river twisting gently below us was certainly beautiful countryside.

The thermals were certainly brewing, as we experienced ten ups and then a fifteen up, just as Grantown on Spey came into view.

The golf course was our landing spot, as we decided to stop for a break. After a few hours sunbathing at the edge of the sixth fairway we were ready for the off. An extra two gallons of fuel had been added, just in case Aviemore had no suitable landing area and we would have to fly on to Glenfeshie Gliding Club.

Take off was from a different fairway, 320 yards par 4, and as the thermals were good we soon 360d up to 1,500ft. ATO.

The scenery was a real contrast, snowy mountains, lochs, forests and fields, all easily seen from our 3,000ft in the incredibly clear conditions.

By now we had become partial to golf courses and the one at Aviemore was ideal. We enjoyed our stay here. From Aviemore we had two options, either to fly west, (America here we come) or to head back to Dundee.

The weather was changing so a non-stop flight back over the Cairngorms was now our objective.

### SLOW

Leaving the golf course and at 3000ft. we aimed for the foothills six miles away. Climbing onwards, some localised wispy clouds approached and although the climb-rate through the sinking air was slow, it gave us no cause for concern.

The scenery was fantastic, so I took more photographs as we passed the Lairig Ghru and the ski lift at 4,000ft. Cloudbase was

variable at 4500ft. and cover about 5/8. At 6000ft. ASL we decided to fly over the back as Ben MacDui lay below and Braemar in the distance.

Cloud top was 6,500ft. and as we flew between the clouds it was like entering another world, climbing steadily to 7,000ft. over Mar Lodge.

### FUEL

Sharing the flying, occasional breaks in the clouds enabled us to navigate successfully to Glenshee and the Cairnwell mountain.

We took more photographs at 7,500ft. with the ski lift directly below, but we saw no kites on the hill. Fuel levels were still OK, so our next fairway was still at Alyth golf course, 20 miles away. Over Glen Isla cloud cover was 7/8 and we reached our maximum altitude of 8,000ft. ASL.

We switched off the engine and so began a silent, magical ten-mile glide. Cloud tops were now 2,000ft. below us and stretched out mile after mile in every direction. We really wished there was someone we could wave to. All too quickly reality was upon us, as a check of our watches proved and it was time to descend to a landing if required.

A spiral glide, through a convenient gap in the clouds brought us out directly above our golf course. A fuel check revealed just enough to reach Dundee ten miles away.

So we ventured on into wind and the roughest part of the flight. With Aviemore, 60 miles and 1 1/4 hours behind us, our landing field came into sight with the satisfaction of completing a memorable flight.

During our short holiday we covered 200 miles XC, and six hours air time. With good planning, reliable aircraft and a responsible approach to flying we hope flights like ours will become an everyday feature of our marvellous sport.

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- CHANNEL
- UPRIGHTS
- GLIDERS
- CATCHES
- HANGDOOPS
- HEATSHRINK
- WIRE
- SWAGES
- TOOLS
- VARIOMETERS
- COMPASSES
- BATTERIES
- VENTIMETERS
- PARACHUTES
- GLIDERS
- SKY TRIKES
- BOOKS
- HARNESSES
- TEE SHIRTS
- KARABINERS
- BUNGEEES
- ROD
- BAROGRAPH
- BAGS
- HELMETS
- TANGS
- BADGES
- CLIPS
- SPARES
- ENGINES

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- UPRIGHTS
- GLIDERS
- CATCHES
- HANGDOOPS
- HEATSHRINK
- WIRE
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# Who dares wins?

picture Bettina Gray



**2nd Graham Slater**



**1st Bob Harrison**



**3rd Tony Hughes**

A PROMINENT League pilot was waxing lyrical over a pint or three in the bar at the Lancs and Derbyshire Gliding Club.

"Cross-country hang gliding is like fly-fishing," he remarked. The metaphor having escaped me, I asked if the gliders didn't get a bit wet. And anyway, wasn't a rod better for the job?

Undaunted, he continued the analogy. Fly fishermen, it appears, are a breed of connoisseur. Not content with catching the same old trout in the same old stretch of water they are forever elevating their ambitions and will travel many miles and wait many patient hours by a particular stretch of water to catch just one prime specimen.

One day, that single-minded dedication to a cause will pay a handsome dividend in the shape of a fine pike and proud pictures in the Angling Times.

## GULLEY

That was how this pilot saw the future of hang gliding in Britain — a small team of dedicated pilots devoted to the cause of pursuing the best XC conditions, making the biggest distances, enjoying the most majestic flying to be had in the country

**Story — Stan Abbott**

**Pix — Steve Thompson**

on any particular day by travelling far to where conditions promised best.

Now the noble pastime of gulley-running represents the other side of the cross-country coin. Invented by Graham Hobson, Bob Calvert and Graham Slater during the American Cup when they found just how far it is possible to fly under a low cloud base and in strong winds, it has grown into something of an artform over the last two leagues.

Today had been classic gulley-running weather: low cloudbase, intermittent wave rotor and a fast-approaching warm front and rain.

The decision to call an open XC task had caused a deep division between those pilots who believed this was the right decision if we hoped to extend the frontiers of hang gliding knowledge and those

who felt a finite task with pylons on the ridge would have been a far more rewarding experience.

The arguments were many, long and bitter and look likely to promote at least some defections from the League at the end of the season. The league may emerge enriched and even better attuned to the needs of international competition selection than it already is.

That remains to be seen. But whatever the outcome, the 1982 Sheffield League — the first to be held on that club's fine sites — will be remembered as a watershed.

It will also be remembered as the league when the handling bugs that afflicted some Magic IIs all season were dramatically sorted. This was most ably demonstrated by Bob Harrison who flew to his first League victory since way back when (was it 79?). It was a fine psychological boost for Bob, due to leave 36 hours later as captain/manager of the British team at Sansicario.

On Saturday an attempt was made to stage the League at Mam Tor but this impressive Pennine peak midway between Manchester and Sheffield kept its head stubbornly within cloud.

Attempts to run a task from lower Bradwell Edge were finally abandoned in the rain at 5pm. although there was free-flying and some, including former local-lad Phil Huddleston went XC in wave. Others, like Andy Wilson, got thrashed in the shifting wave rotor instead.

## FORECAST

Wave is a very dominant factor in Peak District flying and while wave can make a flight, the wave system can be so strongly defined it can actually suppress thermal activity and has brought many an aspiring XC flight to an early end.

That night, a vast wave rotor cloud hung eerily in the twilight over Mam Tor, its brontosaurian silhouette forming a mirror image of the craggy mass in the sky above.

Sunday dawned bright and clear, and after breakfast at the gliding club there was much deliberation as to whether to return to Bradwell Edge or heed the forecast that the wind would switch towards the south as the day passed and go instead to Stanage Edge.



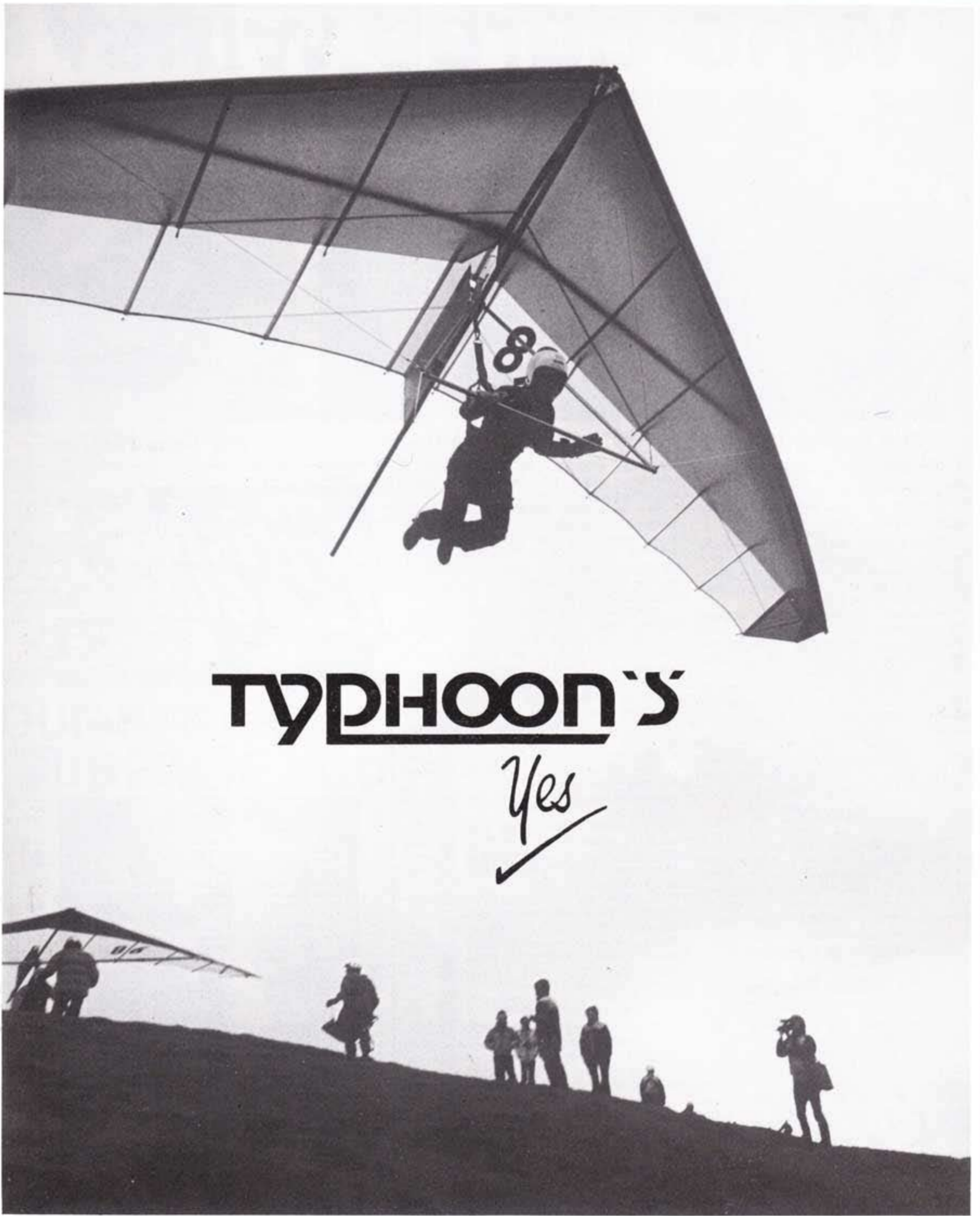
## Fourth League results

Pos	Pilot	Glider	Tsk. 1	Total	overall tot & pos.
1	Bob Harrison	Magic II	96	173	793 (22)
2	Graham Slater	Magic	75	162	959 (10)
3	Tony Hughes	Magic II	51	151	1,213 (3)
4	Mark Silvester	Azur	100	144	1,087 (= 4)
5	Phil Huddleston	Magic II	77	142	886 (13)
6	Graham Leason	Typhoon	80	137	967 (7)
7	Graham Hobson	Azur	90	134	1,237 (2)
8	John Stirk	Typhoon	56	128	888 (12)
9=	Mike McMillan	Magic II	58	123	1,087 (= 4)
9=	Bob Calvert	Azur	36	123	1,357 (1)
11	Ronnie Freeman	Typhoon	21	119	799 (20)
12=	Andy Wilson	Magic II	43	112	962 (9)
13=	Brian Godden	Magic II	47	110	460 (35)
13=	Roy Richards	Typhoon	43	110	521 (34)
15	Dick Brown	Typhoon	36	101	964 (8)
16	Trevor Birkbeck	Typhoon	28	91	827 (14)
17=	Len Hull	Magic II	33	90	814 (= 15)
17=	Michael Carnet	Magic II	21	90	801 (= 18)
19	Chris Ellison	Magic	29	89	906 (11)
20=	Keith Reynolds	Lightning II	24	85	796 (21)
20=	Mick Maher	Typhoon	24	85	591 (28)
22	Johnny Carr	Magic II	64	77	672 (25)
23	Robert Bailey	Comet	37	75	1,061 (6)
24	Graham Bell	Demon	44	73	688 (24)
25	Peter Harvey	Typhoon	39	68	560 (30)
26=	Chris Taylor	Demon	43	66	412 (39)
26=	Peter Hargreaves	Magic II	15	66	626 (26)
28	Allan Smith	Nimrod	45	65	814 (= 15)
29=	Richard Iddon	Typhoon	50	61	603 (27)
29=	Peter Waterworth	Typhoon	32	61	812 (17)
31	John Hudson	Typhoon	34	57	413 (38)
32	John North	Typhoon	27	50	436 (36)
33	Chris Johnson	Demon	26	46	534 (31)
34	Phil Higgins	Demon	17	43	372 (41)
35=	John Fennell	Typhoon	31	42	587 (29)
35=	Jim Brown	Magic II	17	42	701 (23)
37	Mark Southall	Typhoon	30	41	801 (= 18)
38	Dave Bluett	Magic	24	35	530 (= 32)
39	Steve Goad	Magic	21	32	530 (= 32)
40	Mike Atkinson	Typhoon	0	0	401 (40)
-	Donny Carson	Comet	-	-	432 (37)
-	Bill Walker	Demon	-	-	345 (42)
-	Marc Asquith	Demon	-	-	249 (43)

## Women

1	Margie Winton	Comet	100	179	667 (2)
2	Kay Simpson	Demon	52	152	572 (3)
3	Jenny Ganderton	Magic II	64	90	874 (1)
4	Sally Huxtable	Demon	14	82	481 (4)

**Turn to P23**



# TYRHOON'S

*Yes*  
✓

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



## from P21

We go to Bradwell Edge and find the wind already crossed from the south with the spasmodic wave interference at times augmenting the lift and at others arriving off-phase to administer a good thrashing.

The gliding club is active today and that means no crossing on to the ridge in front of their circuit pattern without at least 1,200ft. over the top.

Some pilots work the ridge in front of take-off and others cross the gap to the gliding club. As the wind switches ever further to the south the workable ridge is limited to a short stretch beyond the gliding club and it becomes the rule that you can soar it if you cross the gliding club below ridge level.

Some make better height off in the other direction, but cloudbase is even lower there and most of those who go early in wave to make the best distances do so from the gliding club end.

The air is thick with kites, making it extremely difficult to work what little lift there is and some choose to land because of it. Johnny Carr complains bitterly about the task-setting but nonetheless goes on to notch one of the best distances out of those who left it late.

### ROTOR

Those who didn't go early were left to run as far as possible as the warm front came in, some making hazardous landings in tight fields surrounded by trees and power lines to notch a few extra points from the small kitty available.

Pete Best, who co-ordinated the pick-ups, watched horrified as Graham Slater was tipped in tree rotor but somehow managed to get back into wind for an ungainly landing that jabbed an A-frame bolt painfully into his knee. Moments later, Phil Huddleston tanked in over the same trees to land a few yards further on. "Beat ya!" he shouted to the prostrate, pain-wracked Slater below him.



Living in harmony!

Mike McMillan was among the early ones to go and was well-pleased with the handling of his Magic II after he increased the wash-out by reducing the camber in the outboard battens. He reckoned he was outskinking Bob Calvert's Azur with no loss in performance.

Mike couldn't quite make the next wave bar and landed after 7.6km with Margie Winton, on her way to winning the women's comp. Mark Silvester and Graham Hobson made the next bar and parked over Stanage Edge for 20 minutes before turning and running. Graham reckoned he would have made the centre of Sheffield but felt that overflying the city to land in a park somewhere in the middle would be stretching "landing approach", as defined by air law, a little far.

### TRAINING

Bob Harrison made 16.5km by skirting the city to the south and Silvester did the day's best with 17.25.

When Monday saw us all back at Bradwell Edge in more promising conditions that were to deteriorate rapidly into much the same as Sunday's, Derek Evans took the opportunity to justify the previous day's task-setting.

"This is not classic XC," he said. "It means 'go as far as you can using new conditions'.

"Half of them didn't adjust their thinking to those conditions — it's not just me saying that: it's the consensus of the competitions committee. It's a new form of training really.

"It was a toss-up between open XC or setting a goal at Baslow which would have thrown a bit of discipline into them. But by doing that it takes some decision-making out of their minds.

"The thinkers approached it by saying 'how can I ridge-hop best?'. There is no general change of policy despite some loud outcries.

"My position is a difficult one because I am not an ace flier. But I am absolutely confident in what I do in training because I have been in sport all my life and there is no mystery whatever



Margie Winton — her first Women's League win

in training for all sports — you create the right environment and the naturally skilled guys will use that environment to improve their skills."

### FREAK

The weekend's most outspoken critic of the XC-at-all-times philosophy was Johnny Carr who said he believed pilots were becoming increasingly divorced from a real sense of competition.

"You are just freeflying really, and at the end of the day three prizes are handed out and you feel as though you haven't done anything for it."

He carried on: "There is no adrenalin or wind-up. If the League carries on like this and they send five relative newcomers to the Europeans, say, and they end up doing a duration and spot in a 'wind-up situation' they are not going to be used to that wind-up and they are going to freak out."

He was one of many who felt that flying in any major international would have been called in those conditions anyway. On the other hand, was the argument that what we do in Britain is bound to influence the way hang gliding goes internationally.

Monday's task was not open XC — it was a race to goal at Wadshelf, just short of Chesterfield, with 50 marks for landing at goal and 150 for distance. Those not making goal would have their distance measured along a straight line from take-off to goal, from a perpendicular to their landing point.

### COMPASS

A question by Andy Wilson at briefing led to it being spelt out quite clearly that if no-one made goal the task became a simple open XC out of 100 with the perpendicular not coming into play. As no-one actually made goal, this again made it possible to record at least some score by simply running off round the corner in the rain if you failed to go when it was goable.

Some failed narrowly, like Bob Harrison, Graham Slater, Mike McMillan and Bob Calvert. Ronnie Freeman should have got to goal but as he sat at 4,000ft. three miles from goal the landscape looked

decidedly unfamiliar through the murk at cloudbase and when he saw Tony Hughes far below him going the opposite direction he followed him, only to sink out and land short of him.

"That's the last time I fly without a map and compass" he commented afterwards.

Graham Hobson used the superb glide at speed of his Mylar Azur to lure Phil Huddleston too far behind the ridge to get back into lift but made only 5.6km anyway.

So at the end of the day another good one of 11.75km saw Bob Harrison take the league, with Graham Slater second, and Tony Hughes up there again in third place.

It would be nice to return to these magnificent sites in good weather. Thanks are due the Sheffield club for extending their hospitality on their sensitive sites — sites made sensitive way back when by cavalier attitudes in the early days and for which the club now has to pay a lot of money.

Sadly they now find themselves in a cleft stick, and avaricious farmers were collecting £10 fines for outlandings that quite certainly never took place.

Thanks too to the gliding club for their friendliness and hospitality (wouldn't it be nice to enjoy such good relations with our rigid winged neighbours elsewhere), to Pete Best for his pick-up work and to organisers Graham Hobson and Len Hull. And to Len for his open-house hospitality at magnificent neo-Gothic Cressbrook Hall.

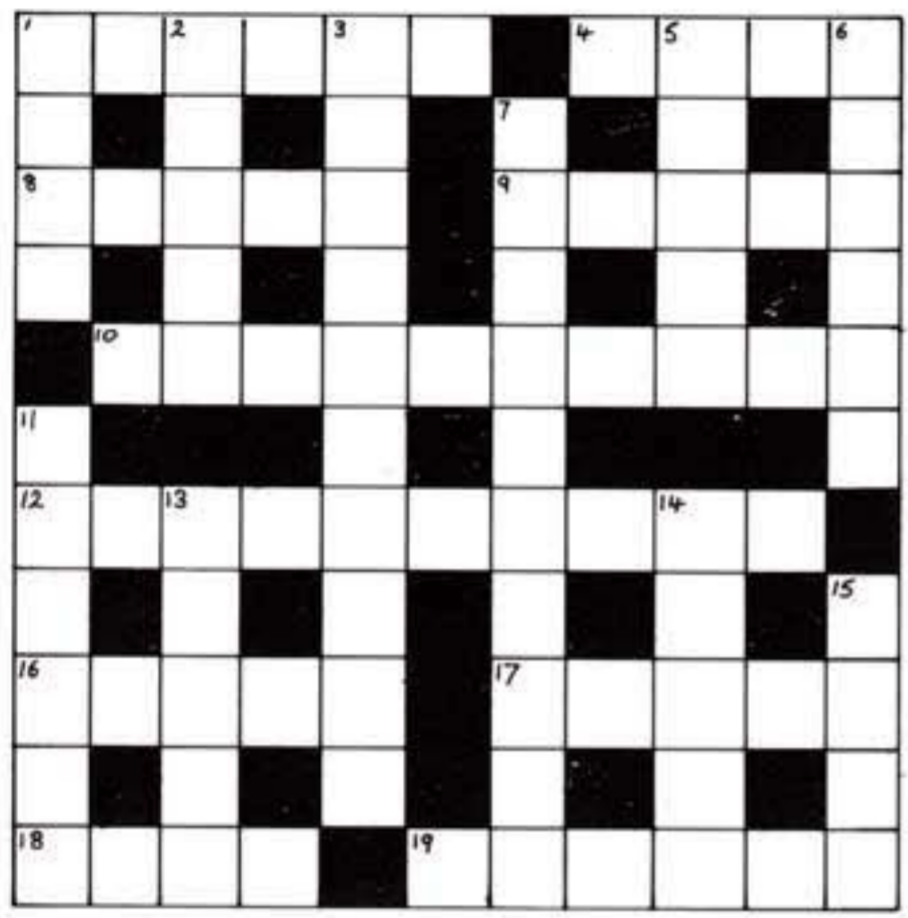


organisers Graham Hobson, left, and Len Hull. Ronnie Freeman looks on

# double PRIZE CROSSStubeWORD

For the first time ever there were no entries to the July puzzle, by Bazantez — obviously too cryptic!! So this month's is a DOUBLE PRIZE of £20 credit from Mainair Sports. Entries as usual to 72 Hartley Avenue, Leeds LS6 2LP by October 31.

## No.12 by Hotair



### CLUES

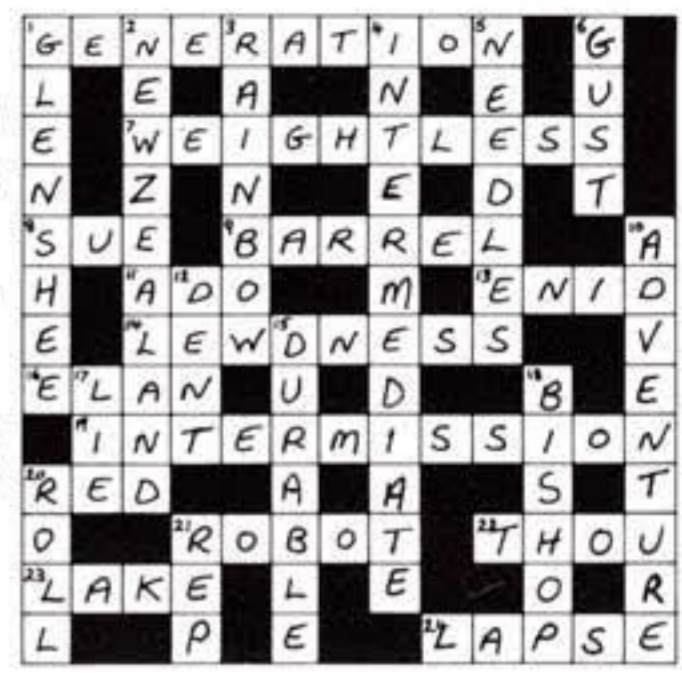
#### ACROSS

1. *Could this be amorous? How spirited!* (6)
4. *Is around this to go in Africa, but D is tan T.* (4)
8. *A single Wizard in the air.* (5)
9. *Sounds like the Cockney is promising to be in pain.* (5)
10. *Does he sell scares?* (4,6)
12. *Line 4 across.* (3,7)
16. *Ale is what you get if you go up this far and you may have to sell your kite too.* (5)
17. *Am I the subject object?* (5)
18. *This comp. consists of up.* (4)
19. *Feline in a sty? Crazy!* (6)

#### DOWN

1. *Is this cross enough to spar with?* (4)
2. *Sounds like it might be ova now.* (5)
3. *If your 10 across is this, then you may take up gardening or find a deer to dope, or 6 Down to being 7 Down.* (4,6)
5. *Is Ronald in a foot ahead?* (5)
6. *Must we go and be kind again?* (6)
7. *Such a nervous affliction is inevitably deadly.* (10)
11. *A very loud wind? What a business!* (6)
13. *Are they so venomous, or just making nasty noises?* (5)
14. *Visibly 2 Down before tea.* (5)
15. *A french version of New York? Never.* (4)

### Last month's solution



## NORTHERN GLIDER SALES

Look who's flying

# A Z U R



Picture by Steve Thompson shows Graham Hobson on his 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.

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# Second-hand Glider Which?

PAUL FARLEY and NICK TOMLINSON of the Welsh Hang Gliding Centre take a look at more third generation gliders for the post-P1 pilot.



Johnny Carr prepares to take off on a Cyclone

## Cyclone

PRODUCED by Chargus Engineering of Bucks, the Cyclone was for many years one of the best performing machines around, making its first appearance at the end of 1978.

The Cyclone differs from most other gliders that we've covered in this review both in concept and configuration. It was one of the first high aspect ratio (7.2) machines and utilised a tighter sail with droop tips and pre-formed battens: this type of batten is now used on all fifth generation machines. As far as concept is concerned the glider was designed purely for experienced pilots with cross country and competition flying in mind.

Rigging is far from simple being lengthy and infuriating with many extra wires to get snagged. Although the control frame folds away it is awkward to rig as one upright swivels forward the other back. The Cyclone has single deflexors and a tip to control frame wire and is very susceptible to turning on the various turnbuckles.

Handling is a little difficult until the pilot has adapted to the Cyclone's peculiarities. Pitch and roll on the small 165 model are fairly light which normally leads to quite a lot of pilot induced oscillation. On the large model (180) roll is much heavier leading to a

sensation of being quite out of control in rough air.

The glider also yaws a lot due to its high wing span and tight sail, giving it a very 'wingy' feeling, especially when flying near to the slope — something that isn't to be recommended on the 180 model. During turns or repeated 360's both models require quite a lot of opposite weight shift to prevent over banking and side slipping.

Also care must be taken not to slow the Cyclone up too much, otherwise it will tip stall, especially when top landing in restricted areas or rough air.

Performance is excellent and the sink rate of a well tuned 180 Cyclone is hard to beat, even by a fifth generation machine. As far as speed and penetration are concerned the Cyclone is definitely the fastest single surface machine, the large one, surprisingly, being faster than the small model.

Cyclones can be picked up cheaply now due to the increased performance on the fifth generation machines and that not many post P1 pilots are capable of flying them. Once a pilot has achieved a good few hours soaring prone on an intermediate glider he could do a lot worse than pick up a nice cheap Cyclone.

In 1980-81 the Chargus Company brought out the Mk II Cyclone which features the current 'make it handle' floating keel, from all reports this cures the previous vices.

## Cherokee

THE Cherokee, no longer in production, was produced by Birdman of Marlborough, who recently gave up manufacturing hang gliders.

The Cherokee appeared on the market shortly after the Super Scorpion and is very similar in many aspects, apart from having a single deflexor on each leading edge.

Early Cherokees had a rather difficult to use bolt-on centre box assembly which connected to the keel tube with wing nuts. This system was improved later using the same method of plug-in cross booms as the Solar Storm.

Most Cherokees had an excellent standard of finish on both airframe and sail, all tubing being gold anodised.

Handling once again is very pleasant and docile, although a little heavier in pitch and roll than a good Super Scorpion. Performance is similar to both Super Scorpion and Solar Storm, with emphasis on a good slow sink rate, the Cherokee isn't a fast or strong wind machine.

One thing to bear in mind before buying a Cherokee is the possible difficulty in obtaining



Lester Cruse in action on a Cherokee

spare parts for a machine no longer in production and for the therefore low resale value of an otherwise good intermediate glider.



The Emu in action

## Emu

THE Emu was manufactured by the now defunct Vulturelight Aircraft Co. of Brighton. After a very successful entry into the hang gliding market in March 1979 Vulturelite ran into financial problems and therefore production of the Emu and their advanced glider, the Predator, ceased.

The Emu is rather different from the other machines covered previously, in that it has a bowsprit, crossboomless airframe configuration, as has the Sigma and one or two other innovations such as a cranked keel which joins at the rear of the control frame.

The Emu's handling and perfor-

mance were typical of this generation of glider although roll and pitch control are a little too light for the average pilot causing the glider to be more than a little wobbly in anything but smooth air.

One important point to bear in mind if considering the purchase of a second hand Emu is the poor availability of spare parts, especially control frame uprights which are very susceptible to damage. Second hand Emus can normally be picked up very cheaply and providing you realise the low resale value present a good first time buy.

The Emu comes in two sizes, the large one being for pilots of 10 stone upwards.

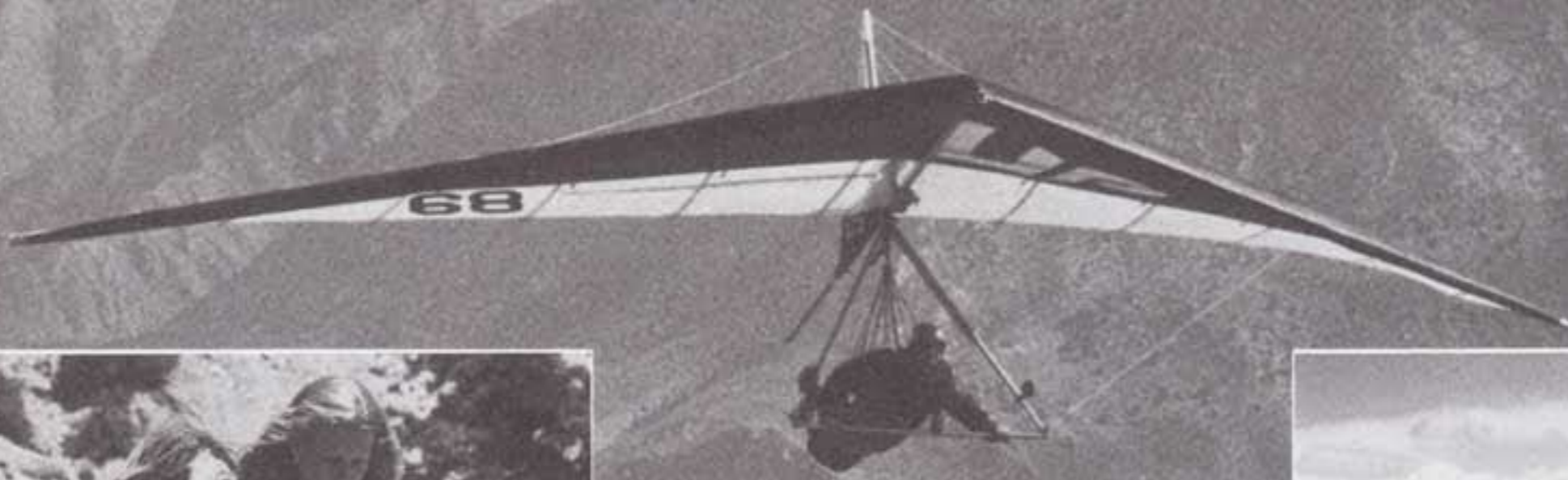
## 'Star-rating' comparison

Glider	Sail	Airframe	Rigging	Performance	Handling	G/Handling
Cherokee	****	**	.	**	***	.
Emu	***	..	..	..	..	..
Cyclone	..	.	0	..	.	..
Vortex	***	.	0	..	.	..

KEY \*\*\*\* Excellent, \*\*\* Good, \*\* Average, \* Poor, 0 Awful.

**Vortex  
report  
P28**

# The 1982 Owens Valley Classic



*Jeff Burnett over Owens River*



*Train back-up team at launch*



*View over the*

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*Entries to address below by October 15*

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*Bill Meyer and Johnny Carr*



*Jim Lee - first*



*Kath Lee*



*Harry Tudor*



*Rickie Duncanson*

*Evening wave cloud*



*Telex sign for "open distance"*

*Manzanar goal*



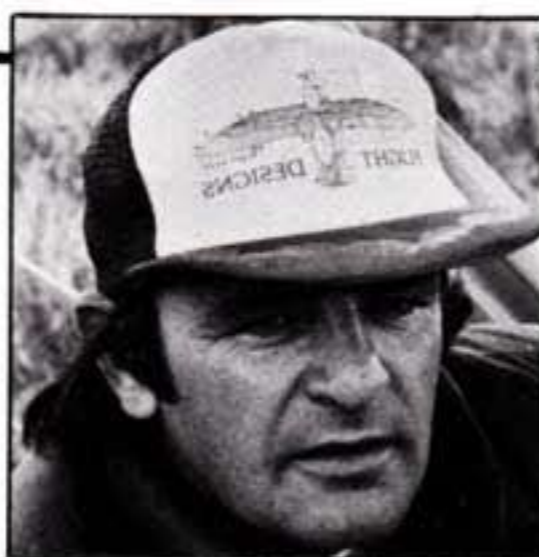
**Photographs by Bettina Gray**

Gray Photo & Press, BX32, Rancho Santa Fe, CA 92067, USA



# Brian Milton

BRIAN Milton came to hang gliding almost by chance. I didn't know how until a friend of mine mentioned it. He worked with Brian on Radio London and apparently told him he was doing a programme on hang gliding at Devil's Dyke, Brighton.



## a leader

Brian asked to go along and, typically, his immediate reaction was a total commitment to this new and exciting sport. That was 1974.

I first met Brian at Mere (BP) in 1975. First impressions were not favourable. We had been knocking around since 1973 and thought we knew it all. I remember thinking, "who is this upstart with the short, staccato, fascist phrases ordering people about?"

□ □ □

"Not only that, but he has the tenacity, with very little experience, to throw himself off the hill, complete with tape recorder and microphone, in front of the public. Still it served him right, he landed in an ignominious heap at the bottom," — not for the first time.

These first reactions were confirmed at the next major competition, The Hole of Horcum, Pickering.

Being a mere marshal on a pylon, all we could hear was the Milton voice confidently and authoritatively directing operations.

It was some time before we realised here was a man who was going places and would be taking hang gliding with him. He could certainly talk, but we didn't realise at that time he also backed his words with

action. There are few people who can match his energy and, if you are swept along by the Milton tide, you can expect a 24-hour commitment seven days a week.

Brian has this wonderful ability to make things happen. The League was but a twinkle in Ken Messenger's eye. Brian built it into the organisation we have today — the envy of the world. The League is just one, others are: The American Cup, London to Paris, Wings!, first free flight across the Channel, team selection and many more.

□ □ □

Always a politician, it was inevitable that Brian should become heavily involved in BHGA affairs and Council. Many and fierce have been the arguments on controversial issues. Brian's sincerity and dedication are beyond reproach but when the bit's between his teeth he gives no quarter.

Some who have sought to challenge his views have retired with a bloody nose.

Brian has himself retired from the League, I hope without a bloody nose! When the dust settles he may come to accept that the decisions which led to his retirement were based on his own sound principles

of honesty, integrity and sincerity.

He would have demanded the same response — no less — had the votes been reversed. We shall miss Brian's input and I hope he will not fade from the hang gliding scene permanently. Leaders of his calibre are few and far between.

□ □ □

In many respects he is a modest man who has not sought glory for himself. It seems odd to be saying that of someone with such self-confidence and drive but if you ever want some fascinating stories, try asking him: how he came to propose to Fiona; how to get an Austin 7 across the Sahara; how he used the radio to get across the borders of an African State; what to do if your're down in the Channel nine miles from land and no paddle; how to stop the traffic in London's busiest street; how to fall 300' with both leading edges broken and survive; what is a two-man balloon drop like. I never did find out why he can't go back to South Africa nor why Cranwell decided to dispense with his services.

You'll be tempted to think it's a chapter of accidents; you would be wrong, Brian is a survivor and in true SAS tradition, "who dares, wins." He will bounce back — I hope.

*Roy Hill*  
Chairman, BHGA

# Flying abroad

INFORMATION about flying abroad is now being co-ordinated by Lindsay Ruddock who is building a central file offering a wealth of information on which anyone may draw.

But, contributions are needed from members... If you have been hang gliding abroad, write down all you can remember about the sites you flew or heard about, and get it on the central file. Include information about how you shipped your gliders; at what cost; customs difficulties and legal restrictions.

What were the meteorological conditions? Which individual pilots were contacted?

Begin site descriptions in general terms, i.e. what kind of site it is e.g. mountain with anabatic lift, hill soaring, light wind thermalling etc., and how good is it in a general way. Is the flying easy or difficult e.g. the take-off might be awkward. What are the ridge lift, ridge-hopping and thermalling potentials?

Then we would like to know wind directions, take-off altitude, distance to bottom landing and its altitude, site popularity, road directions from nearest town, local club, rules, airspace restrictions, top landing, what time of day the thermals begin, what is the best time of year for a visit etc. etc.

In fact, list everything of importance including the appeal of the area to non-flyers and where to camp or stay. Making notes while still at the site will help towards a more accurate and detailed report.

Alternatively, if writing it down is too much trouble, at least put your name on file as willing to offer information if asked.

There will also be many exiled Wings! readers from whom we will want to hear. If you are resident abroad in a good flying area, write to register your name as willing to offer help to visiting fellow pilots.

The address is Lindsay Ruddock (foreign flying), Fairhaven Cottage, Ridgemoor Rd, Englefield Green, Surrey. Tel: Egham 34370.

## STOP PRESS

Sept 18 Fatal Accident — Dennis Searby, 38, of Huddersfield, killed on Skyhook Silhouette after glider tucked at Nont Sarah's Pennines, in good conditions. Investigation underway.

Sept 19 League — Calvert British Champion for 3rd time, Hobson 2nd, Hughes, Silvester, Bailey.

## Glider Which?

from p25

## Vortex

THE Vortex, also produced by Chargus Engineering, and their first contribution to the intermediate glider market, was first manufactured during early 1978.

The Vortex followed the deflexorless concept of the Super Scorpion but with an addition: "Vortex generators". These are little holes cut in the wing tips just behind the leading edge and they supposedly give a lower stalling speed than normal. Whether they work or not is debatable but the Vortex will certainly fly slowly.

Rigging is a bit messy, utilising a difficult to assemble control frame and bolt-on cross booms, like the

Mk I Super Scorpion. Finish is good all round with lots of attention to details, all tubing being anodised matt black.

The performance of the Vortex is only good at slow speeds where it really proves its slow flying, slow sink rate ability. It's not uncommon to still see a seated or prone Vortex pilot top of the stack on a light wind day.

Unfortunately the Vortex is rather less pleasant to fly in strong winds and suffers from some alarming tendencies with the bar pulled hard in.

The Vortex also becomes very light in roll at high speeds and will oscillate uncontrollably in rough air, particularly if the pilot is inexperienced and is overcorrecting.

There have been several incidents of Vortex's luffing in a steep turn especially if flown in rough air.

Having stated these points it is only fair to say that the Vortex, like most other gliders of this generation, is perfectly safe and pleasant to fly as long as it is operated within a restricted flying envelope i.e. within safe speed margins and not in gusty rough air.

A second hand Vortex can be picked up quite cheaply and spares and service are still readily available from Chargus. The Vortex is only available in one size.

Please note comments in Wings! magazine concerning BHGA investigations into the Vortex and other gliders.



# Grousing about the rules

**Robert Bailey tells STAN ABBOTT how the "luck of the draw" stole victory from Bob Calvert at Grouse Mountain.**

HANG gliding — the ultimate test of individual against the elements. And yet at Grouse Mountain, British Columbia, the British team found this year that the fickle finger of fate can intervene in even this most serene of sports to snatch victory from deserving hands.

The high-powered British team of Bob Calvert, Ronnie Freeman, Mark Silvester and skipper Robert Bailey had hot-footed it to Canada directly from the third league while comp. organisers Harvey and Richard Blackmore delayed the start to await the "Brits".

"We got off the plane at 3pm. and there was a pilots' meeting that same night. While I went to the meeting, the others carried their gliders the last 400ft. up the mountain mostly so Ronnie could get a practice. The others, like me, had flown there before it was the only practice Ronnie got.

Grouse Mountain, a winter ski resort, stands in the foothills of the Rockies overlooking Vancouver. The main competition this year consisted of two pylons, the first part-way down the mountain and the second well back on the summit plateau. Each was worth 150 points with a further 300 if both were rounded a second time.

There were then 400 duration points, but if only pylon one was rounded there were 850 for duration. The landing field was a tight suburban baseball park with real "wind-up" approaches.

□ □ □

Last year's winner Robin Pederson made an early exit when he missed the landing field by yards and earned automatic disqualification.

Aussie Stevie Gilmour developed a new approach technique by coming in over the spot at 30ft. and flaring out, using his coalminer's biceps to hold the wing out as he dropped on to the spot, sometimes clutching the back wires.

The British got off to a good start as Terry Silvester and family became de facto manager and general dogsbodies.

Mark was first off in the first heat against the eventual winner Steve Moyes after waiting three hours on the take-off ramp for the cloud to lift. It never dropped again through the meet.

In a real jing-dong battle, Silvester on his Mylar Azur beat the Australian, flying a big 200sq.ft. floaty Missile, to the first pylon and the pair worked back up to pylon two where you needed 300ft. over the top to round it safely and make it back out over the front. Moyes dived in on Mark's blindside to take the second pylon.

Moyes pipped the heat by 44 points and it was to become apparent that you couldn't afford to lose a heat by much more if you planned to survive the first cut.

Bailey found himself up against Mark Gibson, a new American East Coast hotshot on a Sensor, and used his past experience of Grouse to beat him.

"We were 500ft. above the hill and the landing field's about a mile out from the mountain. I decided to head out early to a place where I have got thermals before on a bit of a sandy patch by Capilano Lake.



Bob Bailey takes off the ramp

"I got an e-ight-up and cored it back to 1,500ft. He saw me catch the thermal and came screaming out and got in 200ft. under me. I gained 500ft. on him. It disintegrated at 1,500ft. and I ended up just scraping a win by a couple of minutes."

The ding-dongs continued for eight rounds but Ronnie Freeman was having a difficult time on his Medium Typhoon in the light conditions against bigger floatier machines. "Last time it was far punchier," recalled Bailey.

Super Ron lay 31st after eight rounds and so missed the first cut to 26 by 200 points. "It was good for Mark, Bob and myself because he really battered down to running round and telling us what the thermals were like in front and so on," said Bob.

When the final cut was made to 16 the task consisted of a three-hour window with take-off order to be decided by lots.

With a superb sky and every minute in the air worth ten points everyone wanted to get off the ground as soon as possible and that meant drawing a low number. Moyes drew number three and poor Calvert came up with 15. At that stage Calvert was leading the field by 70 points, with Bailey sixth and Mark seventh.

Bailey drew number 12 and Mark number eight. "It was really bad news," said Bailey. When the early numbers took off, sure enough it was well-soarable and they climbed effortlessly above the plateau. Bailey climbed 1,000ft and watched agonisingly as Calvert took-off with third-placed John Duthie into nothing.

Poor Duthie sank out after 5 minutes while Calvert managed to hang in for 20 minutes and then clawed a weak thermal back up the mountain.

It looked increasingly as though the whole field would stay up until the window closed at 5pm, which would leave those who had drawn the low numbers with a huge advantage.

Bailey reckoned the best chance of regaining the advantage was to quit Grouse for the higher peaks on the offchance it might switch off there earlier because of the greater sea influence.

"I arrived at this huge mountain in a 10mph easterly wind blowing out to sea. At the back side of it there was a 5,000ft. cliff. It was absolutely mind-blowing — made you feel really insignificant.

"It was covered in snow and, amazingly, wasn't soarable. I couldn't believe it! I thought if I go down here I'm going to be right in snook."

But he caught a lee side thermal up to

7,500ft. — only to be joined by Moyes, Howard Vandall, Gibson, and Willi Muller. "Plan A was kaput."

Meanwhile, Calvert and co. were getting 7,000ft. on Grouse itself. Bailey was thankful he'd donned his flying suit — Calvert and Silvester had taken off in shorts and shirts in the 85-degree afternoon heat.

At 4.30 Bailey set off back to make the landing field for the 5pm deadline. Just four pilots had dropped out all afternoon. They worked off their height over the landing field and Calvert came in for an outer — 15 points — which put him a whisker ahead of Moyes again.

Moyes waited to be the last one into the field and scored 40 to win by just 12 points. As he stood on the winner's rostrum he said the only reason he was there was because he'd drawn number three and the other guy had pulled 15.

It was sporting, but didn't alter the fact that Moyes had got \$2,500 in his pocket to Calvert's \$1,300. Bailey and Silvester were also in the prize money.

Bailey said philosophically: "That was the way the rules were and we didn't complain when they were published so that's the way we flew it.

But, for all that, said Bailey: "It was again a really good meet. The sun comes out and it's a brilliant place to fly." Judi Neilsen, USA won the separate women's comp.

## Sixth annual Grouse Mountain World Invitational Championships

Pos.	Pilot	Score
1	Steve Moyes	9861
2	Bob Calvert	9849
3	Howard Vandall	9712
4	Ken Hiebert	9659
5	Mark Gibson	9655
6	Steve Gilmour	9591
7	Bob Bailey	9452
8	Mark Silvester	9436
9	Peter Luke	9362
10	Tony Schmidt	9275
11	Willy Muller	9262
12	Rich Burton	9121
13	John Duthie	8458
14	David Beardslee	8085
15	Tom Low	8022
16	Mathew Wagner	7670
17	Chris Bulger	6435
18	Phil Ray	6344
19	Jim Bamford	6318
20	Rick Mercier	6266
21	Mike Meier	6152
22	Rob Kells	5944
23	Randy Haney	5915
24	Steve McQuilliams	5824
25	Erik Fair	5810
26	Jeff Burnett	4931
27	Andrew Barber-Starky	3676
28	Steve Mawhinney	3558
29	Bruce Case	3543
30	Bruce Galloway	3503
31	Stewart Midwinter	3426
32	Ronnie Freeman	3415
33	Dave Ledford	3240
34	Howard Osterlund	3144
35	Dudley Mead	3066
36	Wayne Walker	2920
37	Darryl Bossert	1957
38	Steve Alford	1783
39	Robin Pedersen	0
1	Judi Neilsen	8147
2	Gayle Bartlett	7518
3	Kim Butterworth	5766
4	Debbie Renshaw	5748

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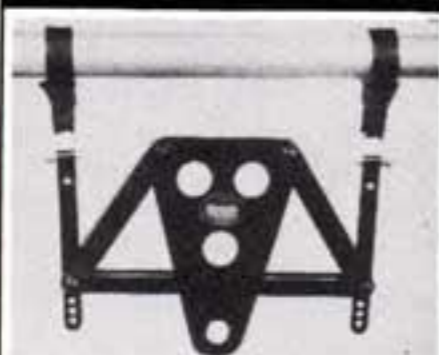
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# To be a millionaire...

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This was the dream we were promised as we set off in our hired mini bus in mid-August for the Sansicario cross country competition. The reality was to be somewhat different.

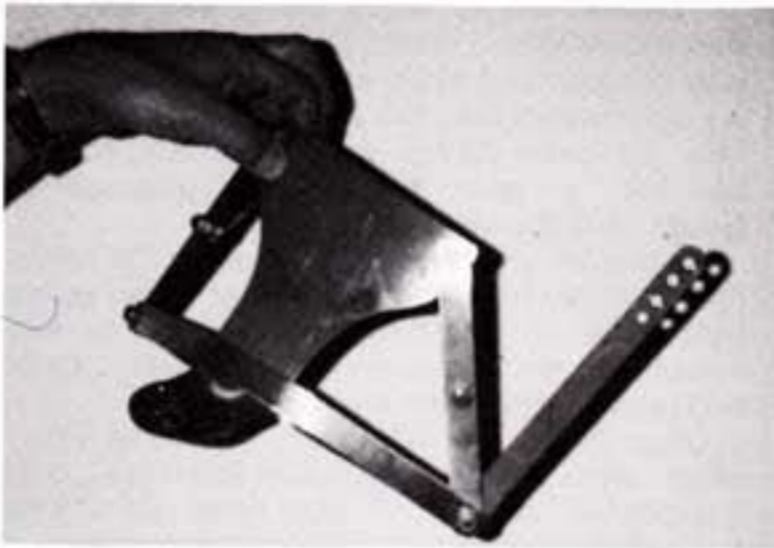


The "official" team consisted of Trevor Birkbeck, John Fennell, Chris Johnson, Marc Southall, Allan Smith, Peter Waterworth and myself with Bob Harrison as flying team manager. Other individual British entries to the comp. were Martin West, John Pendry, Darren Arkwright, Jenny Ganderton, John Duncker and Phil Merton. Lindsay Breen and Alison Johnson came along as official drivers and Jim Bowyer was co-opted (or hi-jacked) along with his van.

Arriving five days before the comp. to suss out the site and conditions and get some practice in, we discovered we were unable to use the cable car until the meet began and so spent a good part of each day pushing the bus up to a reasonable launch height.

By the third day we had arrived at the conclusion that there is very little chance of gaining height or even staying up unless within

## or a Wally Bird!



Allan Smith's buckled French Connection.

*By Richard Iddon at the Sansicario XC meet*

a few hundred feet of the summit.

This was perhaps due to a permanent inversion around 1000ft. below the top and once below this it was impossible to climb up through it. This encouraged us to push the van ever higher up the mountain until, on the third day we managed to burn the clutch out completely and left ourselves with only Lindsay's clapped out Cortina. It was fortunate that Jim Bowyer happened on the scene with his four-week-old Volkswagen van which we duly commandeered. Poor Jim also managed to fall off the roof of his van on his first trip up the mountain, lacerating his face pretty badly and damaging his wrist.

This meant that not only did we have the use of Jim's van, but Jim too, as he didn't

feel much like flying.

One practice day found us exploring new territory over virtually unflown mountains, trying to establish potential XC routes, as previous years' competitions had included open distance tasks. With a thunderstorm looming close we all experienced a really good thrashing. Chris Johnson reported being pinned to his keel for 3-4 seconds at one point before his glider pulled out — "just like someone had pulled the plug out" Alan Smith had his stainless steel french connection twist and buckled in turbulence 8,500ft. above terra firma. It was days later we discovered the locals never fly the routes we took as they consider it much too turbulent.

The evening and pre-flight briefings proved very amusing as Georgio or Gi as he liked to be known, attempted to explain the tasks and rules to us in his rather broken English. We discovered the Italian for today sounds like orgy, so on being told that "orgy is today" all the British contingent burst into raucous cheers. The most amusing gaff, however, came when Bob asked Gi if he had any spare maps. Gi, looking very perturbed, explained the following.

"You knowa when you makea love to a beautiful girl?"

"Yes," says Bob, becoming rather puzzled.

"Well, you knowa da whitestuff?"

"Well, yes".

"In my country this isa calleda da spare-maps."

Bob proved an excellent manager, if perhaps a poor diplomat, pushing our cause forward at every opportunity. For example, on being told that the teams would have to go up the cable car at half hour intervals, Bob immediately piped up "We'll go first". Rather unobtrusive, but most effective.

**continued over** →

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The official team — from left (rear): Chris Johnson, Bob Harrison (capt.), Allan Smith, Peter Waterworth, Richard Iddon. Front: Marc Southall, John Fennell, Trevor Birkbeck. Picture Steve Thompson.

from p31

The technique in flying down the Susa valley, as we had to do throughout the competition, seemed to be to gain maximum height on launch without being blown too far back, then to creep along the spine of the mountains. Very little thermal activity was encountered after leaving Mt. Fraiteve and we discovered that the best way to use what little lift came along was often not to 360 but just to ease the bar out and gently S-turn until the lift disappeared.

At first we were tempted to follow the crows over the back in the belief that they would lead us to lift but they generally led us into rotors so we christened them Wally Birds and avoided them like the plague.

Once below the inversion, a strong valley wind was always encountered, (the local "acrobatic" wind). It was often so strong that no further headway was possible and a vertical descent into wind was the outcome. As one approached Susa, the descent into the valley was further complicated by a layer of cloud which pushed up the valley from the east.

It was normally only a hundred feet or so thick but it took a fair bit of bottle to fly down through it, knowing that the landing fields beneath were very few and far between in places. One section of the valley has only one decent landing field in 14ks, this being the foot of a medieval fortress.

The competition started on Monday 16th with a race to a goal at Caprie, just over 40kms. along the valley. Only four pilots reached goal but our Bob was one. Darren, Phil and Peter landed not far short. A reasonably good start by the team.

Tuesday 17th. A front was forecast to come through by noon so the task was called off for the day. Naturally, the front never materialised and a number of pilots flew in the afternoon to land at the hotel in a spot landing comp. for a "liquid" prize. Phil took second place and collected four bottles of booze.

Wednesday 18th. Race to goal at Caprie again. Almost nil wind and a totally blue sky. The take-off window, originally 1-00 to 3-30 pm. was extended to 4-30 as nothing was going up at all. John Pendry's experience in this type of flying was becoming obvious as he made Busselino, 28kms from launch along with Phil in what was little more than an extended glide down the valley. Peter, John Fennell and Martin West were not far behind at Susa and Darren and I had our first encounter with the roof of the fort.

Thursday 19th. Race to goal at Caprie (yawn!). Good thermal activity but a moderate NW wind meant working the blobs over the back, away from the mountain spine. It also meant the first part of the course was almost ridge-soarable which helped the Brits, more used to this sort of flying. Darren and Trevor followed a thermal back to around 4,000ft. above take-off, then pulled out to encounter 10-down all the way back to the spine and only just managing to creep over the top. Jenny left in the same blob but followed it back even further, eventually reaching the mountains on the south side of the valley behind take-off. As the thermal had fizzled out by this time she was able to take a dog-leg course from here, directly towards the goal without encountering any really bad sink and, in fact, easily made the goal with what turned out to be the fastest time of the day.

Friday 20th. Dull and overcast with winds gusting to 35mph. on launch. Race to goal at Caprie was originally called (double yawn) but after much dissention it was finally called off at 1-30pm. by which time the cable car had been stopped because of the wind.



The phantom of Sansicario - Bob Harrison tries Jeff Scott's flying suit for size.

The unofficial task then became a race down the mountain, on foot. I think Allan Smith won this, making the 3000ft. descent in 36 minutes. An afternoon of sheer decadence followed, lazing by the hotel pool sipping chilled wine from champagne glasses.

Saturday 21st. The best looking day so far. Light winds, bright and sunny but very cool on launch with ice on the gliders left on top overnight. A 28km out-and-return was called with a turn point on top of the spine. The day, however, did not live up to its promise and the first two pilots to launch went down, so the task was shortened to 16kms and the window extended to 5pm. By 4 o'clock the whole mountain spine was working and most pilots completed the task easily. The finish gate was at the hotel and the assembled crowds there were treated to some fairly spectacular landings including Bob doing an ultra low-level 360 around the windsock.

Sunday 22nd. The same out-and-return task was set but conditions proved virtually unsoarable except for a few early competitors. The final results found the winner to be Angelo Crappenzano, a local flier. John Pendry took second place and Peter Waterworth, third, both becoming Lira Millionaires in the process. Other British fliers in the top 20 were Bob Harrison 11th, Darren Arkwright 12th, Marc Southall, 16th, John Fennell 18th and Trevor Birkbeck 19th. We also brought home the team prize, just snatching it from the Norwegians on the last day.

Obviously, the organisers could have been more inventive in their task-setting and it was a pity that no open distance was called as there is terrific potential from this site — a flight to Lachens being a definite possibility. The timing of the meet was another problem as most of the Alps become liable to inversions in the valleys by this time of year. We all got to know the Susa valley quite intimately and Jim's van was most definitely run in by the end of the rip.



A pensive Bob Harrison with Lindsay Breen.



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WINGS! is typeset by Leeds Alternative Publications Ltd., and printed by Arthur Wigley and Sons Ltd., Leeds LS6 2RT.

Additional artwork by Harry Hammill.

The magazine is published by the British Hang Gliding Association, 167A Cheddon Road, Taunton, Somerset, TA2 7AH (0823-88140).

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

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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.

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