

# George Worthington

He took up hang gliding in his mid-50s and went on to gain every single FAI record.

He died in an ultralight accident on September 10, 1982. He was trying to bring forward that sport as he had done for hang gliding.

On September 19, his ashes were scattered from an ultralight over his favourite Torrey Pines soaring site in California. He was 62.

A four page report in his memory begins on page 6.



OCTOBER 18, 1982

# Wings!

**Mere:**

picture report, p15

Cover shot by Steve Thompson shows Phil Higgins on his Demon over the Clubman's camp site



# Calvert does it again!



Victorious but under "crazy foam" attack – the great Bob Calvert!

**BOB Calvert cruised to his third British League championship at the League final in wet and windy Lancashire.**

The anticipated last gasp battle between Calvert, his local rival Graham Hobson and the on-form pilot of the moment Tony Hughes (not to mention Robert Bailey, Mark Silvester and Mike McMillan all snapping at their heels) failed to materialise as only one short Mickey Mouse task survived the weather.

An approaching front got just as far as Parlick Fell while the rest of Britain, it seems, was enjoying a refreshing thermic south westerly system.

It was a slightly anti-climactic end to the League season as the wind steadily freshened that last Monday, but it was only what we all should have expected – after all, the weather at the first League had been a dream and had declined at a steady linear rate since.

## Donkey

As it was, Bob Calvert merely put the icing on his cake by scoring a 100 point maximum on the duration and spot which took all of three minutes. For the record, Andy Wilson came second, followed by a gaggle in third place.

Some attempted a second flight on that first day – even after the clag descended and hid the landing from take-off.

Pendle Hill was the clagged in site on the second day which saw Mike McMillan win the Donkey Derby on Blackpool sands.

So, as the prizes were presented by BHGA Chairman Roy Hill in the car park at Chipping, near Clitheroe, Competitions Chairman Derek Evans summed up what had been a sensational year of achievement for British hang gliding.

"We started out this year thinking we had really got the answer – it wasn't quite the answer, although somehow it got us the best results in international competitions.

"We want to make next year an even better year."

To that end, competitions committee brings in three new faces – Dick Brown, Michael Carnet and Len Hull – at its strategy meeting next month. Leaving the committee are Jim Brown and Keith Cockroft.

Derek thanked the League's long-suffering marshals for their services, notably, Joan Lane, Mike and Lynn Clayton and Audrey Evans and the prizegiving began with the Trevor Birkbeck award for the pilot campaigning hardest for more finite tasks. Johnny Carr wore his Mickey Mouse mask with pride and dignity as he humbly kissed Derek Evans's feet.

Bob Calvert was awarded a very small cup indeed for winning what there was of the League Final. It was so small it actually had a real egg in it which Bob tossed skywards over the heads of the watching crowd. All watching, that is, bar Wings! photographer Steve Thompson who had his vision fixed through his SLR

by Stan Abbott

viewfinder. The egg landed with a majestic splat atop Steve's head and dribbled sickeningly down his face!

The more serious prizes were then presented by Mr. Hill who paid tribute to the League in its "most successful year ever". Second to Calvert was Hobson, 1982's most luckless pilot, whose main consolation was that in this competition he had been beaten fair and square within the rules without the intervention of fate's fickle finger.

Tony Hughes, served so well this year by his distinctive Mylar Magic II Slippery Sam, retired his faithful mount for the final in favour of a Sensor and rounded off his superb year by coming third. Fourth was the ever up-and-coming young Mark Silvester – could next year really be his year?

"The League just wouldn't be the same without that smile," was one comment as the grinning Robert Bailey took his fifth prize. Mike McMillan's sound analytical performance throughout the season placed him sixth, followed by Graham Leason up from 13th last year to seventh. Then came Andy Wilson and Dick Brown with newcomer Phil Huddleston in tenth place and the proud receiver of the Mainair Cup for the best placed newcomer.

## Cost

Len Hull took the Ultra Sports Salver for the most improved pilot – up from 34th to 14th.

The "relegated" list, sadly, contained some prominent names – people in at the foundation of the League. Most notable are John Hudson (although he plans to maintain his commitment to Competitions Committee), Mike Atkinson, John North, Brian Godden and Donny Carson who dropped out after the third League this year because he simply couldn't afford the enormous travelling cost from his home near Inverness.

Jenny Ganderton won the Women's League again, although competition was definitely becoming a bit keener by the end of the season. Has she still got time to log those extra XCs needed to book her place in the big time next year?

• Follow that! page 12. Why I'm leaving, page 13.



"Egghead" Steve Thompson (who took these pictures and those on p12)

## The 1982 League – Final positions

Pos.	Pilot	Total	Pennine Lge Glider
1	Calvert	1457	100(1) Azur
2	Hobson	1289	52(18) Azur
3	Hughes	1277	64(12=) Sensor
4	Silvester	1155	68(9=) Azur
5	Bailey	1129	68(9=) Azur
6	McMillan	1123	36(23) Magic II
7	Leason	1047	80(3=) Typhoon
8	Wilson	1046	84(2) Magic II
9	Brown, D.	996	32(24=) Typhoon
10	Huddleston	966	80(8) Magic II
11	Slater	959	— Magic
12	Ellison	906	— Magic
13	Stirk	904	16(31=) Typhoon
14	Hull	882	68(9=) Magic II
15	Southall	881	80(3=) Typhoon
16	Smith	878	64(12=) Nimrod
17	Freeman	863	64(12=) Typhoon
18	Waterworth	844=	32(24=) Typhoon
	Reynolds	844=	48(19=) Lightning II
20	Birkbeck	827	0(36) Typhoon
21	Harrison	825	32(24=) Magic II
22	Carnet	817	16(31=) Magic II
23	Brown, J.	765	64(12=) Magic II
24	Carr	752	80(3=) Azur
25	Bell	720	32(24=) Demon
26	Iddon	651	48(19=) Typhoon
27	Hargreaves	642	16(31=) Magic
28	Harvey	640	80(3=) Typhoon
29	Maher	623	32(24=) Typhoon
30	Fennell	603	16(31=) Typhoon
31	Johnson	598	64(12=) Demon
32	Goad	578	48(19=) Magic
33	Bluett	562	32(24=) Magic
34	Richards	537	16(31=) Typhoon
35	Godden	524	64(12=) Magic II
36	North	516	80(3=) Typhoon
37	Atkinson	449	48(19=) Typhoon
38	Taylor	444	32(24=) Demon
39	Carson	432	— Comet
40	Hudson	413	— Typhoon
41	Higgins	372	— Demon
42	Walker	345	— Demon
43	Asquith	249	— Demon

## Women

1	Ganderton	948	64(2) Magic II
2	Winton	715	48(3) Comet
3	Simpson	572	0(4) Demon
4	Huxtable	561	80(1) Demon

# Goodbye Sylvia

**Wings! Commercial Editor Sylvia Howard is leaving us after years of loyal and conscientious service. We wish her all the best in her new life in Libya, where she is going at short notice to join her doctor husband, Brian.**



Ruth Kohlman

## Important notice to advertisers.

ALL advertising bookings should now be made through RUTH KOHLMAN at the Taunton office, 167A Cheddon Road, Taunton, Somerset, TA2 7AH. Tel (0823) 88140.

Artwork and text for setting and design should, as usual be sent to the editor once the space has been booked.

New advertising charges have been agreed with effect from the next issue of Wings! They include a generous new discount for advance payment on two consecutive bookings.

The general ten per cent increase in our advertising rate is the first increase in two years and is simply to keep our very reasonable rates more in line with costs. Our colour rates have had to be increased rather more steeply — in the past we have been ready, effectively, to subsidise colour advertisers because of the general enhancement of the magazine brought by the addition of full colour. But a realistic appraisal of the position regrettably forces us now to revise that policy.

The new rates are as follows and apply to all advertisements except those for which a price specifically relating to the November issue has already been quoted.

Rates applicable to gliders with no British CoA in brackets.

Single leaf insert	£132 (£212)
Back cover	£159 (£254)
Full page	£132 (£212)
Half page	£73 (£116)
Quarter page	£42 (£67)
Display rate per single col. cm (min. 4cm)	£1.55
Full colour	
Full page (any)	£400

All prices are exclusive of additional typesetting and artwork costs. On full colour adverts there is a standard charge of £150 where colour-separated artwork is not provided.

Spot colour is available at a surcharge of 20 per cent. For full details of classified small ad rates see page 29.

Accounts should be settled within one month of invoicing otherwise a ten per cent surcharge is levied.

A ten per cent DISCOUNT is offered where a space is booked for two consecutive issues and paid in advance.

Wordage and "semi-display" (boxed) small ads must be prepaid.

# 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:

72 Hartley Avenue,  
Leeds,  
LS6 2LP  
Tel (0532) 451891

## Inside

Page 4 — Fitting a French Connection.

Page 5 — Leader page.

Page 6-7 — George Worthington's last flight, by RICK MASTERS.

Page 8-9 — George Worthington: a tribute by JOHN HUDSON. The Mitchell Wing, by GW.

Page 10-11 — Your letters in Air-mail.

Page 12 — DEREK EVANS rounds up the competition season.

Page 13 — Why I'm leaving the League: JOHNNY CARR talks to Stan Abbott.

Pages 15-17 — Clubman's Mere. Reports by BOB HARRISON and MIKE DRISCOLL.

Page 19 — JOHN DUNCKER'S big 10-4: new British height record.

Page 21 — News

Page 23 — Power: STEVE THOMPSON at Long Marston.

Page 24 — Xmas pressy round-up, part one.

Page 26-27 — Applicability to military training opens doors for hang gliding sponsorship in Hungary as this logo (below) shows. This and more in Cosmopolitan.



Pages 29 & 32 — Classified section.

Pages 30-31 — News, including Army h.g. championships.

Page 31 — Mainair prize Cross-tubeword.

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# Handley machine out soon

THE Welsh whisper is getting a little louder down at Tredegar, home of Hiway hang gliders.

No-one's going to jump up and down and say the new Hiway machine represents the biggest quantum leap ever in hang gliding design — not after the Alien left everyone with egg all over their faces.

But the muted optimism seems now significant enough to conclude that the new Miles Handley design really is something right out of the ordinary.

Hiway boss John Ievers confirmed that while it would be "a little bit premature" to put a launch date on the as yet unnamed project it would nonetheless be "very shortly".

The company is presently working on production method details and testing and certification. Patents have been taken out on the Handley wing-twisting mechanism which makes the ship, says Ievers "more revolutionary than the Gryphon was when it came out".

Despite the enormous design investment and the impressive images conjured up by ideas of wing-twisting and moving fin for yaw control, Hiway expects to sell the new glider at somewhere between £1,000 and £1,100 or rather cheaper than the Alien was expected to fetch. It will weigh about the same as a Demon, said John.

# Airwave glider 'surgery'

AT the end of November, Airwave Gliders are planning a week of maintenance for any of their gliders.

This will involve complete overhaul of each glider including:—

- Stripping the sail from the frame.
- Inspecting and repairing the sail.
- Replacing suspect rigging, bolts, hang loop, Mylar, and tubes.
- Rebuilding glider.

The cost is £25 + VAT plus the cost of any replacement parts. A sail cleaning service is offered at £17.50 + VAT.

All owners of Airwave gliders (irrespective of whether their glider has had the overhaul) are invited to come to the Isle of Wight for the following weekend (Dec. 4 and 5) for a get-together, taking advantage of the low rates negotiated with a local hostelry, the Grantham hotel, and the ferry company.

It is hoped to have two days of good

flying, tuning gliders, trying out the new ones, and talking technically.

If you are interested in having your glider overhauled and/or coming for the weekend make arrangements with your nearest Airwave dealer to get your glider to us by Monday 29 November. Most dealers will be coming to the Isle of Wight for the flying on 4 and 5 December, so make arrangements to share rides.

The programme for the weekend will be:—

Saturday — Breakfast, collect packed lunch. Test flying and tuning. Dinner at Grantham Hotel, films and technical talk in the bar.

Sunday — Breakfast, collect packed lunch. Test Flying of new gliders. Return home.

The price for full board and packed lunches at the Grantham for this weekend will be £23.

For further information contact Airwave Gliders. Phone 0983 296042 or 291651.

# Get French Connected!

*PROPERLY set up, the French Connection is a delight to fly with. It is surprising that, even though the idea originated in France, there seems to be no commercial manufacturer there producing in reasonable quantities.*

*"We are really looking forward to finding ourselves an agent in France — a bit like selling snow to Eskimos," commented JOHN HUDSON of Mainair Sports, who offers the following advice on setting up a French Connection.*



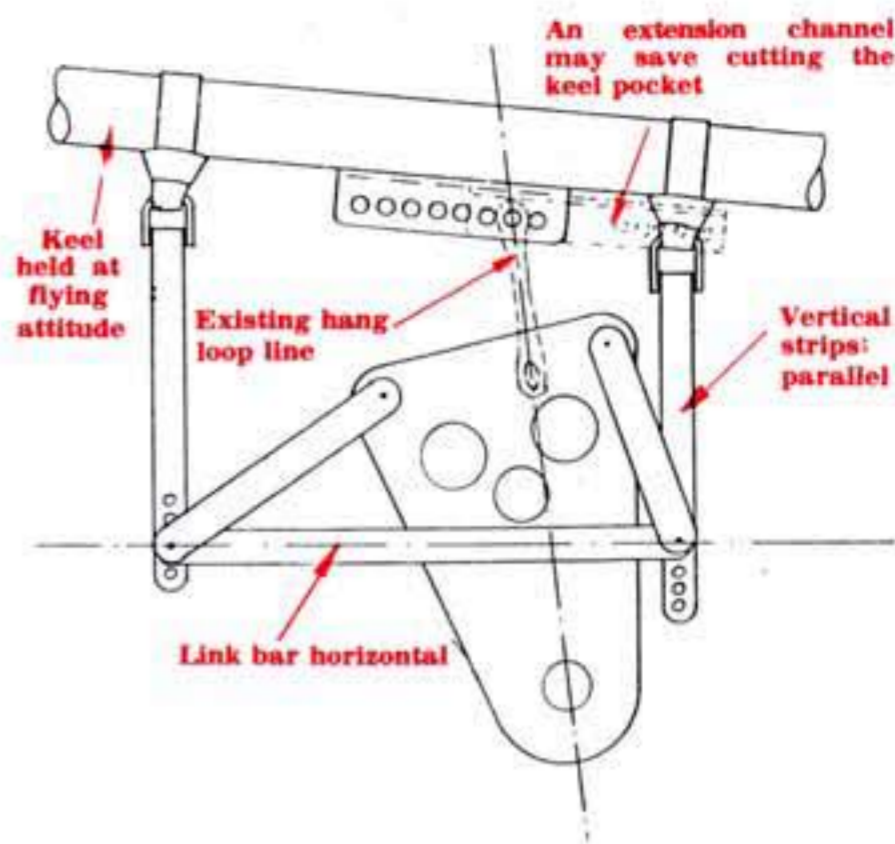
**For fitting in pitch mode:-**

1. The optimum position of the connection should give approximately 30 per cent travel rearward of the 'hands-off position' and 70 per cent of forward travel. However, I recommend the Connection is initially fitted to give little, if any, rearward movement to safeguard against accidental stalling. The position can be altered once you are used to the light and neutral feel to the base bar.

2. Before attempting to fit, firstly fly the glider on your normal hang point and memorise carefully the "hands-off" position of your body in relation to the base bar.

3. Clip into your normal hang point on level ground and have a helper raise or lower the rear of the keel until your body is positioned in the hands-off position.

4. Have another helper line up

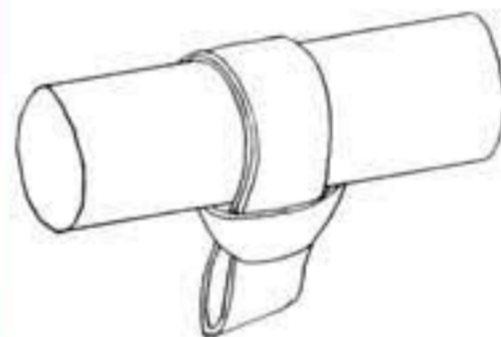


Initial connection position—see note 8.

the Connection with your existing hang loop. It may be necessary to "hot cut" a hole in your keel pocket to allow the fixing webbing to be fitted. It is essential that the two vertical strips are parallel and that the horizontal bar is level. Adjust on the strip holes if necessary.

At this stage position the triangular plate in line with your normal hang point but against the rear of the connection to safeguard against accidental stalling. See drawing.

5. The Connection is hung from the two webbing loops by disconnecting them, passing them around the keel and passing one end through the loop of the other. Ensure that the webbing is free from twists. Once the correct operating position has been found, the webbing can be prevented from moving by sticking a strip of self-adhesive Velcro to the tube, re-fitting the loops over it and holding with the other Velcro half. The loops can also be held with adhesive tape.



6. Adjust your harness hang height and clip into the Connection. Pull yourself forward through the bar as if in flight. Your keel helper should allow the keel to raise 6 to 8" (150-200mm) as it will in flight. It should be easy to pull through and your second helper will see the connection working correctly with the triangular plate hinging forward. If it is hard to pull through then the horizontal bar is too high at the front. Adjust on the strip holes. If you feel it is too easy to pull on and you tend to swing forward, then it may be too low at the front.

7. The only way to trim the Connection properly is to fly with it. It will be immediately obvious if it is too high at the front as you will be continuously "pulling on"; too low and you will be flying fast and pushing out. It is obviously better to start by hanging high at the front slightly and to lower it hole by hole until it feels equal.

8. In order to help you flare easily for landing etc., you should move the whole Connection rearward once you have had a few hours air time and are familiar with the neutral feel to the base bar. It may be necessary to re-adjust for trim.

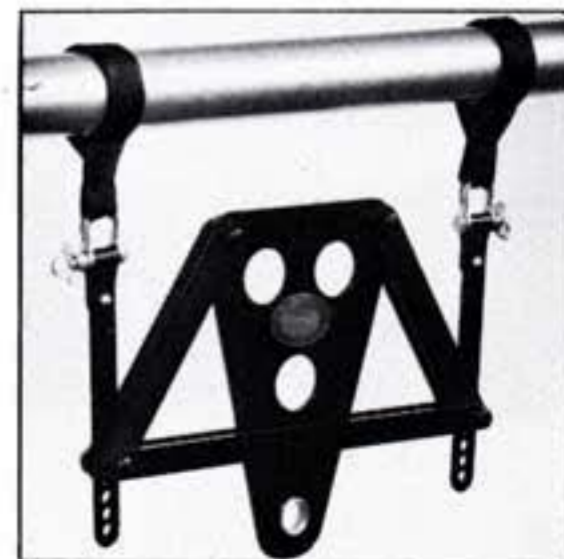
**Connection fitted for roll control** (not for floating cross tube gliders):-

9. Connections can help greatly for those gliders which are heavy in roll. Fit to the cross bar as outlined above, but obviously, the connection vertical strips must utilise the same holes so that the horizontal bar is level. The unit must also be fitted in the centre of the glider.

**10. Maintenance.** The Connection has many moving parts. I recommend you liberally spray all the joints with silicon lubrication at frequent intervals.

**It is essential that you fly with a secondary independent suspension loop long enough to allow full travel.**

Fitting a French Connection or similar may affect the airworthiness of your glider.



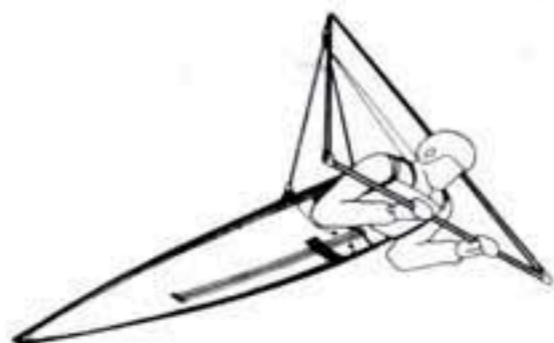
## Elton Products, Norway are looking for dealers abroad

6 years experience in harness-making, harnesses — bags — and other software equipment

**Butterfly** — more than 200 sold in Norway



**Stinger** — New, low-drag harness



Good discount for dealers — ask for more information

ELTON PRODUCKTER — 2870 DOKKA Tel ((0)61) 13867

## Why comment?

WHEN I took on the job of editing Wings! 16 issues ago it was my policy not to publish editorial comment pieces as a "matter of course" but only when I felt specific issues merited it.

It was a policy born out of my journalistic experience in which I have found the editorial stance of a publication is adequately conveyed implicitly through its general content, whereas leader comment is often trite and liable to alienate a large proportion of the readership.

I am now, however, forced to conclude it is time to reintroduce leader comment to the pages of Wings! Why? because the BHGA and the sport at large is at the crossroads. Big decisions are being taken almost daily both within the sport and without it that will profoundly affect its future.

Many Wings! readers neither know nor care. Fly today and let tomorrow look after itself seems a common attitude.

The reintroduction of leaders is an attempt to make readers more aware of some of the issues involved in which I hope Wings! can become a strong and neutral watchdog acting in the interests of fliers and for the good of the sport.

The leader page will not be the exclusive preserve of the editor — it will be open to informed and relevant opinion on important issues from anyone who can be said to speak on a particular subject from a position of reasonable authority.

## Time to be seen to act

ON September 24, 1982, something new happened in British hang gliding.

In the wake of a fatal accident at Nont Sarah's, Pennines, a notice was circulated to all BHGA members urging that the Skyhook Silhouette be not flown pending the outcome of investigations, in particular the results of tests on the association's Cranfield-based dynamic test rig.

The prompt action in effectively grounding the Silhouette can only be praised in as much as it shows the BHGA is acting with a responsible concern for the well-being of the members it seeks to represent. It brings the BHGA into line with aviation at large where just one unexplained crash of a par-

ticular aircraft can provide sufficient argument for its grounding.

But it does nonetheless prompt questions as to the rights and role of the association in these matters generally, and — more specifically — it asks questions that Skyhook Silhouette owners want, and deserve, to be answered promptly.

The position in general is this: the BHGA unlike the Civil Aviation Authority and the British Gliding Association has no statutory right to "ground" aircraft. The Silhouette "grounding" was effected by the manufacturers themselves at the instigation of the BHGA and they deserve full credit for their total co-operation.

Editor:  
Stan Abbott



This raises two issues:

- What would have happened had the glider in question been manufactured by a defunct company?
- Does the BHGA wish to take on broader powers in line with the BGA to cope with the eventuality of a less co-operative manufacturer, and if so, is it competent to exercise such powers?

On the first question the CAA says: "We see no reason why the BHGA should not stand in for a defunct manufacturer and advise its members that a glider is unsafe."

"But we believe that possibly the BHGA may have more of a problem than the BGA because not all members are members of clubs and so are less easy to contact."

The CAA says its doors are open should the BHGA wish to pursue the subject.

But if the subject is to be pursued, the BHGA must first be able to put its hand on its heart and say, truthfully, that it has the procedures to act responsibly, consistently and efficiently where airworthiness — and hence questions of life and death — are concerned.

Sadly, it would be dishonest of the association to argue that its past record shows this to be the case.

Mike Cook and Elizabeth Kilkenny of Cranfield Institute of Technology tell in September Wings! how the dynamic test rig was out of action for fully five months simply because no-one from the BHGA could arrange for its collection and modification after damage during its use.

Faces have changed since then, but the BHGA is still relying by and large on volunteer labour to operate the rig. This places volunteers in a most unenviable position of responsibility which ought, rightly, to be assumed by someone paid to do the job and delegated so to do by BHGA council.

The "grounding" of the Silhouette happened not because a set investigation procedure was followed which deemed "grounding" to be the appropriate course to take, but because a number of concerned individuals within the association — paid and unpaid — lobbied for such a course.

Now the actual carrying through of that decision — that is the dynamic testing of the glider — depends again on the galvanisation of volunteer effort to coincide with an even break from the weather.

The first such attempt was foiled because one of those who had done the lobbying had not been briefed in good time as to how the glider was to be fixed to the rig.

Silhouette owners are left pondering the safety — and secondhand value — of their gliders amid the increasing temptation to fly them anyway.

Meanwhile, there's a list as long as your arm of other gliders which council has over the past two years suggested should be tested but which have escaped the treatment meted the Silhouette. Gliders which spring immediately to mind are the Vortex, the Sunspot and the Floater.

Not only do these and other gliders require testing, but work must be done to test the relevance of such testing to the actual flying situation.

Yet, the BHGA has now taken on even more work for the test rig in reaching agreement with the BMAA to carry out airworthiness tests on "trike" wings (see p25).

That too is a splendid idea, but if the BHGA is to maintain credibility with its members and other aviation bodies it must act NOW to delegate responsibilities for carrying out that policy.

In short, one or more of the association's paid officers must be mandated to drop all other commitments to deal speedily and efficiently with such life-and-death airworthiness problems. Or outside professional help must be hired.

It is, after all, no more than the fair-minded Silhouette owner is entitled to expect for his/her monetary contribution to the association's airworthiness programme.

## Lottery winners

### August

The winners of the 500 club lottery for August 1982 were:- K.P. Dickinson £55.20, R. Clegg £27.60, G. Fischnaller £13.80, S. Abbott £8.25, P. Meckiffe £6.90, I.R. Hoad £6.90, D.J. Powell £5.52, L. Turner £5.52, C.A. Ingram £4.14, B.J. Bull £4.14.

This makes a total of £138. prize money, and a like amount for BHGA funds.

### September

R.J. Wilson £54.60, J.A. Hudson £27.30, Lord Mosteyn £13.65, A.J. Ramsden £8.19, P.G. Blenkinsop £6.82, K. Litten £6.82, P.T. Ansty £5.46, P. Clancy £5.46, E. Brooks £4.10, A.G. Trend £4.10.

This is a total of £136.50 prize money and a like amount for BHGA funds.

**NOTE:** all prize winners that have not received their cheques please contact the Treasurer as soon as possible as to-date 15 cheques have not been cashed.

## Fighting fund

Many thanks for the further donations to the Fighting Fund from:- Thames Valley HGC, S.C. Rhodes, R.J. Payne, and particularly R.K. Sugg, a non-flyer.

Percy Moss

## Spending

**THE Wings! committee has taken steps to get spending on target for the current year.**

As announced last issue, the magazine was heading for a £2,000 overspend by the BHGA's December financial year end, due partly to falling advertising revenue.

Part of the shortfall has been made good by transferring £1,000 owed to the magazine from the Foster's sponsorship account owed for advertising in Wings!

It was also decided to produce three 28-page issues of Wings! as the magazine has been kept at 32 pages without the advertising to justify it.

A general increase of ten per cent in advertising rates was agreed and further savings will be made by the transfer of advertising work to the Taunton office.

It is hoped the magazine will now finish the year within budget.

\* Readers may have got the impression from the story Financial Fears in last month's issue that monies destined for the Fighting Fund were finding their way into general funds.

Treasurer Percy Moss wishes to point out most emphatically that this is, of course, not the case.

## Triangles OK

Triangle cross-country flights can now form the basis for official record claims, CIVL has decided. The length of the smallest side of the triangle should be at least 28 per cent of the total.

## Welsh welcome

The S.E. Wales club announces that social meetings will be held on the first Saturday of every month at 8.00pm. at the Dragon Country Hotel, High Street, Crickhowell.

Bar snacks will be available and it is intended to have regular film and video showings. All members and visiting fliers to the area are most welcome.

The S.E. Wales northerly site at Rhigos is still under negotiations with the Forestry Commission and is unfortunately still out of bounds.

## \*\*\*LETTERS\*\*\*

### Put the record straight

Oh dear Stan —

Putting the record straight, although still basking in the glow of having seen my name twice in print in September Wings! I feel I must correct some false impressions which may have been given.

1) The letter concerning the hiring of local experts was entirely my own opinion and should not have carried also the name of the Dales h.g. club.

2) While the words of my account of my modest XC success were mine as printed in an earlier DHGC newsletter, the headline "How I beat Mr. Bailey" was not. I do feel it gives an uncharacteristic cast to the whole piece.

NOEL WHITTALL

Leeds

# The last flight of

"SOMETHING brand new and wonderful is about to happen," wrote George Worthington in July's Hang Gliding magazine.

"An announcement has been made that on September 10, 11 and 12, 1982 there will be a soaring contest for ultralights, that's right, the world's first cross-country soaring contest for ultralights will take place in Bishop, California." George was excited. He was ready. He was going to sweep it.

But the Wanderer George planned to fly wasn't ready.

Designer Mark Smith finished the reconstruction, after its mid-air failure, in early August. A friend was supposed to trailer it to Oshkosh but family troubles got in the way. It sat in the trailer, ready to fly. But somehow George and the Wanderer never got together...



Thursday night, the ninth of September, the Owens Valley sky captains Don Partridge and Tom Kreyche watched dismally as the fourth final contestant arrived for the pilots' meeting. It's a new sport, they told themselves. Giant oaks from little acorns grow, and all that... How could they expect anyone else to make it, they thought, philosophically, when their own entry wasn't even ready?

The barren D-26 Nomad dangled forlornly in the shadowed hangar, hungering for the back-ordered 1/16" rivets, deprived of September's thermals. And what were they going to do with all those tee-shirts? Oh, well. At least the quality of the pilots was pretty good.

There was Jeff Stephenson, the "Economy King", in from Porterville with his wonder wing, a Mitchell Wing B-10 — a wing so white it hurt the eyes at noon. A wing so smooth. So ahhh... And this guy knew how to thermal (thank God!). Hadn't he flown 70 miles on a quart of gas or something ridiculous? And what a fuselage! With an outboard motor the fibreglass thing would be mean in water sports.

Steve Grussock, the fellow who flies straight down (stall — what's that!), dropped in from the Kasperwing factory in unpronounceable Issaquah, Washington, dragging along veteran hang glider pilot Scott Rutledge to sniff out thermals in a second Kasperwing. Grussock's prototype fuselage was a work of art. In the air it looked like a cross between the scout from the mother ship and a dragonfly eating a squash bug at max L/D. But it was beautiful. Beautiful! And all those colourful little goodies inside. It looked as though you could reach right through that great clear canopy and touch them. And with those sculptured Kasper tips, those gigantic drag rudders — my God! — the thing was incredible!

And then there was the guy in the Hummer. (He's flying a what?) Gil Kensey had come all the way from Provo, Utah with Klaus Hill's second Hummer. His oxygen bottle looked like a cannonball.

And then there was George. (Where is George?) "It seemed strange," Gil said later. "Here we all are at George's meet and he doesn't even show up at the pilots' meeting."



It was 8:30 Friday morning. Mark was chasing Jeff at the Wanderer's top speed. They dipped down between the trees along the meandering Owens River, twisting through at 50 feet. "I was doing about 60," Jeff said. "I would imagine he would have had to pull almost 2G in the stuff we were doing."

## Stories by Rick Masters



They returned to Bishop for the first task, an economy run 17 miles south to Big Pine and back. While Don carefully measured the gas in the tanks of the ultralights, Mark reviewed the operation of the new Wanderer with George.

"George was in really good spirits," Jeff said. "He seemed active and really involved and interested in what was going on."

"I had taken a very, very close look at the Wanderer," Gil said. "Mark and I had looked over it pretty closely and I would have had no qualms about flying it. To me the machine looked very, very good. And I can understand how George felt about it by looking at it. In no way did the structure lead the potential

## The Wanderer

**IN July Wings! George Worthington wrote enthusiastically about Mark Smith's Wanderer — the first ultralight "with real soaring capabilities".**

He watched as the machine entered a spin with Mark at the controls. He saw a wing tear off as Mark pulled back the stick.

His parachute blossomed open a scant 100 ft. from the ground. George ran to the wreckage as it smashed into the earth upsidedown, fearful of what he would find. But Mark was okay. "I felt as if I'd seen a miracle!" George said.

George laid the blame on Mark.

"The fact that a wing came off does not mean that the ship is flimsy, weak or understrength," he wrote in June *Glider Rider*. "In any light, clean soaring machine, it seems reasonable to say, you can pull the wings off with a combination of high speed and an abrupt and sudden backward movement of the stick." The ship was okay. Mark needed some work.

In the conservative *Journal of the Soaring Society of America*, Soaring and Motorgliding, George and Tasso Proppe published a controversial article on the Wanderer. Outraged by their seemingly casual attitudes regarding conventional engineering practices,

pilot to believe that it was going to be inadequate."

The ships launched one after another. George built up a lot of speed, rose about ten feet, and levelled out to gain more speed before he climbed. Compared to the others, especially Jeff in the B-10 who left the ground in a neck-straining power climb, it seemed a somewhat trepidatious take-off.

No one knew except Mark — and few even suspected — that this was the first launch George had made in the rebuilt prototype. With less than an hour of experience with the previous aircraft — an aircraft with controls so light that he had stated "there was no way for the pilot flying the ship for the first time to coordinate the controls and to prevent both

skidding and slipping during turns in turbulent thermals" — George had come to do battle with the wind gods on their home ground!

"The only thing I would have commented to George prior to launch, and I seriously considered doing it," Scott said, later, "was the fact that he wasn't wearing a helmet. It bothered me to see him hop in that plane without a helmet on. It really did. I guess he thought he was hopping in a sailplane."

"There were a lot of factors involved with him flying that was taking a nonchalance towards what was going on. More so than I felt he should have been comfortable with. Steve and I came here a day early to practise and see how bad conditions really were and try to assess what our abilities would be, instead of just hopping into the first task and assuming everything would be okay."

"I felt prepared for it, but I did not have that feeling when I saw George and the Wanderer. It seemed to me that there was a distinct lack of experience as far as him flying

aircraft designer Kevin Renshaw wrote:

"One will not live to be an old pilot if he makes a habit of flying brand new aircraft designs without adequate ground testing and static loading in particular. I have seen many cases of a critical part being analysed very carefully only to have a failure occur in some other area than that which was expected. Six hundred ft. above the ground is not the place to find out that the wrong area of the wing fitting was analysed."

George responded immediately: "I must admit to a habit of flying gliders and ultralights without first checking into the area of 'ground testing' and 'static loading'. But I would like to make it quite clear that I do have self-imposed rules as follows: (1) I will not fly any flying machine in the role of a test pilot; (2) I will not fly any machine, owned by another person, unless that person flies it first just prior to my flight; (3) I do try to evaluate the designer-builders and have been known to go on the principle of faith.

"I am 62. I love to fly and have flown over 300 different makes and models of flying machines during 43 years of 'everyday' flying. I fervently believe that I will not die as a result of an aircraft related cause. If I have a fault regarding 'safety' in general, it is in the area of being overly-

fearful and overly-cautious."

Tasso, despite having admitted to running a faulty stress analysis on the wing fitting that failed, had a few words for Renshaw.

"I grew 72 years old spending my productive years as a professional engineering test pilot. Static loads wouldn't have helped us much, then. We didn't know the loads — we flew and measured to find out. That seems to be habit-forming; I am still at it."

"To me, it's a lot cheaper to take some calculated risks and get some answers now. Oh, that's heresy, I know, but without this attitude, aeronautical engineering wouldn't be what it is today."

"What kind of bugs me about their answers," Renshaw said, later, "was: 'We're older. We know better. We know everything there is to do and we're not going to get hurt. It's you new guys coming into it that aren't going to survive.' And that kind of thing. It was not really a good example."

Mark rebuilt the Wanderer. He strengthened the centre section and beefed up the fastenings where the twin tailbooms met the fuselage. He changed the elevators and made them less sensitive. But the aileron linkages, which George had described as "marginal", remained the same.

that wing in different types of conditions and preparing physically and mentally for this type of experience. I thought that he probably didn't have enough airtime to warrant even being over here. Because if there is any test of structural integrity and pilot skill, this is the place."

"Everybody was a little nervous then because none of us were really experienced at flying here," said Jeff just after a gust front ripped through the valley, its edge rattling the roofs at Bishop airfield.

"George was the only one who had much time in this valley. He was interested in getting airborne as soon as possible. I won't say he was pushing because he wasn't, really. He was afraid that the soaring conditions might

# George Worthington

deteriorate."

As George stood by the Wanderer, waiting, he told Mark his flight plan. The task was north to White Mountain Ranch and return. He would head directly for the Whites, he said, and hunt thermals. He regarded the wind, crossing from the right at 10mph.

"What is the crosswind take-off capability?" he asked Mark. It struck me as odd that he didn't know.

"In this wind, nothing to it," Mark replied. "You won't even notice it."

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"Whenever you're ready, George!" Don yelled. George strapped the parachute over his jacket, settled the pork-pie hat on his head and squeezed through the narrow opening in the fuselage behind the sliding canopy. He mentioned to Mark that he had not yet flown the Wanderer below 30 miles per hour. I almost dropped my camera.

"You can fly it a lot slower than that," Mark told him. George pulled the canopy shut and pinned it in place. He fastened the safety belt around his waist and donned his gloves. George seemed hesitant in his actions this time, unlike before. He reached up and pushed at the canopy. He scowled.

"Will this come away?" he asked. "It feels pretty firm."

"Yeah. It's designed to," Mark said. The Old Man seemed unconvinced. "You'll be surprised at how strong you are with an adrenalin rush of fear."

The pilots began to launch, each one intent on using as little fuel as possible yet still making it back within the time limit.

"His take-off was real clean," Jeff said. "Real nice. He turned to the left and headed out toward the hills."

"Shortly after he cleared, I took off. I climbed a little faster and went over the top of him. Shortly after I passed him, I flew into what seemed to be a thermal at rather low altitude — about 400 ft. I thought I'd give it a try, anyway. I did one 360, and as I came around I saw George. He was moving toward me, manoeuvring under me. We were pretty close to the same altitude — within 100 ft.

"It looked almost like a porpoising action when he was coming over. A couple of times his attack angle looked odd. At one time it looked like he was on the verge of a stall, flying along at a nose-high attitude and carrying power to keep it from stalling. He didn't lose any altitude when he brought the nose down.

"Evidently, he had some power on at the time. It just struck me as odd. Flying under a high angle like that, you're going to burn up more fuel and you're going to waste time. 'He must be trying to feel the ship out,' is what I thought.

"The thermal didn't seem to be overly turbulent or anything else. Normally thermals have some amount of turbulence in them — but it **wasn't anything you couldn't deal with easily.**

"I went around on another 360. I hit some sink as I went out one side of the thermal. When I came back around again, I looked for George. I couldn't see him anywhere."

Scott was at 800 ft. a quarter of a mile away.

"The air was mildly lifty," he said. "And it was really a better climb-out situation than we'd had for the first task and for the preceding day that Steve and I came and practised. It was relatively smooth. In fact, it was smoother at that time than it had been on any other occasion that I'd flown.



Mark Smith and George Worthington with the Wanderer before the fateful flight

"I was intently watching the Mitchell Wing and the Wanderer to see if they were going to catch anything. It looked as if both of them were starting to work a thermal, except, in my opinion, they were both extremely low to the ground. My whole attitude was to get as safely as possible to 1,000 ft. and cruise. I would have been at parachute-effective altitude — and that's really the major concern.

"They were working something that had a fairly good size to it. George wasn't banked up at all. Not even 30 degrees. And for a thermal, that's keeping a pretty flat and wide turning radius. They were making clockwise turns. The Mitchell Wing was slightly more toward the hills than the Wanderer.

"But as George was 360ing, the inboard wing broke. It broke right in the air. And it looked like there was a puff of dust that came off it..."

□ □ □

"It's on fire!" someone cried.

We stood frozen, our breath stopped, as George began his fall from the sky.

"Oh, no! George!" It was Mark Smith. Screaming. "Throw the chute, George! Throw the chute!"

□ □ □

Gil was directly below Scott at 300 ft.

"I saw the glider slip," he said. "But I don't know if it had failed prior to that or not. I was real surprised when it came apart — especially in the air that it came apart in. That's what leads me to believe that it might have been a slip that helped to induce the failure."

"When the wing broke," Scott said, "he entered what looked like a spin with the wing that was intact still at a flying attitude for a half-second or so. It was continuing in the turn with one wing straight up and the other one pretty much at a right angle to it. And it didn't take but a second before the other wing was straight up in the air, matching the one that was broken. The fuselage was on its side. It continued a slow spin with both wings straight up in the air, plummeting towards the ground. It impacted going straight down. From 400, maybe 500 ft.

"I'd say the whole thing, from the breaking of the wing to impact, was five or six seconds. I don't think he had enough time — I don't think he had enough altitude — to effectively do anything."

Don hurtled the Kawasaki down the runway, the engine screaming at full bore. I grabbed the arm of a spectator with a nearby van.

"Let's go! George might need us," I said. Mark jumped in as we rolled off.

"Oh, George! Oh, George! This is my worst nightmare," he kept saying between sobs. "I know he's hurt. Oh, George!"

Far out on West Line, Don was a speck roaring away at 100 mph.

If George really needed us, I knew, we would never make it in time.

"I kept looking through my soaring windows to see if he was possibly above me," Jeff said, "but I couldn't see him anywhere. Finally I looked down and I saw the wreckage on the ground. I went down and landed to see if I could do anything.

"The ship was upside down. There was very little I could do to get to him other than to reach in. There was no pulse that I could feel. He had blood all over his face but he wasn't bleeding."

Jeff ran to the barbed-wire fence at the edge of the field as Don slid to a halt. "Call an ambulance!" he yelled. Don spun the bike around. He tore by us as we approached the scene.

I leapt from the van. Another local hang glider pilot trained in emergency medicine had just arrived. We ran to the wreckage.

The left wing was intact with the fuselage in which George was pinned upside down. "We've got to turn him over!" I cried. We grabbed the wing and rolled the fuselage over. It was surprisingly light.

We tried to resuscitate George but his spirit had flown. We were too late. Later the coroner would tell me it didn't matter. He had died instantly.

Stunned, I walked slowly back to the road. Mark stood on the berm, visibly shaken, his jaw twitching, his eyes begging me not to tell him the truth. That George was dead.

"I'm sorry," I said.

"I killed him," he said, his voice faint with horror. "I killed George..."

"No, Mark," I responded, trying desperately to reach him. "You didn't kill him. He knew exactly what he was getting into here. More than anyone else here. He knew! George made a mistake. Whether it was up there or back at the airport — it doesn't matter. Aviation does not allow us to make mistakes and survive. When George climbed into your ship, he assumed the risk. All of it. Don't blame yourself."

I reached out to comfort him. His eyes widened. He backed away from me, turned and stumbled down the road, sobbing. I looked down at my hands.

They were thick with George's blood.

*Rick Masters is an independent journalist and cinematographer. His second film, The Sky Blue Movie, follows George Worthington's love of free flight from the '82 XC Classic to the Self-Launch Sailplane Contest, to his tragic death at the Ultralight Soaring Contest.*

# George Worthington — man of great

HANG gliding is a pretty intense game. There are tight communities in almost every country in the world and stars in the sport tend to get international reputations.

There are two names however which stand apart from the rest having climbed to the pinnacle of recognition in the twelve years or so of our sport.

One is Dr. Francis Rogallo who lives quietly in the USA taking the occasional flight from the sand dunes and seeing the wing which carries his name blossom the world over. The other belongs to George Worthington. Go to any wind-blown or sun baked spot in the world where flying takes place, say his name and see the recognition.

George Worthington is no longer around. He died achieving goals and ambitions beyond the reach of the vast majority of us. I had the

good fortune to spend some time around this dynamo and, believe me, I was impressed. No-one I had ever met had the dedication, commitment and single-mindedness of George Worthington. In his late fifties, he told everyone he was going to establish the range of FAI records on hang gliders and within two years he held not one or two but all of them.

George was pilot extraordinaire. He has been a naval pilot in World War Two, flown military jets for ten years after, gained a commercial licence, taken up gliding, won his soaring diamonds and set soaring records in sailplanes. When hang gliding came along he grabbed it and eventually took it to the Owens Valley to make it grow up. His influence on the way our sport has progressed since then has been astronomical.

It was George who was among the first pilots testing out the radical Owens conditions. It was George who pushed and publicised the place, it was George who cajoled, encouraged and bullied the XC Classic into being. From these efforts resulted world record flight which made "real" pilots and authorities sit up and take notice of us.

Everyone loves a winner — the first time. When the guy keeps on winning, jealousy and envy can sometimes turn admiration to hostility. Unfortunately there are a few people around who knocked him saying things like "yes, okay, he gets the record but he's not that hot. Why, I outclimbed him in the thermals the other day". These goons probably never stopped to talk to him and discover that George Worthington, this world winner, was a very honest and

respectful pilot and a man of quite extraordinary humility if you took the time to reach him.

This came home forcibly to me one day in August 1979. I was driving for George Worthington and Mick Pollard at Cerro Gordo. It was blown out on top and believe me it was honking.

George insisted on driving 500ft. down the mountain and rigging up where the wind was slightly less. We helped him assemble his Mitchell Wing and after a wait I noticed him sitting in his car doing nothing. I walked over, leaned on the door and asked what was up. "John," he said "I'm scared."

"The wind is strong, maybe too strong. I'm very nervous about it but I'm going to sit a while longer and think it out."

I just didn't know what to say.

## Flying the 'King of Kings'



*George Worthington was a frequent and enthusiastic contributor to Wings! whose youthful, energetic style conjured up a sort of Tom Sawyer image belying his years. His last contribution was this "eulogy" on the Mitchell Wing — the wing on which he set the world hang gliding distance record in 1978*



THE foot-launched Mitchell Wing is by far the highest performance hang glider in the world. It could be made even better with just a fraction of the talent and time now being spent on Rogallo improvements.

So why is it that foot-launched Mitchell Wings are scarcer than a hen's tooth? There are a lot of possible reasons, and some are quite valid. There is also the possibility that the Mitchell Wing reputation has unjustly suffered in some unknown manner during the six years of its existence.

The time is right to set the record straight. I have waited until now, because I owned a Mitchell Wing and felt the praise I was bound to give it might be misunderstood. Now I have sold the ship and can speak out.

Does the Mitchell Wing get higher than any other hang glider? No. My experience has been that during about 20 individually good days at Torrey Pines, the Mitchell Wing had about 30 per cent of the hang gliders above it, and about 70 per cent below. But while those hang gliders were at or near 22 mph best sink speed, the Mitchell Wing was doing 32 at minimum sink.

An even greater difference in performance is apparent when both types are speeded up a bit, to best L/D speed, but perhaps the best testimony exists in cross-country conditions. On one occasion, I crossed the Westgard Pass area from south to north with no discernible tail wind in very calm air, and with no thermals. There were no clouds in the area of the straight glide of 17 miles which was begun at 17,000 ft.

I reached a point over Black Mountain, and still had 10,500 feet. In other words, 17 miles was flown, with no turns, with the loss of only 6,500 ft!

I have had successful flights from Gunter and Cerro Gordo in Owens Valley when the wind conditions were well above those deemed safe for flexwings and the Mitchell Wing seemed to climb, often straight ahead, on a course parallel with the mountains, when I knew from long tough experience in Rogallos that they would not have done so.

I am disappointed and sad that I flew the Mitchell Wing so infrequently and on so few record attempts, although the reasons are understandable. The wing itself, as distinguished from the cage underneath, is fairly hard to repair because there are no Mitchell Wing repair services in my area. I always knew that if I ever damaged the wing structure (and I never did in 168 flights) the wing would

have to be delivered to San Francisco (from San Diego or Owens Valley) and later to Porterville, when the "factory" moved there.

This meant the possible involvement of considerable time and money, so there was a constant nagging reluctance in my mind about risking damaging the wing. I always owned and flew Rogallos during the five years I owned and flew the Mitchell Wing.

This "repair" problem would not have existed if I had built the Mitchell Wing instead of having it built by the designer Don Mitchell. If you build a ship, you can repair it. But I'm not a builder, and will never be a builder — it takes a proper apprenticeship and time and I would rather fly than build.

For many many of you, this is not the case — a great many pilots would be willing to spend time building a ship if they were certain the finished product would be "the best in the world."

Why is the performance of the Mitchell Wing so superior? Because it has cantilever construction — no wires, king post or struts — and because it has no drag or weight created by having a tail. It is a flying wing. Also, it has a much more uniform and smooth wing shape than any other foot-launched machine.

Does it have any kind of instability problem, as is sometimes rumoured to be associated with flying wings? No! Why? Because of the unique design of the elevons. They are carried below the trailing edge of the wing and retain an important degree of control-authority even after the wing itself has reached stall speed.

The size of the elevons, plus their method of connection to the control stick, and their direction and degree of movement are also beautifully designed to do a very different job.

Can the Mitchell Wing handle the roughest Owens Valley thermals and turbulence? Yes, absolutely! I have flown the Mitchell Wing in some extremely rough air, and found it handles turbulence better than any Rogallo.

Can the Mitchell Wing climb as well as a Rogallo? I believe it can. Sometimes, in high wind conditions, it climbs much better. My average cross-country speeds in the Mitchell Wing have always been 20 to 30 per cent higher than those (along the same general route) in the Rogallos.

Is the Mitchell Wing heavier than the Rogallo? Not any more. My Mitchell Wing weighed 70lbs.

Is the Mitchell Wing capable of car-top portability? Absolutely! The first Mitchell Wing owner-pilot, Dr. Howard Long, had the practice of placing the Mitchell Wing (with cage off) on top of some padding on the roof of his car, tying the ends down to the bumpers and



# humility

Here's the great George Worthington telling me, a punter from England, that he's scared of flying. He eventually flew off making a very clean launch and disappearing into the distance but it was then that I realised that here is a man who didn't hide behind anything, least of all a reputation.

George Worthington, a man unafraid to give voice to his successes, fears and failures achieved more in the 7½ years he spent flying hang gliders at the latter end of his career than most of today's young pilots will throughout their whole lives. Some will say that he went doing what he loved; but that's no way. There's a lot of unfinished flying to be done and it's a great tragedy that George Worthington is not going to participate in it.

John Hudson

driving at normal highway speeds. He had no cover for it and didn't seem to mind the sun or rain, because he regularly left it on top of his car.

When I saw Howard Long's Mitchell Wing after over a year, it seemed in perfect shape. I took a far more cautious approach, probably much too cautious, and after five years of use, my Mitchell Wing still looked like new.

Is the Mitchell Wing tiring to fly? No. It is far less tiring than a Rogallo, because immediately after take-off the pilot's body is eased into a very comfortable hammock, and no further weight shift is used until final approach on landing. The control stick and wing-tip rudders are moved easily, smoothly, and efficiently.

Is it easy and safe to make take-offs and landings in the Mitchell Wing in all the conditions which are used for Rogallos? Yes — absolutely, for the take-off, and no, not quite as easy, for the landing. I feel safer during take-off in all conditions (especially high-wind conditions) in the Mitchell Wing than the Rogallo.

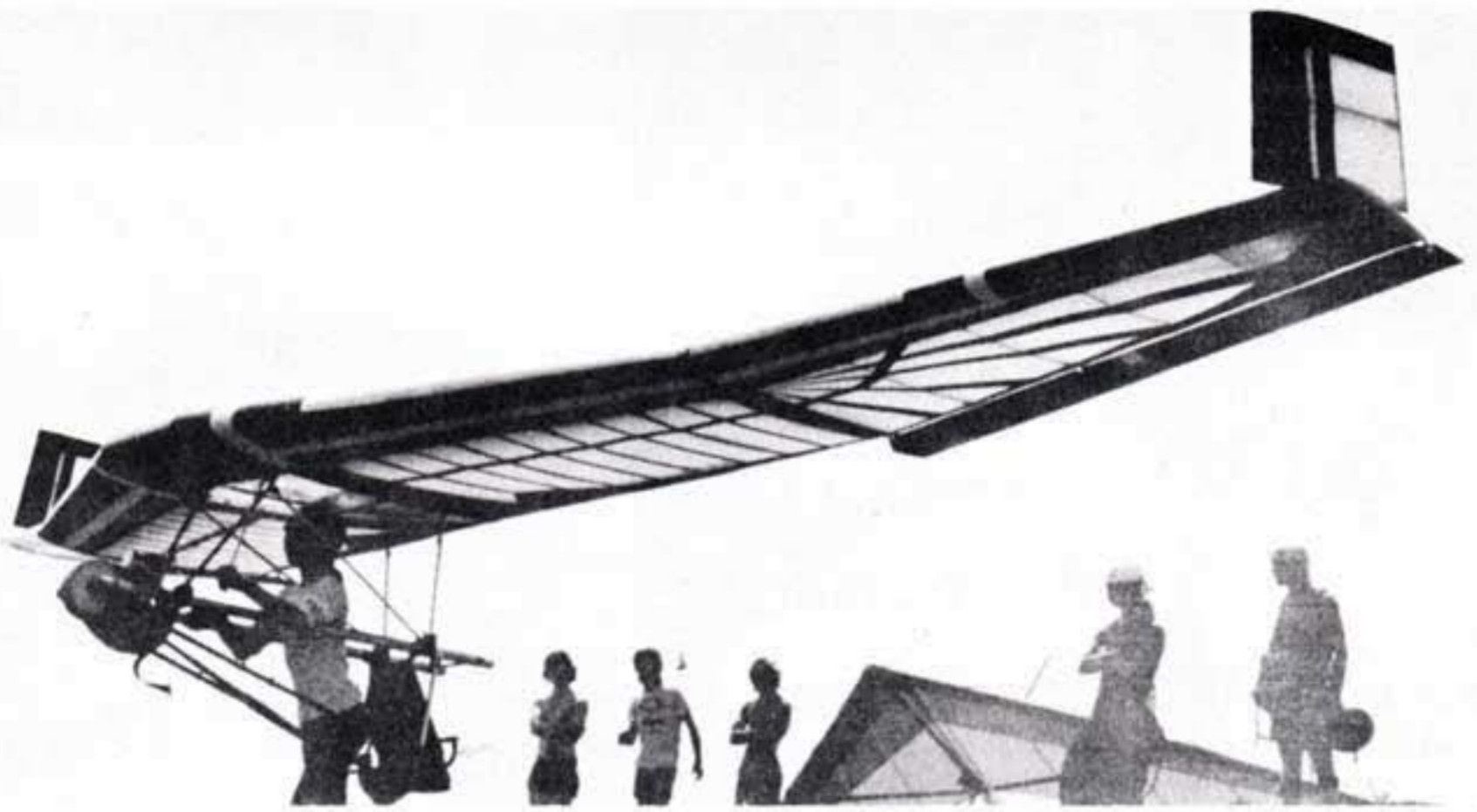
The Mitchell Wing has a very gentle predictable stall. It has shown no tendency to drop a wing. But in a no-wind landing, the pilot must take about six or seven very fast running steps in slowing down and transferring all of the weight from the air to his legs. On practice-hills, I was able to handle no-wind landings in every case. However, after three or more hours of flight, my legs and co-ordination would not usually handle a no-wind, nor a light-wind landing — usually I'd take two or three running steps and fall down.

I was never hurt or even bruised.

The forward vertical tubes (half inch chrome-molly) were sometimes slightly bent. One of the horizontal "armpit tubes" (2" aluminum) was twice broken... a quick, simple replacement which I could accomplish alone with just a drill and rivet gun. But it must be clearly pointed out that I am average-to-below in the talents required to land foot-launched air machines.

This is easily verified by the fact that I do a great deal of practice at Torrey Pines in a Rogallo and yet can never come near the landing grace, performance, or ability of more than a dozen other pilots. Therefore, it is totally logical to conclude that many pilots — because of youth, strength, and ability — could make far better landings under much more difficult situations after they had learned to fly the Mitchell Wing than I could.

I feel sure that the Mitchell Wing has as much capability of being landed expertly as the Fledge II. I was never able or willing to try using both rudders simultaneously for landing the Mitchell Wing. But I'm sure, when done



The Mitchell "King of Kings"

properly, it would be very effective.

If, for some reason, such as previous damage, the rudders of the Mitchell Wing or the elevons should become inoperative, would this be dangerous and render the ship uncontrollable? No, absolutely not! In 1976 because of previous unrepaired damage, a Mitchell Wing pilot lost one of his elevons. He landed safely and easily. In 1978 a glued part of my rudder cable housing broke off in flight. I was extremely nervous and apprehensive, because I had thereby lost all use of the rudders. Then I found the Mitchell Wing was still totally controllable (though it did a slight bit of yawing in the turns) and made a perfect landing without the use of rudders.

What about the use of a parachute to save the pilot, in case of a mid-air or some other catastrophe? The use of a parachute is just as applicable to the MW as it is to any other hang glider. I liked having a chest-mounted, special light-weight, drogue-type parachute attached to a special harness. All I had to do in case of trouble was undo a bit of Velcro on the hammock, raise my arms, and I would slip quickly out of the Mitchell Wing. Then I could pull the rip cord. Since I wasn't attached to the ship by a Karabiner or other means, the exit could be very speedy and efficient.

What about assembly and disassembly-time as compared to a Rogallo? The Mitchell Wing is faster. The wingtips are hinged. Just fold 'em out, insert three pins, tape the gap (slap on 2" masking tape to close the 1" gap). The elevons are already connected and ready to go. Insert each rudder and pin it. Insert the control stick... and fly. I have flown the ship without taping the gaps, and could discern no difference.

Can the Mitchell Wing be launched unassisted? Yes! In order to prove this to myself, I landed one day at Torrey Pines and, completely unassisted, walked with the Mitchell Wing from the point of landing to the cliff edge and took off again. I was then 59 years old.

I think we've covered most areas of operational requirements and other comparisons between the Mitchell Wing and the Rogallo. Are there any unfavourable aspects of owning and flying a Mitchell Wing? Yes, particularly two. First, a pilot will normally want to build his/her Mitchell Wing from an excellent kit which is provided. It takes a good amount of time and effort to build one. Like any first-time task, these could be cut by 50% on the second one, and by 80 per cent on the fourth. The point is, it is only hard because you've never done it, and because you have no experienced builder guiding you. The second problem with the Mitchell Wing is even

more serious. There are no places where a pilot can get Mitchell Wing instruction. The ship is easy to learn to fly, with proper instruction, and at an adequate site. It is extremely hazardous (to the ship mainly) and difficult to teach yourself to fly a Mitchell Wing. The factory discourages pilots from trying to build a foot-launch Mitchell Wing.

The factory pilots do not ever fly or even own a foot-launch version. As far as I know, the only foot-launch Mitchell Wing in the world is the one I recently sold to Chuck Rhodes. It was an ideal sale, because I didn't have to worry about the problems which would be facing Chuck in learning to fly it. He had previously flown a foot-launch Icarus V, which is far more difficult to learn, and yet which is almost identical to the Mitchell Wing in cage-layout. Chuck should have an easy and safe time in transitioning to the Mitchell Wing and he should love the major increase in performance over the Icarus V.

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Don Partridge and Tom Kreyche said a Mitchell Wing could compete in 1982's XC Classic, providing the owner provided his own transport up the mountain. Boy oh boy, what an opportunity, if someone had had a Mitchell Wing ready on July 1st! The Mitchell Wing, flown by somebody like Pfeiffer, Tudor, Burnett or Moyes would absolutely smoke the rest of the competition. It is always fun and exciting to have a machine that you know is much much better than anything which the competition may have.

Why did I sell my Mitchell Wing? Because I'm 62, easily intimidated by difficulties, and because I certainly do not now possess nearly enough talent to handle the problem of landing in all the areas and conditions that the Rogallo can and does.

And finally, does the Mitchell Wing have a good potential for setting official and unofficial world record distance flights? Wow! Yes! If a pilot can fly 168 miles in a Rogallo, someone could fly 250 miles in a Mitchell Wing. It's that much better. There should logically be 1,000 Mitchell Wings flying in the U.S.A.

And there is a bonus. If you happen to like ultralight flying, you can buy a factory landing gear and engine, and by removing bolts, you can convert your foot launch Mitchell Wing into an ultralight B-10. This conversion from foot-launch to powered ultralight would take less than five minutes.

It is hoped that some of the misconceptions, ignorance, and inaccurate rumours about the Mitchell Wing have been dispelled by this piece — the ship deserves much much better than it has gotten so far.

# Power training

DEAR STAN —

With reference to the fourth of Bob Harrison's recommendations on the use of dual powered hang gliders for training of hang glider pilots, I would like to point out to readers what Howard Edwards was trying to achieve.

Realising the potential of power training he bought a Chargus Titan modified for his purposes and was working on a suitable power unit when he was killed. The idea was that a student who showed promise before reaching P1 standard would be taken with an experienced instructor on the Titan to a height above 1,000ft.

With the engine on tickover or even off, the student could pilot the glider as a normal freeflight machine with no fear of crashing into the hill and, above all, not having to think about landing a few seconds after take-off.

If the student was unable to cope the

instructor would immediately take charge and land if necessary, either with or, in emergencies, without power. The obvious advantages of this system are:

1. The student gets used to height and is less likely to make mistakes through being "zonked out" on first soaring flights.
2. If the student loses, or the glider feels as though he/she is about to lose control, the instructor can take over immediately.
3. The student learns in full prone, has plenty of space in which to manoeuvre and gets the feel of flying a hang glider without worrying about the proximity of the ground, trees, power lines etc.
4. The student finds out immediately whether he/she likes flying; if he/she "freezes" the instructor takes control. (Less bent uprights and broken wrists).
5. The student experiences his/her first thermal (and other) lift under close instruction.
6. If interested in power the student learns to use it and at the same time

not to rely on it, so will probably make a very safe microlight pilot.

Of course students would have had to do their slope training as normal to gain P1 standard, but they would also have height experience and have realised how much more there is to learning to fly a hang glider than just "ground-hopping."

Experience is safety in our sport and through using a two-man powered hang glider Howard was trying to widen the experience of his students, thus making them safer and more responsible pilots.

That he was killed flying his powered Cyclone (which was foot-launched and without the unique suspension system of the Titan), before his ideas could become fact, is an ironic tragedy that will be fully and bitterly felt if his accident is used to prevent the development of dual power training gliders because of safety. Hang gliding can not grow without experimentation.

MISS S.M. BRALEY, Kidlington, Oxford.

## Soaring's not so boring

Dear Sir, —

I was very interested and delighted to hear of Jenny Ganderton's successful flight.

I was not so happy about the comment "an hour or so's boring soaring."

To be fair to Jenny: this view is held by quite a few fliers I have met, that if one can only soar back and forth on a ridge it is boring.

I ask all those that hold that view to spare a thought for those people who would do anything to be able to soar at all; those who are physically incapable of enjoying the experience of flight.

It is salutary on occasions to ponder on one's initial training and the absolute thrill it gave, first to be able to complete a flight from the top to the bottom of a hill.

I hold the view that every single flight is a lesson and every flight a new experience.

Has anyone heard a sailor who has circumnavigated the world, when he takes out his sailing dingy to the local reservoir with his mates, say "I've had a boring day's sailing?"

What I have written does not detract at all from my admiration of Jenny's achievement.

MIKE GLANVILL  
Chard,  
Somerset.



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.

## Over Milkwood?

The poet Dylan Thomas was born in Swansea, holidayed at Rhosilli, and spent the latter part of his life at Laugharne, across the bay. A recently discovered fragment shows the extent of his precognition of present-day Rhosilli:-

*Sparrow-dot high above  
the down,  
Beneath the blowsy bar-  
maid of his sail,  
Hangs No-Good Boyo;  
Peering past his shaking  
boots, to spy*

*The bare and grassy  
couples of his dreams,  
And finding only sheep.*

W.G.MUNRO  
London SW27

# Who gives way...?

Dear Stan, —

Following Ian Trotter's excellent article (August Wings!) on the art of gentlemanly flying and the avoidance of verbal abuse — can he, or anyone else, tell me the correct course of action to take when two gliders find themselves scratching below hill top level?

Approaching head-on and breaking right means that the glider with the hill to his left (the "gentleman") may go down whilst the other (the "idiot") hits the hill.

Air law says that the "idiot" should maintain his course and

speed in the expectation that the "gentleman" will give way and fly round him... not easy!

On a number of occasions the law of self preservation has dictated that I (as the "idiot" with right of way) should pull out LEFT allowing the "gentleman" the inside line rather than try and squeeze through the 40ft. gap generously left to me.

Obviously should any of those "gentlemen" have had failing eyesight or just have been leaving things a little late, their avoiding action plus mine could have resulted in very unfortunate consequences — with this

idiot as the guilty party for breaking left.

Luckily, so far all of the "gentlemen" I have encountered in this way (including Ian Trotter) have flown straight on and happily taken the inside line offered to them.

Two "idiots" like me may well both end up at the bottom as a result of our safety-conscious flying. What happens when two "gentlemen" meet?

STUART PROSSER  
Abingdon,  
Oxon.

## Noisy trikes!

Dear Percy, (Moss) —

While we thank you all once again for the successful conclusion of the Mere event in the face of terrible odds (those shifting, whispering winds!) my wife, friends and I would like to offer a desperate plea on behalf of those of our hang gliding fraternity who regard the countryside as a refuge from the noise and pressure of our town life.

There was, alas, no such refuge enjoyed at Mere this year — it was the Battle of Britian again.

Now trikes are, I admit, a wonderful invention and lots of fun, but conversationwise Saturday in particular was a washout for those on the ground. A few of the trikers displayed a lack of courtesy and discipline with their low-level "macho" wingovers and several disdained the rifle range airstrip (still usable at that time) in favour of landing beside their own tents in the main field — surely outside the "special rules" hinted at

in your note in July Wings!

I know my triking friends in my own club, the Wessex, would endorse my suggestion that we must encourage a more purposeful attitude to powered flying. I hope that next year will see the organisation of competitive tasks — e.g. a navigation circuit, which, while still maintaining the essential presence of powered hang gliding, will free them from the confines of the site and thus allow the return of that ingredient of tranquillity that lately has departed.

BOB DEAR,  
Chertsey, Surrey

# Please look after the novices

Dear Stan —

I must write to say that I found reading the June issue of Wings! very disturbing. It wasn't just the fact that two fellow fliers had been killed, and a number seriously injured (not to mention the near misses) but the casual and blasé manner in which this was reported. Buying a new glider and parachute is definitely not the answer to the problem. You're still left with people flying gliders with various instability problems. Isn't it about time someone took a stand (come on BHGA)

### Floater fear

THE Saxon Floater ultralight glider — built by an estimated 100 UK pilots — is to be tested publicly on the BHGA test rig following an investigation into the cause of a crash in which the pilot was killed.

The aircraft was practising stall recovery in low conditions.

I was flying since a week out in level at 1000 ft with about 2000 ft of climb and a stall about 1000 ft above the ground. The stall was not as sharp as I expected and I just kept straight through very quickly into the vertical and I crossed the stall in my back and I fell into the water and it happened about five or six times.

Phil, a Pilot One, landed upright down on the grass, the wing post having the impact, when he landed the way up the hill.

Amazingly he went on to complete the purchase of a Cessna which he actually flew that day.

### Tragic death of Howard Edwards

HOWARD Edwards — a member of BHGA council and one of the sport's most likeable personalities — died in a micro-light accident at the Dunsdale Hang Gliding School on May 25.

He was using a Cessna 170B glider with a gross weight of 1000 lbs. He was competing a circuit pattern marked by four pylons when the aircraft was seen to drop a wing and enter a steep descent.

The aircraft was registered to the name of the school and was used by the school for many years.

A full BHGA/BHGA investigation is being carried out and the results will be published in the next issue of Wings!



Picture shows Paul, test, and the remains of the Floater

## Spring again brings its toll

MAY 1982 will go down as one of the most tragic in the history of hang gliding.

and made STRONG recommendations that certain gliders be grounded until sufficient testing has been done on the test rig.

This goes for the old as well as the new gliders. The test rig is now operational so let's use it.

To all fliers of pilot 2 ability and above:- to do our sport justice demands that everyone (not only instructors and observers) should feel concerned for the safety of our fellow intermediate pilots. After all, it is the sport en-masse that suffers from these

serious and fatal accidents. So, if you can't think of others, think of yourselves.

It takes very little effort to offer words of advice, and if this is done in the correct manner it doesn't usually upset or offend anyone — quite the opposite.

Most pilots with any grey matter in their helmet-protected bonnets will at least think about advice offered and generally take heed once they've thought it through.

Surely this is better than letting pilots take-

off in adverse conditions or on structurally sub-standard equipment, which could result in further accidents and possible injury.

It's taken us six to ten years to make our sport reasonably respectable to the media and general public, and now companies are beginning to offer sponsorship.

Why blow it with articles only suitable for the "suicide weekly"?

MIKE WHITE  
(Whinging Kiwi.)  
c/o Welsh Hang Gliding Centre, Crickhowell.

• June Wings!

# Learn new skills

Dear Stan —

Being a P.1. of some experience it always strikes me as strange the amount of coverage Wings! gives to competition flying. Although this is undoubtedly an interesting aspect of the sport (and important in terms of potential revenue for BHGA) it can make very dull reading.

Hang gliding is an exhilarating sport and to turn large sections of Wings! into pages of dry facts and statistics is not only uninteresting but also counter-productive.

For the BHGA to survive and prosper it is essential that those entering the sport (and those already in it) are encouraged to develop fully their own skills, as well as learning new ones.

It is in this field that Wings! can make its greatest contribution by giving advice on basic and advanced flying techniques; glider construction and performance; ancillary equipment; and geographical and meteorological phenomena.

Such information would be of invaluable help to the everyday flier. This is not to say that Wings! should become some kind of basic instruction manual, but merely asks that the focus of attention be shifted from the experienced and competitive fliers, to those who form the ground rock of the sport — the non-competitive weekend flier.

J.R. SHARMAN  
London NW6

## Thank — you

Dear Stan —  
Could I through your pages thank everyone who helped me after my accident at Mere and in particular Tony Terry and the beautiful lady who held my hand.

STEVE NEWPORT  
Birchington, Kent.

# The numbers game

Dear Stan —

I thought I may as well take this opportunity to make a less than serious complaint about the article in AUGUST Wings (no exclamation) on the League event.

Why, when all other distances, weights and heights are given in imperial units, are nearly all XC distances given in Kilometres? Is this purely to confuse — or is it an attempt to impress by making all numbers larger.

Even worse — some distances were in miles! i.e. in the part

by Robert Bailey — "20 miles or so", "the extra 11 miles or so" not trying to be too accurate — no real need either I suppose.

So why in the next paragraph 45.2 KM. Please standardise the information, at least in the same article!

Also, why so many weird R.H.S. justifications? Haven't they heard of hyphenation to avoid this. (Two words on one line, one at each end — very messy)

O.K. Moans over, carry on with the job — I wouldn't do it for

all the gliders in Mainair sports.

B.F.JONES.  
Jeddah;  
Saudi Arabia.

• *I stand guilty! The big problem, of course, is the fact that competitions etc. mix their measures and this comes down to the fact that the Ordnance Survey divides its maps (and always has) into convenient kilometre squares. Perhaps the time is ripe to lobby for kilometers throughout.* — Ed.

# Magazine for ego trips?

Dear Stan —

Without wishing to take anything away from pilots who are perfect ambassadors for hang gliding. I feel I must write and complain about the way that Wings! has been presented recently.

Is this really a national magazine for all BHGA members, or merely a benefit monthly provided to feed the egos of a few elite members, where the same tired old faces seem to adorn every other page month after month.

There are many other pilots I have met of excellent standing all with notable newsworthy stories to retell; and many other sites and clubs (Yes its true, even outside the Dales and Peak District).

So come on Stan, lets have some stories from real pilots not just these superheroes who exist on a higher plane than ourselves.

I would also like to point out that while I am not supporting space given to power in the magazine, I am equally against so much time and space devoted to National and XC League items within the format of Wings! as these articles are generally of very little interest to the majority of pilots.

DAVE GUNNER  
Pirbright, Surrey.  
• *Are people in the XC League "real pilots"? The ball's in your court, Dave, let's read about YOUR news!* — Ed.

# Safety code

Dear Stan —

Last month I read of another pilot who took-off without "clipping in" — he got down alive but others have not.

Having been trained by the RAF I always hated the idea of taking-off without a routine pre take-off check so I gladly adopted Phil Swift's CHEW. For me this means:- C Clip in; H Helmet and harness O.K; E "Empty" — air free from other kites — wireman informs; W Vario switched on and stopwatch started. Wind.

In the RAF I came to the conclusion that cockpit drill was the most important part of flying and six years of rather infrequent hang gliding has not altered my feeling that the most important part is what you do before you take off — assessing wind, checking kite, consulting others who have just flown, etc.

TONY NEWELL.  
Rossendale, Lancs.



# Follow that! ...

...is the phrase which sums up my initial feelings at the end of our best competition season ever.

Our aces have threatened to do something like this for ages and having got it all together this year we now have enough silverware to enable us to control the silver bullion markets for some time to come.

Dominating the *European Championships* was a fitting finale to a highly successful season and rewarded Tony Hughes for some brilliant flying over the past two years. It also broke the myth that we can only win team prizes. So what price the *World Championships* next year in Germany?

We certainly have ten individuals who have the skill and the will to win. This strength-in-depth was amply displayed in the *Bleriot Cup* this year when we beat the French on their own ground with a "B" team and, in doing so, put the pressure on the "A" team who regained the *American Cup* in the Dales the following month.

□ □ □

These three top class cross-country wins were significant as we have concentrated almost exclusively on XC tasks this year — even when conditions were not ideal. The ability to get from A to B in indifferent conditions is a great test in my book and one which has undoubtedly helped in our preparation for international competitions.

Given a few ridges down or cross wind, weekend flyers could well follow our example and test their skills and ingenuity by going for it on one of those grey days.

My dear friend Johnny Carr has voiced his opinions of this philosophy and naturally I respect his views as the great flyer he is. He is NOT the proponent of "Mickey Mouse" as some are saying — he just wants to get the mix right between good finite and XC tasks. Having said that, I am totally convinced that our European team was the best trained for that event after competing in the League this season.

## Competitions chairman Derek Evans sums up Britain's best competition season ever

It was good to see the French pursuing a similar philosophy to ours and, in the long term interests of the sport, I hope the Germans will do the same.

Johnny's reasoning is wrong however, over Mike McMillan — Mike has probably more international competition experience than any of our top flyers — but in world class dinghy racing. There is nothing unique about the wind-up when competing in hang gliding, but poor Mike's problem in Millau was largely I believe, the classic one of trying to recover from a very bad start.

And on that point of experience, what about Phil Huddleston, Peter Waterworth and John Pendry? Anyway Johnny, please be there next year — we do need you.

Our other successes figured in the sink rate competitions at Grouse Mountain and the Norwegian Midnight Sun Cup. Bob Calvert did everything but beat the rules at Grouse this year, dropping to second place due to a flaw in the regulations, and our best-placed newcomer in the 1982 League, Phil Huddleston, won the Midnight Sun Cup on his international debut.

Another "B" team took Sansicario by storm, to win the team prize with Peter Waterworth leading in third place. A certain John Pendry, however, was said to have stolen a little of the League flyers' thunder...



Johnny "he's no Mickey Mouse" Carr



Trevor Birkbeck scrapes off in his Bulletman harness

Altogether, some 30 League pilots represented Britain in full internationals during 1982 and I would hope this proportion will continue in the future.

Lesser competitions are used to "blood" the promising pilots and also to provide an additional incentive to those who may be considering joining the League. Incidentally, we value any help given by "Brits" on our foreign trips and I would be pleased to hear from anyone going to Germany for example, next June.

□ □ □

At home, the irrepressible Johnny Carr won the Foster's British Open but had to give up his National League crown to his old adversary Bob Calvert. This is the third time Bob has won the League and, in such brilliant company, this is a remarkable achievement.

There is a reason for his every move, whether in the air or on the ground, and it is interesting to hear that he reckons his triking activities this year have enabled him to learn even more about the air in which we fly.

Our League programme has, generally, been successful following a very positive move into cross-country this season although I know there are a few voices against our pre-occupation with XC. We have yet to strike the right mixture of meaningful finite tasks and XC work but all the indications are that next year will be THE year! I think we all forget from time to time that our sport is still in its infancy and that perfection can not be attained overnight. Experiments, trial and error will be with us for a long time yet — if only someone could get the weather sorted...

A final brief remark — congratulations to all our winners and all those who have provided support for them. I wish you all further success in the season to come.



The prizewinners! From left (rear): Bob Calvert, Graham Hobson, Rob Bailey, Steve Goad (what's he doing there?), Mike McMillan, Andy Wilson, Dick Brown. Front: Tony Hughes, Mark Silvester, Phil Huddleston, Graham Leason, Len Hull.



• Johnny, left, takes the Foster's Open cup

# Why I'm giving up the League

Johnny Carr talks frankly to Stan Abbott about a competitions scene that leaves him cold...

**ONLY a radical change in direction at next month's competitions committee meeting will keep Johnny Carr in the National League next year.**

The British Open and last year's League champion confirmed this after the League Final near Clitheroe, Lancashire. He was restating views he first aired after the Sheffield League in an exclusive interview with Wings! which was not immediately published for fear his judgement might have been clouded by personal considerations.

As reported last month, the Sheffield League highlighted the growing division in the League between those pilots agreeing with the new philosophy of setting XC tasks in even the most marginal XC conditions and those who felt such flying was more a test of bottle than flying skill and that finite tasks would be more applicable in such conditions.

## *'I spent that day complaining'*

Johnny was the most outspoken among the anti-XC lobby which seemed likely to prompt at least some defections from the League. But he was anxious to stress his decision to leave was not prompted by "sour grapes".

"No, it might have been fair to say that if I had done badly at Sheffield, but I didn't — I finished seventh on the first day. But I spent that day complaining bitterly about the tasks and I complained again on the second."

The reasons given for wanting to quit were many and various but boiled down to a gut feeling that the League had lost the sense of camaraderie, of competition wind-up you got from competing directly with other pilots in pools... a sense of "things ain't what they used to be".

"When we used to come to the League an open XC used to be set on a great XC day," said Johnny. "There were times when we didn't have XCs and we should have done and I was one of the main instigators in getting that changed."

"This year it's been XC all the time, even in non-XC conditions,

and what's missing is there's no competition atmosphere any more. You are just free-flying and at the end of the day three trophies are handed out and you feel as if you haven't done anything for it. You used to be in competition: four other people to beat.

"You could have two of these tasks (finite) in conditions like we have had the last two days and people would have felt they had a competition — and they would have all been much happier."

"I love the League but I can't get it across to people that only ten people out of 40 are doing some sort of XC in crap conditions and that makes ten people satisfied and 30 dissatisfied — there's no atmosphere and it's the atmosphere that I love."

Johnny, a great friend of Brian Milton and the pilot who more than anyone stuck with him throughout the Newton Aycliffe sponsorship row, said he believed Brian's charisma had been a unifying influence at the League which was perhaps now missing.

But what about the broader sphere?... the League is, after all, the passport to participation in the international competitions circuit.

"I realise that I'm blowing my chances of being picked for the British team," said Johnny. "But there will be international competitions which I feel I will be invited to so I will keep my hand in."

## *'You can do more interesting things'*

"And if the League changes back to what the majority seem to love there is a chance I may come back to it at a later date."

Anxious to emphasise his rejection of the sour grapes argument (he was lying 25th at that point), Johnny recalled the year's first League — in magnificent XC weather in Powys.

"Sarn was brilliant, yes, but those were XC days — now, I didn't do well then. I flew well but I made a navigational mistake and it cost me a lot of points — if there were sour grapes I would be complaining about that, wouldn't I?"

"No, I think the Ludlow goal task (where I got lost) was the best task the League has ever run. My answer to the argument is that

in marginal conditions you can do more interesting things for most of the people than XC.

"If the League carries on like this and they send five relative newcomers to the Europeans 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 argued the Isle of Wight Foster's Open, generally held to have been something of a Mickey Mouse event, had been nonetheless "damn good training".

He summed up: "I have got a lot of respect for the League task-setters — but I just think they have gone overboard and I am worried for our position in the world."

"And doing open XC in very marginal conditions there are so many people in the air and it's really quite dangerous. A mid-air collision is a possibility or a probability when there are 40 or 50 people on the ridge and you get a marginal thermal and try and turn and find there are four people behind you."

For next year, Johnny pledged to carry on XC flying for his own

enjoyment and would even be ready to wind-dummy at Leagues — in the right conditions.

His outspoken views were expressed at a time when he had just come back "burnt-out" from a harrowing time at Owens Valley to find his marriage in tatters.

He said then: "I am upset with the way it's going and that's got no bearings on my personal problems because the League is just not a problem to cope with."

Looking happier, fitter and rested after the League Final, he said he stood by everything he had said and even had an answer for the argument that his case had been proved wrong by the outstanding British performance in the Europeans, based precisely on the despised art of "gully-gobbling".

"Ah well," said Johnny. "The lowest British placing was Mike McMillan's and — with no disrespect — he's a relative newcomer to the League with no solid Mickey Mouse training! And, besides, from what I hear there was at least one day when a lot of people would have liked a Mickey Mouse task because XC just wasn't on."

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# AIRWAVE GLIDERS

SATURDAY dawned warm and still, the last few drops of dew evaporating under the new day's sun.

A wind sock hung asleep from its pole undisturbed by the gentle roar of a Gaz stove making the first brews of the day. One by one the array of multi-coloured make-shift homes yielded figures that stretched away the stiffness of the past night.

By 9.00 the wind sock had slowly come to life, wafting lazily, it told tales of a breeze that drifted away from Mere's south bowl. An hour later the wind had been everywhere, (except upwards) but had shown a tendency to favour W to NW.

The end of the east side of the bowl would provide a suitable take-off if a fence, of barbed wire and long sturdy steel spikes could be removed. The farmer very kindly agreed and, with his tractor, all was made possible — so easily.

Another tractor, pulling a flat trailer, was busying itself to and fro carrying scores of gliders and pilots to take-off. The light and variable winds would demand fast legs, and already one pilot was helping another with a strange massage technique that amused the St. John merry band of helpers!

□ □ □

Yes, Mere was about to kick off again and enthusiasm was high. Terry Flowers, Ann Austin and their helpful band of landing marshals were setting up the Time Precision task while Pete Scott was organising his marshals ready for the Glide Angle knock-out.

The wind was predictably unpredictable, and pilots had to wait a long time before the drift of wind would coincide with the slope of the hill. By mid-afternoon a weak, slow-approaching and ill-defined sea breeze had reached us and it successfully bent the wind into the bowl. "All move" was the order and all move we did — Dayglo, targets, pylons, marshals, radios, pilots and gliders. The marshals patiently set everything up for the second time, which proved not to be the last! and soon the flow of take-offs increased markedly.

With the whispers of the sea breeze a few pilots tried their hands at XC, but sadly this proved less than satisfactory until Steve Goad showed the way. A hop-skip-and-a-jump gave Steve's control frame corner a chance to do some market gardening on take-off. When he bored with that he kicked into prone, but the stirrup, obviously sensitive to its treatment broke down and refused to accommodate two thrashing size 12s.

Steve continued like an undersized gorilla following in the wake of his knock-out partner Trevor Birkbeck.

A couple of zeros later both had doubled everyone else's distance (trebled the XC distance) and were busy eating up the next field. Trevor, squeezing the last inch, landed on his belly only to see Steve "head-banging" the ground in front of him — what people do for silver!

Meanwhile, the time precision boys were going great guns with Bunny Smith stealing the limelight on his amazing bog standard. Bunny sat on the ground, his seated harness on and clipped in. The keel was brushing against his helmet as he looked out towards the spot. Impossible, he thought; too far away.

Nevertheless he started his time and as the two minutes ticked away the murmur of the crowd quietened in anticipation. With 30 seconds left he stood up, levelled off and ran like a "good-un", leaving behind a flap of nylon and 100 amazed faces. He took off and headed out, surprisingly clear of the grass waving on the steep slope. In between two trees and over a bush that marked the first fence his craft was like a dart heading straight towards the target, into ground effect, down the slightly sloping field and finished the flight perfectly with a beautiful landing only yards short of the spot target.

A warm round of applause concluded the spectacle which illustrated so clearly the speed

# Chasing the wind



and distance hang gliding has developed in the few short years of its existence.

As the afternoon turned towards evening the wind, what there was of it, dropped to nothing. British pilots have a very bad reputation elsewhere in Europe as we are known to be "lethal" in nil wind conditions. But is this fair criticism?

Unfortunately it is. Just too many pilots didn't take the time to think or prepare themselves and their gliders. Too many people were not committed enough to run fast, and several red faces and near misses were seen.

---

by Bob Harrison

---

One poor chap, Steve Newport, obviously noticing the dilemma of others, did take the time and trouble. He launched like an express train, nose down, legs going well until one tripped in the stirrup causing a hard crash. Sadly he fell awkwardly on his arm and snapped it above the elbow.

Soon afterwards a drift started from over the back which increased with time. Despite the nil wind incidents some pilots wanted to take-off but still weren't prepared to leg it. Both T.O. marshals then closed their T.O.s and waited. When dusk approached the day's competition was called off.

Sunday came too soon for many. The various parties, barbecues and Mere Carnival provided an excess of entertainment and several heads regretted the indulgence. In a way, the morning's appallingly bad wind direction was, perhaps a blessing. It gave pilots a chance to look around the various commercial stands and dream of Christmas stockings full of hang gliding goodies. Clubman's Mere wouldn't be the same, or perhaps it wouldn't even exist if manufacturers didn't take the time and trouble to attend.

This year the attendance was good, and included Airwave, Hiway, Solar Wings, South-down Sailwings, Mainair and several hang gliding schools.

Eventually the flying activity started, but this time we were suffering south easterly winds and had to use the other side of the bowl. Once again XC was impractical. The sky was grey and overcast and promised nothing but rain by the evening.

For the first time, this year's K.O. distance event was split into two classes, one for single surface machines, the other for the double

surface. It worked very well indeed and gave everyone a much fairer chance.

The time precision task, although remaining basically the same, also had some changes in it and this proved a healthy tease to those familiar with the old way.

In true style just as the flying started to go smoothly, the wind gods played up again. Instead of doing as forecast (veering through south to west) it backed and finished up just about due north, right down the bowl and along its sides.

Time was also running out. Results had to be calculated, presentations made and a lot of travelling had to be done. As pressure increased, Marc Asquith and his lady were doing great work on the time precision take-off. Terry and Ann at the other end of the radios were desperately trying to speed up the pilots-per-hour rate and hit an all-time high of 20. Pete Scott and myself were trying to rush the various rounds of Knock-Out while Sandy Edwards and Samantha saw that fair play was carried out in the landing field. To speed things up, the power boys were asked to move elsewhere and with everyone's co-operation somehow the various tasks were completed.

Around the presentation table a group of expectant pilots gathered. Some, the North-umbria lads, were biting their already short finger nails. Written across the faces of Paul Quin and Ronnie Freeman were the questions "have we done it again? for the fourth time?" or "have we blown it?"

Percy Moss, Meet Director, would, in time, divulge all. Throughout the event he, and his willing staff of wives and girlfriends, (I'm sure it's illegal in this country — I don't know how he gets away with it) had toiled away quietly ensuring the smooth running of the competition which is designed to be, primarily, fun and, hopefully, hassle-free.

All in all, despite the weather, Mere '82 was very successful and I didn't hear any serious complaints. One of many successes was the record attendance — 148 pilots registered to fly, 26 teams entered, 16 clubs participated. Here's looking forward to seeing you all at Mere '83.

May I extend my thanks to the marshals for their devotion and patience; to the pilots for their co-operation and to everyone who helped to make Mere the fun competition that people want.

Turn page

# How we did it!

**Mike Driscoll  
tells the Dover  
& Folkestone story**

The Northumbrian teams were huddled round team manager Ronnie Freeman with stopwatches and calculators whirring.

The first few gliders were taking about a minute to get down in the dead air. I decided that conditions weren't going to improve and went early and managed to float my big Comet round three pylons and get a good stand-up landing with only three time penalties.

This had the Northumbrians a bit worried as nobody else was getting the third pylon.

Due to the late start only about 50 pilots managed to get a flight that day. Most of the Dover and Folkestone A and B teams got reasonable scores — and but for a dispute over a spot landing which was disallowed, we would have been in an unassailable position.

As it was, the event could still be won by any team the next day if conditions improved.

Sunday, however, was much like Saturday with just a light variable breeze. This time the "left hand" ridge was to be used and the Northumbrians were now beginning to panic as the pylons were very difficult to get and few people were getting anywhere near the spot landing on time.

The afternoon was punctuated by heavy rain and the closing time of 4 o'clock was extended to 6 o'clock to try to get everybody a flight. The marshals had to move yet again as they followed the wind round the ridge.

The K.O. Distance was finally flown with the last six or so pilots in a fly-off, with Andy Wilson the winner.

The Dover and Folkestone club's A and B teams were battling for first place in the timed precision with the B team winning by just three points. Well done lads. The Northumbrians won some consolation as they were presented with a shield for winning the event for the previous three years.

The marshals deserve a big thank you for doing a fine job under difficult conditions. Well done Anne Austen and Co.

Now that Dover and Folkestone has the Club Shield we intend to hang on to it. So if your club want it start practising now — we are! See you next year!



Good to see you back! — Natalie Wilson, airborne again on her Magic after a break from flying



Wow! — just look at that glide angle!  
The Bog Rog trophy, as won by Bunny Smith



Hmmmm... looks like

Mere picture sp



## Results recap

- Club Shield**
1. Dover & Folkestone B
  2. Dover & Folkestone A
  3. Northumbria
  4. Mercian B

**XC**  
Steve Goad

- KO Distance**  
*Single surface*
1. P. Rolinson
  2. M. Kelloway

- Double surface*
1. Andy Wilson
  2. Graham Deegan

**Timed Precision**

1. Mike Driscoll

**Bogrog Trophy**  
Bunny Smith



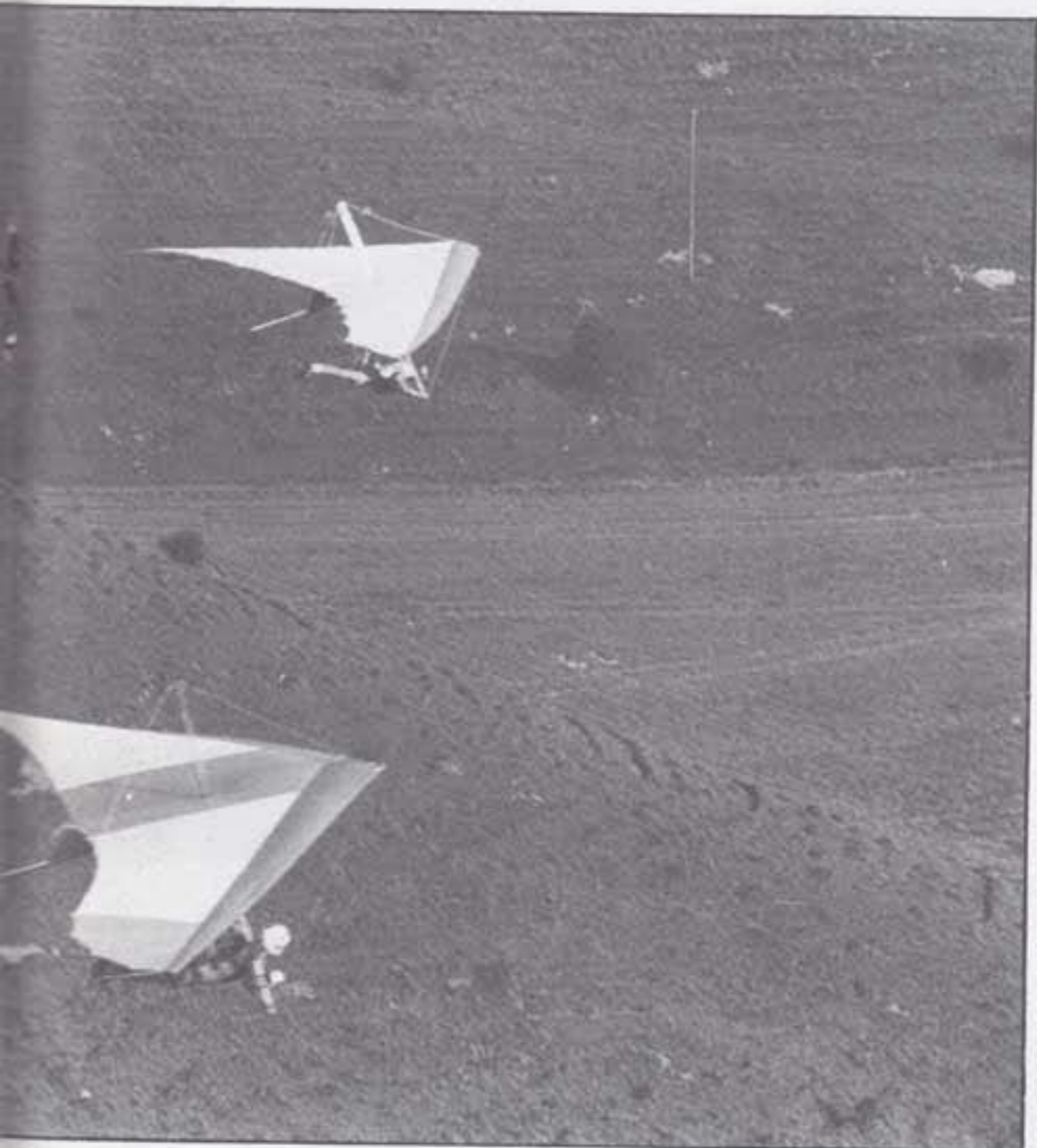


we should practice our nil-wind take-off

pecial by Steve Thompson



Rounding a pylon in the timed precision event



One-on-one — the glide angle knock-out



Above, general view. Below, Steve Goad.

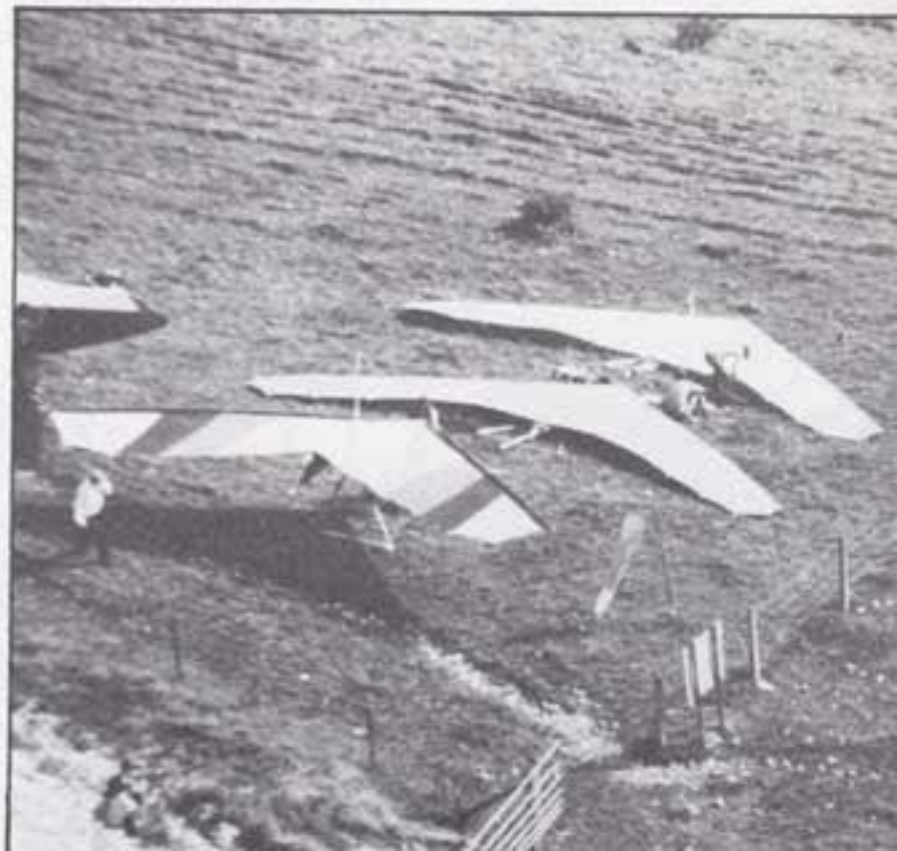


Photo by Dave Bedding

Below, take-off (from John Sharpe's trike). Above, Andy Wilson



Photo by Dave Bedding



# Demon: a small miracle

The small Demon, the final link in the range, is now in full production. Performance is outrageous and the handling is light and predictable.

Whatever your weight and whatever your flying requirements, Demon is the glider to go for.

## Nearly 2 miles high!!

Congratulations to John Dunker for his amazing soaring flight to 10,400 feet a.s.l. by Demon on the 31st August. During the flight he made a height gain of 8,500 feet.

John demonstrates yet again that sweet handling, and high performance make the Demon the practical glider for the pilot who wants to go places.



### Competition results:

Demons placed first at Grouse Mountain, fourth in the Owens Valley XC Classic, second and fourth in the Austrian Nationals and first and second in Cederon. The official Out and Return world record was recently broken by two Demons.

Our congratulations to Robin Peterson, Mike De Glanville, Helmut Loronzoni, Ernst Reicholf, Francois Goethals and Graham Slater for their efforts on Hiway Demons.

Write for details and information about your local agent to:

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



# 19 stone and 2 miles high!

**JOHN DUNCKER on Britain's first 10-grand — from Wether Fell, fast gaining a reputation as THE wave site. Pictures by PAUL WOOLMAN.**

AFTER many weeks in Europe, it felt good to be back on a windy Dales hillside.

Although the conditions did not look very promising (6/8 cumulus and high lentic) there was enough wind to give reasonable ridge lift — ideal for sorting out my new French Connection, I thought.

A flight without the Connection confirmed nothing special but smooth and easy lift to 500ft. above take-off.

Landing, I captured a passing pilot to hold my glider while I went through the usual hassle of fitting something new. Eventually I got the connection sorted out did a hang check, and walked to take-off.

A voice from behind piped up: "You're not going to fly are you? It's got up a bit you know."

Indeed it had strengthened somewhat, to 20-26 mph and everybody else had landed. Still, it felt reasonably smooth and I do hook in at around 19 stone, so I committed aviation.

After a couple of minutes I realised I had got the Connection set up about right and I settled down to get used to flying with it.

I was working weak thermals and ridge lift, at about 1,000ft. ATO.

Then I found a persistent 1-2 Up and although it was not always there, I thought "wave!"

I soon reached cloudbase, approx 3,500 ASL but although there was broken cumulus all

around me, directly in front — extending to Dodd Fell and Hawes — there was a blue hole which had been there all the time I was in the air so I thought "let's get up a bit yet."

At 6,000ft. I was above the tops of the cumulus and it was a fantastic view — sunlight and shade on white bubble bath foam as far as I could see. My 1-2 Up had petered out and after enjoying the view for a little while I set off along the front edge of the wave bar far above me in the hope of finding another elevator.

Well to the left, off over the road leading to Dodd Fell I found it — 5-up!!

I could not quite park in it but had to make gentle beats about 100 yards long. 7,000ft ASL passed, then

I was level with the bottom of the lenticular cloud at about 7,500–800ft. Staying close to the front edge I continued to climb in steady smooth lift — so smooth it was like flying in oil.

I was flying with one hand, warming the other behind my parachute and wishing for my winter mitts and balaclava. I was feeling very cold indeed but had heard from Jenny Ganderton of her 8,500ft. flight in similar conditions and was determined to better it. 8,500ft, 9,000ft, 9500ft. passed with the vario still reading a steady 4-Up. The wind speed had increased very slightly but I still could not park. I watched anxiously as the fifth digit neared — 10,000ft. I had cracked it! Now my thoughts turned to getting over the top of the wave bar which looked about another 2,000 or so feet and "going for it." However, it was not to be. The vario fell silent and I was left at 10,200ft. Vainly I searched but: nothing. Suddenly I became aware that the wave bar in front had changed shape and seemed to be moving rapidly towards me and a faint ghostly presence was forming around me. Time to panic, heaving overboard several crates of bottles, I headed for the centre of the diminishing blue hole.

Observers on the ground said the leading edge of "my" wave cloud became fuzzy and the one in front changed shape noticeably.

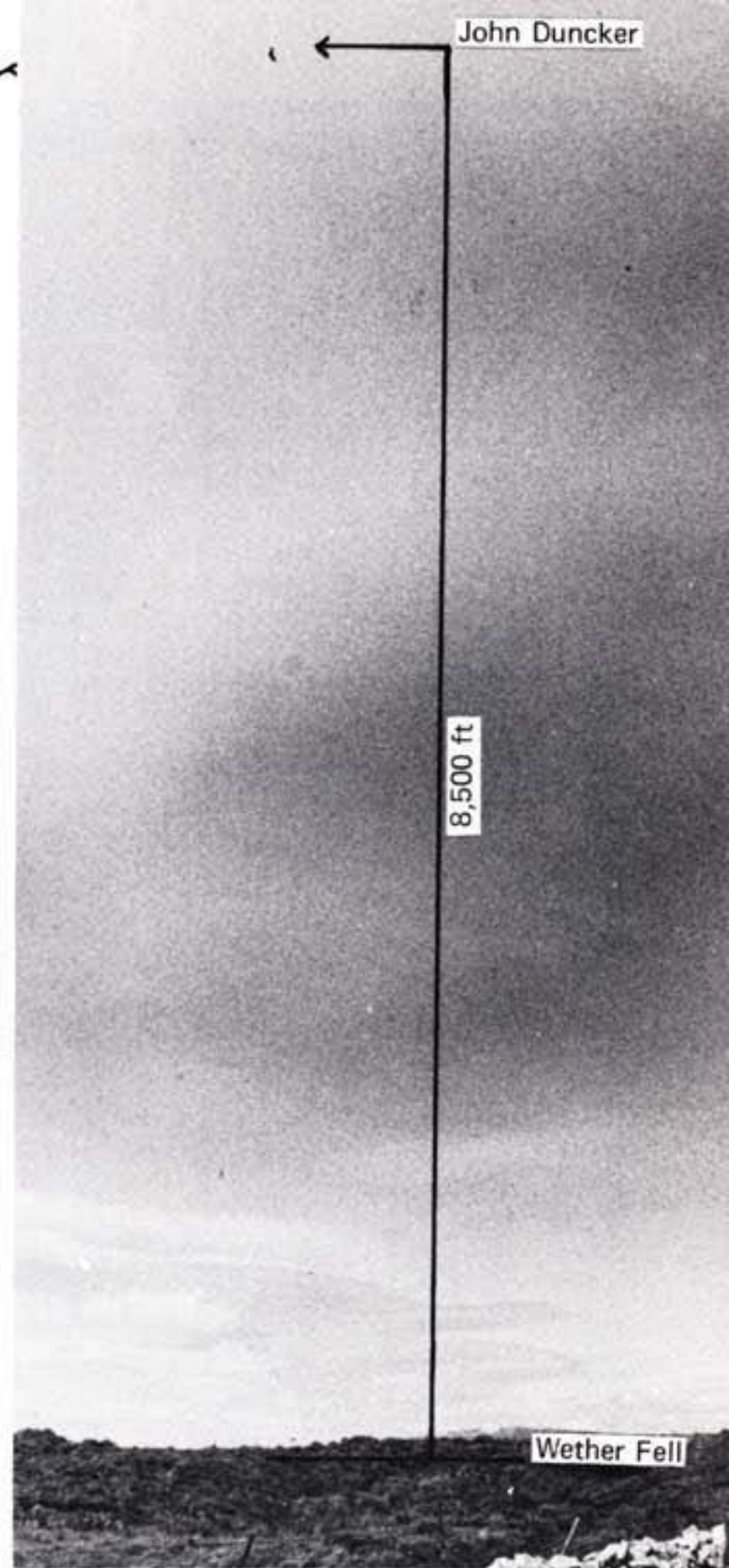
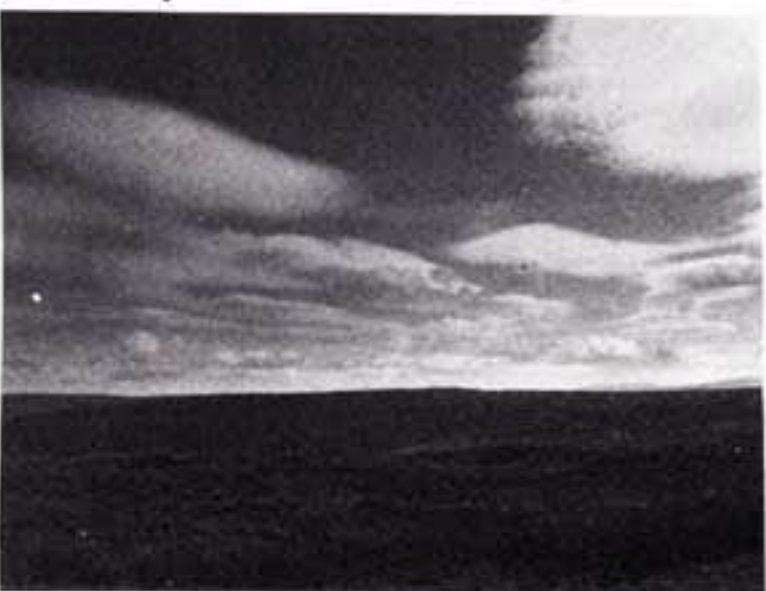
Once below the cloud, now down to 7,000ft. I started looking for lift again but although the hole was still there and by inference the wave system was still working, I could find nothing — just a steady 3–5 down. Eventually at 3,500ft. I found some 1-2Up but 4,000ft. was as high as I could get.

Then a niggling worry surfaced again: why had nobody else taken off? I could see kites on the ground and what looked like a huddle of bodies in the lee of a hummock, but nobody in the air. Oh dear!

Unable to better 4,000ft. and very, very, cold I decided to land. Easier said than done. Every time I got near the ridge, up I went: To lose height I had to get close to Dodd (upwind) and it got pretty rough. To cap



Pictures show changing wave cloud patterns over Wether Fell



John's Demon — just a speck in the sky

it all, I was now having difficulty penetrating.

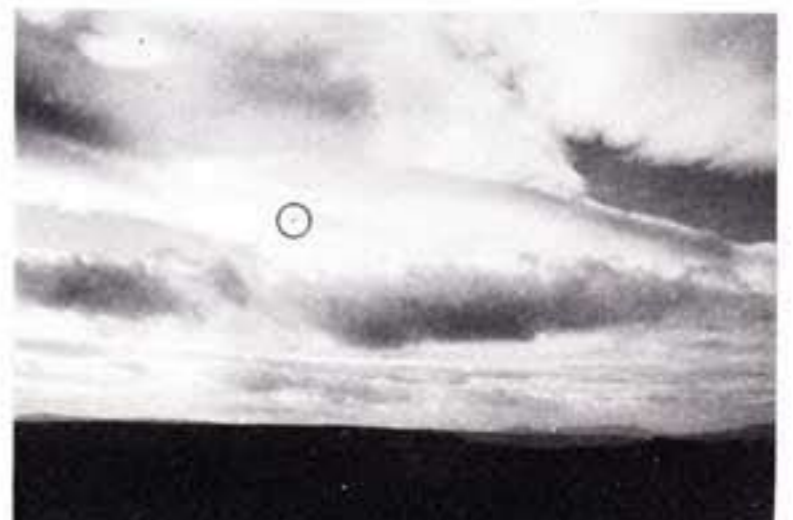
Flat out, bar to the ankles over the rigged glides I was grateful to see that John Turner Des Boucher and other Dales fliers whose names I do not know had realised my predicament and were spreading out to catch me.

In the end it proved smooth right to the ground and I landed comfortably, but many thanks nevertheless.

During the ensuing warm-up and coffee session in my faithful sherpa van someone announced that "there is a prize for the first person to 10 grand". My spirits rose, "With a barograph" my spirits fell. "Rats!" It also transpired that I had set my altimeter to 1,700ft. and got to "10,200ft." whereas Wether Fell T.O. is 1,900ft. Therefore I reckon I got to 10,400ft ASL. (My beard iced up!)

Site: Wether Fell

Date: 31/8/82; take-off 4.15pm; Landing 6pm. (approx)  
Equip: Demon 195; French Connection, Ball 651 vario—  
Altimeter, insufficient clothing!



# O-zee

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# BMAA 'trike' deal

THE BHGA and BMAA will work together to establish airworthiness requirements for 'trikes', it has been agreed.

The definition includes any powered aircraft that can be flown as a conventional hang glider when the power unit is detached.

At a meeting on September 20 between Roy Hill and Barry Blore for the BHGA and Graham Andrews and Bruce Giddings for the BMAA, it was also agreed:

- The BHGA would make the dynamic test rig and structural test rig available for testing these aircraft.
- A charge would be made for use of the test rigs and issue of powered endorsed Cs of A. The fee will be in line with those charged to other users.
- It was envisaged a suitably modified hang gliding C of A with power endorsement would suffice.

The BHGA has an interest in these machines because:-

1. BHGA members fly them.
2. In the future we may wish to use them for tow-launching or giving air experience, via dual control, to conventional hang gliding students.

3. We are issuing Certificates of Airworthiness for conventional hang gliders. Some pilots are attaching power units to their hang gliders and if there were to be a subsequent mid-air failure, with or without the power unit attached, the following questions would require answers:-

- a) Did the hang glider fail due to the extra stresses caused by the power unit?
- b) Is it a hang gliding or microlight accident and which association should investigate it and make recommendations?
- c) What will be the position regarding insurance for that particular claim and which association will bear the loading on subsequent insurance premiums?
- d) Is everything possible being done to minimise the problems of these aircraft?

I believe the natural development within BMAA is with fixed-wing three-axis control microlights. It is the type of aircraft that, as an association, they are most familiar with and the type of aircraft that conventional pilots can convert to the easiest.



by Barry Blore

The BHGA, through its manufacturers and Airworthiness Board, has a better understanding of dynamic forces on flexible wings, performance parameters and control of hang gliders than any other controlling body in the UK. We also have a developing airworthiness programme.

A combination of results from the dynamic test rig, the new structural test rig, flight tests and possible use of a wind tunnel to ascertain the drag forces on a trike unit should give the BHGA sufficient information to make recommendations. There is no alternative testing facility or organisation with these capabilities.

The equipment we have at our disposal is very expensive and in a few years time will either become obsolete or unserviceable. So we need to put the test rigs to as much use as possible — at a cost — to build a reserve fund for future financing of the airworthiness programme.

It is quite logical that BHGA and BMAA should work in consultation with each other on any issue that affects or is likely to affect both associations since the sharing of knowledge, experience and effort must in the long term be of benefit. I sincerely hope that the agreement we have reached will set a precedent for future successful co-operation.

## Airwave/Mainair link

AIRWAVE Gliders have extended their dealership network in the North of England, bringing in Mainair Sports of Rochdale and Adventure Sports Equipment, the South Yorkshire manufacturers of the Skymaster parachute system.

Robert Bailey of Leeds formerly had exclusive dealer rights on Airwave products in the North.

For Mainair, the move plugs a gap in their range which the company has always endeavoured to keep as complete as possible.

Mainair and Airwave have also reached agreement to market a new power/wing combination, the Skydart, a 330cc Robin-powered wing which goes into production next month.

Meanwhile, the Airwave Magic II has become the latest glider to acquire a BHGA airworthiness certification.

## LATEST Aussie comp

Details have just been received of the 1983 Mt. Buffalo XC Classic in Victoria, Australia.

Round One runs for seven days from December 28, 1982 and Round Two for ten days from January 6. There will be ten places for overseas pilots of 'international class', so top British pilots can expect to have to compete in Round Two only.

Entry is \$50, to: Stephen Ruffles, 23 Kirkwood Court, Montrose, 3765 Victoria. Tel: (3) 860 2075 (bus) (3) 728 2778 (home).

## Sorry

...that so many of you received your September Wings! so late — this was due to production difficulties.

SA

## National XC League 8/10/82

Position	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 Fennel	Thames Valley	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	Simon Ogston	Angus	23.9	23.8	50.0	97.7
10	Robin Rhodes	Northampton	37.3	32.9	22.4	92.6
• 11	Johnny Carr	Southern	60.9	9.9	16.4	87.2
= 12	Jack Rayne	Mercian	71.0	14.4	—	85.4
= 12	Mark Asquith	Mercian	24.5	22.2	38.7	85.4
• 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
= 16	Mark Hebden	S.E.Wales	36.8	24.9	14.0	75.7
18	Digby Rolf	G.Cayley	23.0	26.1	22.0	71.1
19	Kevin Winter	Avon	28.1	23.4	18.4	69.9
20	Richard Armstrong	Lanarkshire	18.3	19.6	30.4	68.3
21	Tom Warren	S.W.Wales	11.1	43.5	13.1	67.7
22	Donald Mackenzie	Lanarkshire	18.0	26.4	23.0	67.4
23	John Hammond	Loughbro' students	24.2	6.3	36.3	66.8
24	Darren Arkwright	Pennine	51.8	14.4	—	66.2
• 25	Allan Smith	Wessex	19.4	26.3	18.4	64.3
= 26	John Stirk	Dales	14.0	20.3	29.5	63.8
= 26	Richard Newton	S.E.Wales	19.4	25.5	18.9	63.8
28	Joe Culler	Lanarkshire	9.4	14.8	39.4	63.6
29	Steve Hudson	Sheffield	24.2	16.8	19.1	60.1
30	John Meredith	Thames Valley	18.2	40.9	—	59.1
31	Ceri Davies	S.E.Wales	20.3	20.8	17.5	58.6
• 32	Graham Leason	Thames Valley	22.0	36.4	—	58.4
= 33	Mark Dale	G.Cayley	18.3	14.2	24.6	57.1
= 33	Pete Waterworth	Avon	29.1	12.0	16.0	57.1
35	Marc Southall	S.E.Wales	31.0	12.3	10.2	53.5
36	Jenny Ganderton	Dunstable	24.0	15.8	13.5	53.3
37	Len Hull	Sheffield	20.1	19.5	13.5	53.1
38	Sandy Nicol	Peak	18.7	24.1	10.2	53.0
39	John Rankin	Lomond	13.2	38.1	—	51.3
40	Gordon Holmes	G.Cayley	9.6	29.2	12.0	50.8
• 41	Phil Huddleston	IoW	49.8	—	—	49.8
42	Ian Slater	Sheffield	29.3	19.4	—	48.7
43	James McMenemy	Thames Valley	27.3	21.1	—	48.4
• 44	John Hudson	Pennine	18.5	28.1	—	46.6
= 44	Noel Whittall	Dales	8.6	29.5	8.5	46.6
46	Julian Hardman	Mercian	21.6	23.9	—	45.5
47	Michael Hibbit	Thames Valley	23.2	13.8	7.6	44.6
48	Bill Newton	Southern	19.6	12.9	12.0	44.5
49	Nigel Moor	S.E.Wales	20.7	22.0	—	42.7
50	Tony Spirling	Dales	19.2	8.3	15.1	42.6
51	Malcolm Hurst	?	22.9	19.3	—	42.2
52	B.J. Harrison	Southern	13.2	27.4	—	40.6
53	Peter Robinson	Wessex	23.4	16.8	—	40.2
54	Richard Iddon	Pennine	21.0	18.6	—	39.6
55	Mike Tomlinson	S.W.Wales	26.0	12.5	—	38.5
56	Simon Murphy	Devon & Somerset	24.0	14.0	—	38.0
57	Robert Hooker	Northumbria	37.4	—	—	37.4
58	Dave Clayton	Southern	10.5	12.6	13.5	36.6
= 59	Malcolm Clee	Sky Surfing	11.7	15.9	8.9	36.5
= 59	Tony Fillingham	Dales	11.1	9.0	16.4	36.5
61	Neil Clark	Loughborough	7.5	17.9	10.4	35.8
= 62	Rob Hobbs	?	6.2	13.5	15.7	35.4
= 62	Simon Todd	Long Mynd	24.7	10.7	—	35.4
64	Richard Sheppard	Peak	11.2	13.5	10.6	35.3
65	Dave Harrison	Dales	10.9	24.0	—	34.9
66	John Hunt	Avon	33.9	—	—	33.9
67	Martin Hann	S.E.Wales	17.1	16.7	—	33.8
68	Dave McRobert	Avon	4.0	16.8	7.9	33.7
69	Chris Taylor	Cumbria	18.3	15.1	—	33.4
70	Paddy Yeoman	Sheffield	25.7	7.6	—	33.3
72	Graham Deegan	IoW	32.0	—	—	32.0
73	David Walter	Sheffield	31.9	—	—	31.9
74	Ian Currer	G.Cayley	18.6	12.2	—	30.8
75	Dave Cheeseman	Avon	29.8	—	—	29.8



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# TYPHOON'S

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



P P P Power P P P Power P P P Power P P P Power

# Trikers on display

**STEVE THOMPSON**  
*played photo-journalist at Micro-Expo 82 held at Long Marston airfield, Warwicks.*

AN important event this one, with the qualifying heats for the great London to Paris microlight race to be held.

Saturday dawned fine and good for bendiplanes popping into — and out of — the air.

The airfield revealed a truly wondrous scene with a great many three-axis microlights lashed to huge blocks of concrete, and equally numerous trikes actually flying!

A fine static display, a fair, drag racing down the far end, and a mighty horde of paramilitary security men who seemed to outnumber participants and spectators combined.

### Bad timing

Even some of the joystick twiddlers came out to play in the sky, leaving their concrete blocks behind.

There were particularly impressive performances from a pair of Goldwings, flying almost like real aircraft and the rather odd looking Lazair with its twin engines, inverted V tail, see through Mylar wings and the pilot's backside very near the ground — quite a modest little thistle could have caused terrible problems.

The valiant efforts of John Wadsworth were a source of great wonderment — unfortunately after four attempts he gave up having failed to reach the qualifying distance for the Commonwealth games long jump.

The only real excitement was when the Lazair took off, immediately turned, tip stalled and (oh dear!) delighted Angus, its owner, who'd lent it to someone to try out! Pity really, a nice looking machine in the air.

Come Sunday and the weather settled into the usual pattern for microlight events — the



The Triking Viking — Odd Johnsen, a competitor in the London — Paris microlight race.

wind blew hard! Trikes, of course, cope well with these conditions, you can just take the wing off and zoom around regardless.

Monday was even worse with the wind even stronger and heavy rain as well. There was an impressive flying display from the heavies, everything from Tiger Moths to a Hunter, and an amazing display from a WW II German Fiesler Storch which stalls about 20mph and flies more like a microlight than anything else.

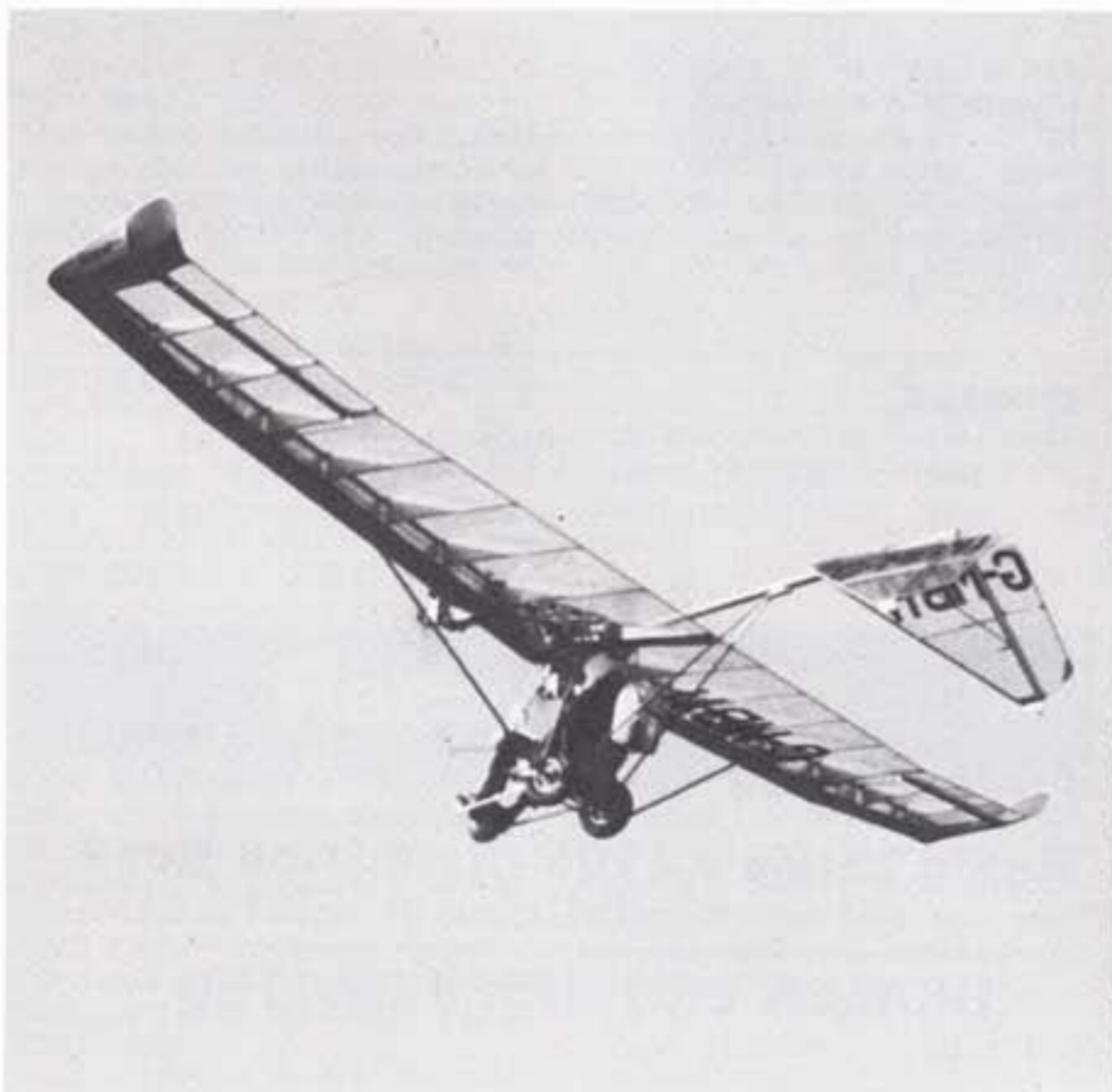
Thirty seven members of the Midlands parachute club piled out of a DC3 and showed that they were well on their way to inventing the hang glider, the glide angle was nearly as good as a bog-rog and very manouverable.

Tuesday morning, as most of the participants had departed, was finer with the wind less strong. The trikes were flying again.

Leaving the airfield in the afternoon every mile homeward brought an improvement in the weather and I reached my front door on a perfect triking evening, still, clear, sunny. Funny it always seems to happen like that!



Murray Rose and Steve Morris of Chargus on a Titan T440 demonstrate the art of strong wind triking.



The Lazair starts its brief flight... and comes to earth with a bump!



# Christmas present ideas



"What do hang glider pilots like for Christmas?" is a question that sounds deserving of a corny riddle-type answer, but for friends/lovers/spouses/relations trying to buy something that will be appreciated the choice may be a little bewildering.

This two-part feature will endeavour not to give a comprehensive guide to everything on the market, but perhaps to at least nudge the more fertile minds along the right present-choosing path. The BHGA itself stocks a wide range of books badges etc., listed here and on page 32.

## BHGA pricelist

BHGA Student Handbook.....	£1.00.....
Written for the non-pilot to provide background information necessary during elementary training	
BHGA Pilot Handbook.....	£2.00.....
The training manual written to guide newly qualified pilot 1s to advanced levels of flying ability. (This book is included in the package sent to those who join the Pilot Rating system)	
BHGA Observer Handbook.....	£1.00.....
It gives guidance on how to help and check out pilots working their way through the rating system. Observers are sent this book free on appointment)	
BHGA Instructor Handbook.....	£2.50.....
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Payment is requested by crossed cheque, crossed postal order or, if you live outside the UK, by Sterling International money order. Please make payable to BHGA. p&p included.

cont p32

Books always make good presents (new books even SMELL nice!) but hang gliding books are not usually available on bookshop shelves and so a little forethought is needed.

Sadly, people often gain appreciation after their death rather than when they were around to enjoy it and — like it or not — sales of George Worthington's *In Search of World Records* are sure to rise now...

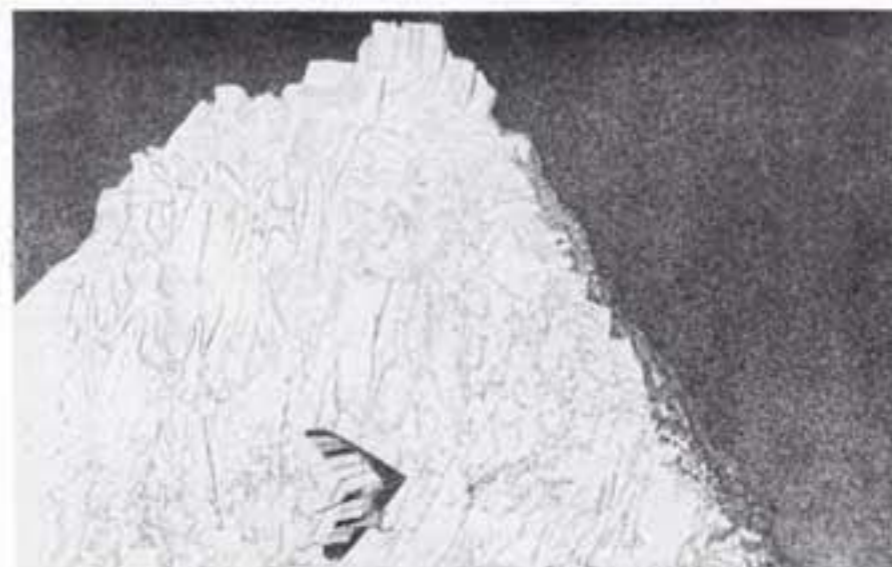
The following is a short extract from *The Old Man's Quest*, an extract from the book.

'For six precious minutes the Mega twisted and turned in the air in a desperate search for cohesive support from the lift which seemed too much like bubbles of rising air trying to organize themselves. But it was a losing struggle. Each minute he sank a few feet lower and was being forced a few yards further down the mountain. He couldn't continue this struggle, to turn, and try to climb every bubble.

It wasn't paying off. He was losing altitude while remaining only about 100' above ground. So he stopped fighting and headed straight for the valley in order to get more ground clearance under the Mega, and thereby allow the thermals to have formed some unity before reaching his altitude. He realised clearly that he had been working too close to the ground. Now his clearance was a more sensible 400'.

At that moment almost as if it had been preordained, the

thermal and the Mega embraced one another. Each gave to the other. The thermal, which previously had been merely one of millions that morning, to live a brief rushing swirling, climbing existence, found the recognition of lifting a human being and 65 pounds of Dacron, aluminium tubing and steel cable, upwards into the sky. The Mega, which without this assistance could only descend straight toward the valley, with the gifted windsong of the thermal



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Worthington and Markowski books: — U.K. — 65p each. Europe — £1.80

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# Christmas present ideas



became a modern day magic carpet.

The glider and the old man were lifted 7,500' spiraling into the heavens. The climb lasted for 11 minutes. A mile and a half straight up at the average rate of almost 700 fpm!

Those figures translate into a vertical speed of eight mph, or roughly twice as fast as a person walks horizontally when in a hurry. No athlete, no human engine, could vertically ascend, even with the use of a stairway, that far and that fast. It could only happen in this silent peaceful way by the inspired union of man's stunning ingenuity combined with nature's beautiful power.

The old man guided the rogallo in an upward spiral until it touched the cloud, directly over the launch site, which had been calling to him for many precious moments. Ordinarily when reaching cloudbase he would stop the climb and head the glider straight north. But not today. Today he felt bold. And although, over the past few years, he and his hang glider had been sucked up into the clouds, and it had not been pleasant, he felt he could use a newly-devised tactic that had occurred to him only seconds before it was to be implemented.

## Photographic interest



Hang gliding photography is gaining popularity, it seems, but the rough and tumble of the sport is not always compatible with looking after delicate photographic equipment.

Camera Care Systems, of 30 Alexandra Road, Clevedon, Bristol, stock a range of lightweight protective cases for cameras etc. designed for rugged use. They could also be useful for flying instruments.

They also supplied me with a mini-tripod, the Travel-pod, which provides a good mounting for fixing a camera to your glider for in-flight photography.

SA

## Punter fodder!

**The Spur Book of Hang Gliding**  
By Ann Welch  
Spurbooks, 137-141 Leith Walk, Edinburgh  
Price: £1.25.

DO you or your club ever get cheesed off by questions from members of the public on the hill?

You know what I mean: "How do you hang on?"... "How do you steer it?"... "How do you..... etc., etc?"

Well, help is at hand! The Spur Book of hang gliding is the perfect answer for the punters.

Whether they are just interested, or thinking about trying hang gliding, this book will answer all their questions simply and cheaply. Enterprising clubs could probably do a roaring trade selling the book on the hill, or at competitions.

Consisting of 64 pages, prolifically illustrated, with a nice colour picture front cover, the book reports everything you need to know in the early stages.

From: How to start; The Hang Glider; through First

Flights; Speed Control; to Achieving Pilot One and Rules of the Air, in 14 chapters.

It's very unusual for me to be able to say this, but this is a good book and is to be thoroughly recommended to the ordinary punter who knows nothing about hang gliding.

Nick Regan

## Supercar?

Tony Hughes is writing a piece for Wings! on the "ideal hang gliding vehicle" and invites any offers of help or opinion or information. He asks for photos, details of ground clearance, mpg and other running costs.

Please note his NEW ADDRESS: 170 High Street, Burbage, Marlborough, Wiltshire. His Hungerford h.g. school will be accordingly renamed Wiltshire Hang Gliding and Microlight Centre.

## Lucky lesson

Michael Carnet reports a lucky escape with a reassuring outcome when he took off in Owens Valley without the nose "swan" catch secured by the pip pin on his Magic I.

On realising his error, he maximised the tension on his bottom wires by bracing his feet round the rear rigging. Loosening the Velcro on his parachute bag against possible airframe failure, he flew the agonising descent from 8,000ft. ASL to valley floor. There is no alternative to thorough preflighting.

## Warning!

BHGA council warns owners of prone trike units of the danger of machinery snagging on rigging wires and urges care in checking for the same. It also wishes to stress the vulnerability of the pilot in an accident, particularly if the power unit falls on him/her.

## Airspace pamphlet

STUDENTS at Ravensbourne College of Art and Design have produced an excellent pamphlet detailing airspace regulations in the Southern hang gliding area.

The project was co-ordinated by tutor Mark Woodhams in association with the Southern Hang Gliding Club and is aimed at cross-country hang glider and microlight pilots in some of the busiest airspace in Britain.

The pamphlet incorporates 3-D diagrams in a combination of tints and colours and should be an invaluable companion to the southern flier. Its succinct dealing with basic air law will extend its potential as a useful tool for other club coaches and copies



are available from the Southern Club, price on request.

Stan Abbott

## Race results

THE Blackpool to Paris air race which became the London to Paris rally was won by Francois Thovex on a Danis Sabre 23 in the weightshift class and Jacques Antoine Breuvart on a Vector 610 in the three-axis section, reports Flight Line.

Gerry Breen on a Pathfinder and Australia's Ray Broom on a Resurgam shared the speed

award. Jean-Pierre Danis on a Danis Mercure took the economy and youngest pilot awards and Switzerland's Marco Broggi took the prize for the quietest aircraft on Daedelus Apex II.

John Hudson and Geof Ball won the Norfolk Air Race on a dual Mainair trike. Full report next month.

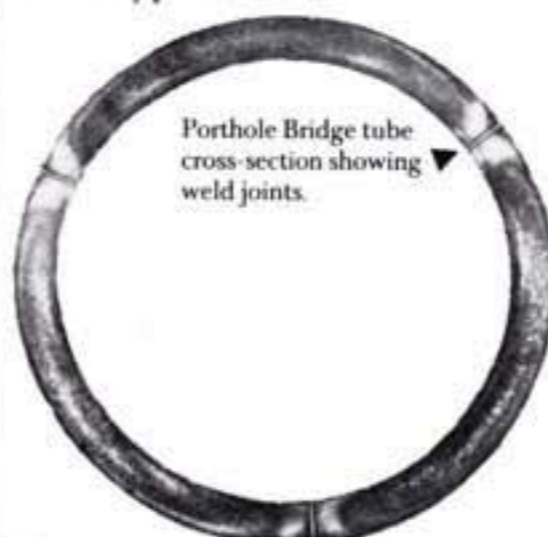


This cross-section (below) shows the structure of aluminium tube made by the Porthole or Bridge tool method of extrusion. The resulting tube comprises a number of extrusion seams along its length (often not externally visible).

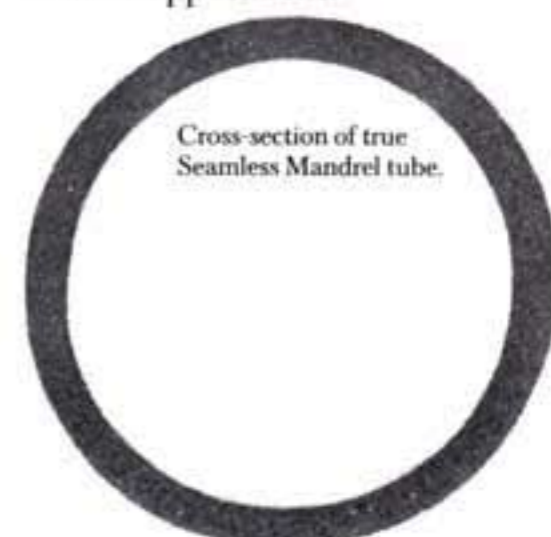
Rigorous and complex testing is necessary to establish weld soundness on this type of tube.

This is a cross-section of true Seamless Mandrel tube (below). As defined in BS 3660, it contains "no split or deliberate longitudinal bonding of two or more edges by pressure, fusion or mechanical interlocking."

True Seamless Mandrel tube is the recommended form for highly stressed applications.



Porthole Bridge tube cross-section showing weld joints.

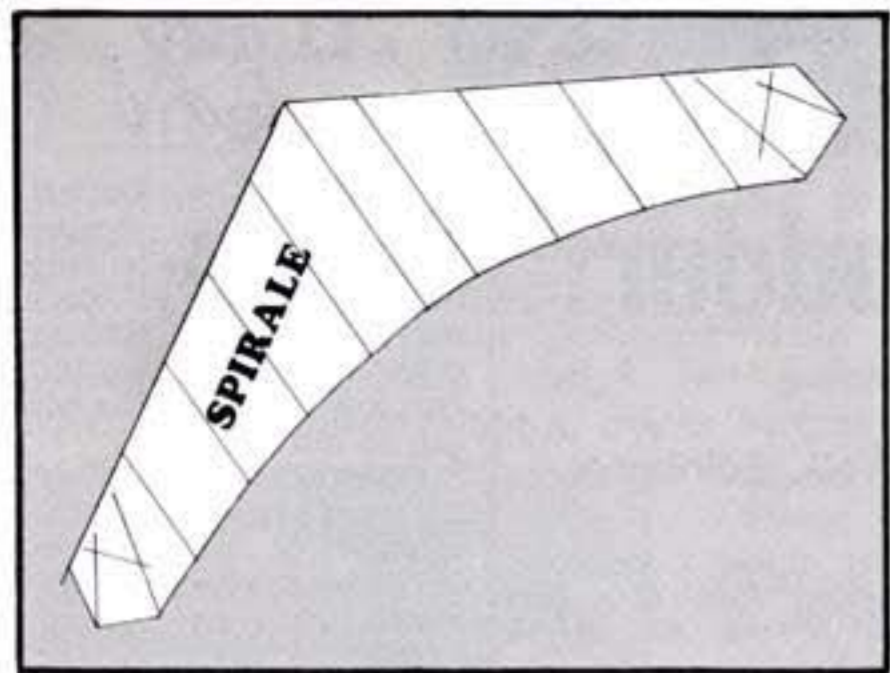


Cross-section of true Seamless Mandrel tube.

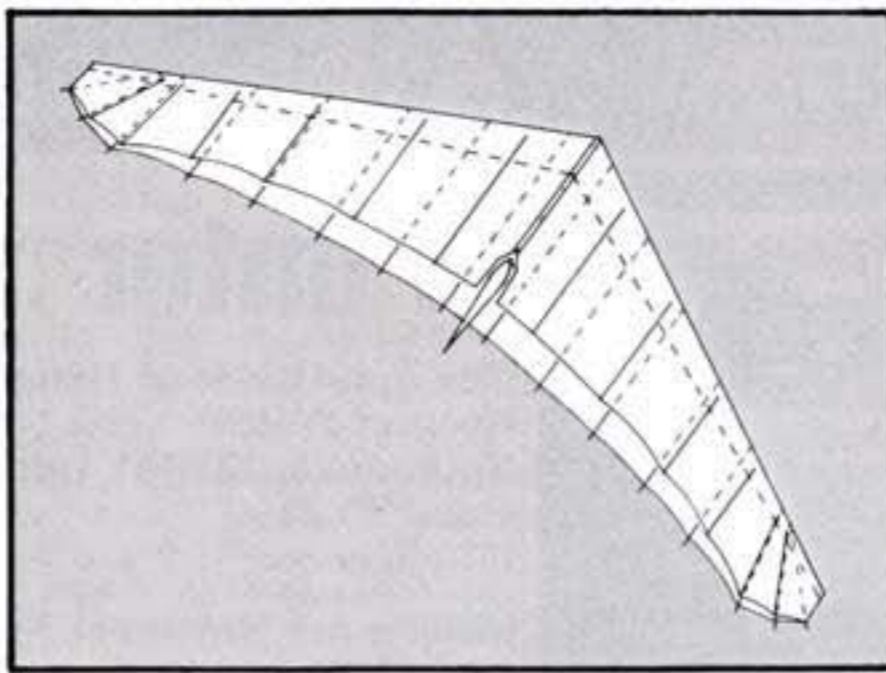
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The Spirale



The Mirage

**HUNGARY**

**XC as a way of life**

IT is a little known fact in hang gliding circles that way back in 1977, the world's first cross-country meet was held in Hungary.

Since that day, the sport has developed there faster than any other Eastern Bloc country to the point where — despite inferior materials and slightly outdated designs — the Hungarians can more than hold their own at international level, as proved at the recent European Championships.

The Hungarian team leader at the championships was Marton Ordody, an amiable, bearded man of around 30, exuding a love of flying and a thirst for such knowledge as might not yet have filtered its way through the Iron Curtain.

Indeed, such is the eagerness of the Hungarians to learn that the idea of a British team visiting one of the main Hungarian XC meets next year was quickly mooted during our interview and now looks set to become reality.

There are about 1,500 hang glider pilots in Hungary, of whom about 300 are licensed by the sport's governing body.

Hungarian airspace is fairly busy and major XCs are supposed to be notified — something that tends of be overlooked in day-to-day flying but not in preparing for major meets for which generous advance warning is required.

**FRANCE**

**Tecma Mirage**

TECMA — best known in the hang gliding world for the indispensable pip-pin — is entering the sail market with two new gliders.

The company plans to make two intermediate Spirales and one 80 per cent double surface Mirage a week from its factory in eastern France.

The new set-up stems from troubles at Pacific Wings, manufacturers of the Vampire, where Andre Chayrou has sacked his workforce.

Now with Tecma are sailmaker Joel Koechlin, test pilot and airframe builder Thomas de Clerck,

Christine Spohn, formerly secretary at Pacific Wings and a flier of four years' standing, and boss Michel Mallinoud.

The Mirage, which is slightly reminiscent of the Vampire II and owes something to the Phebus 82 in its wingtip design, has a floating bottom surface, 26 battens and tips the scales at 27kg. It will come in two sizes — 13.1 sq.metres and 15.2.

Christine claims test flights at the Salève have indicated a superior glide and sink rate to the Azur, combined with similar handling. Other vital statistics include a 124-degree nose angle and aspect ratio of seven for the small version, suitable for pilots of 50 to 70kg.

And that other vital statistic... it sells at 11,900FF, just the right

side of £1,000 at current favourable exchange rates.

The Spirale sports Bainbridge cloth, deflexorless wing, flexible battens and an aspect ratio of 5.8.

**Wanted**

*A compiler for Cosmopolitan. This feature was conceived by Michael Carnet who has since been forced to relinquish the job because of business commitments. Since then, I have compiled Cosmopolitan but my time too is scarce. Anyone willing to do Cosmo in return for negotiable "expenses" and free overseas mags should contact me by letter stating interests and qualifications.*

Stan Abbott



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This year's Hungarian nationals saw seven days of XC flying with distances around the 30-mile mark and no airspace restrictions. By a bizarre set of coincidences, the Nationals produced two champions whose performances could not be separated by so much as a whisker.

Andras Borovszky and Endre ("he has no brains but very good instinct," says Marton in the excellent English he has learned from the BBC) both ended the meet on 3,572 points. Their personal best distances were compared — both had made 161km and the sum of all their XC flights was also identical.

The sport in Hungary draws from all walks of life: "Every beginner gets a club-owned glider and they pay for this only a club membership fee.

"In the bigger clubs where they have good sponsors they buy the materials and manufacture half the gliders themselves, again working together as a team."

The most common gliders are the Denever, which has its origins in the Demon, and the Strucc (Ostrich), an Azur copy which should form the backbone of the team "fleet" at the world championships at the Tegelberg next year.

The predominant sailcloth is plastic-based and "ripstop" reinforced. Most tubing is Hungarian-manufactured silicon-based (rather than copper-based) aluminium alloy.

Club sponsorship is fairly readily obtained, particularly from the large agricultural co-operatives, and none of the team in France had to pay a penny for the trip which was also backed by the national aero club — in preference to sending a top aerobatic pilot abroad.

The first XC meet next year takes place in March, followed by the Gagarin Cup in April, the Eger meet (Eastern Europe's biggest) after the world championships, and the Nationals in August. A British team will attend one of these.

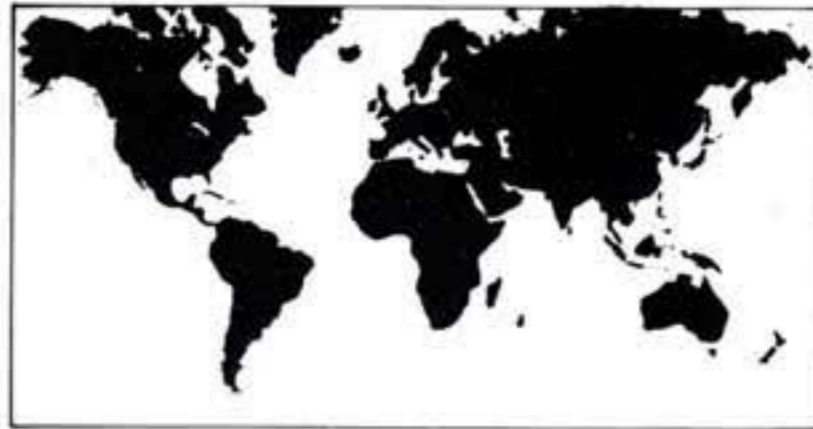
Research worker Marton claims to have been one of the first two Hungarian hang glider pilots back in 1972 — early ambitions of soaring parachutes by towing them high enough to thermal were abandoned in favour of Rogallo designs.

The nascent hang gliding dream quickly replaced sailplane flying as Marton's first love.

In 1978 the Eastern Bloc countries decided in Warsaw that hang

## COSMOPOLITAN

**The monthly Wings! round-up of overseas news, dos and views, compiled by Stan Abbott.**



gliding was dangerous, inferior to parachuting and conventional gliding and — horror of horrors — no more than a Western bourgeois hobby. It was duly agreed the sport should not be officially endorsed and Poland was the only country to abstain on the vote.

Each country — except East Germany where hang gliding is banned — promptly reneged on the decision, and bowed to the lobby for officially recognising the sport. That later opened the door to sponsorship in Hungary as hang gliding could now be recognised as suitable preparation for military training.

Now towing and power are major areas of experiment in Hungary which, says Marton, boasts similar flying conditions to Britain.



Marton Ordody

## NORWAY

**Don't forget the Moon boots, chum!**

NORWAY — land of the Mid-night Sun and spring thermals of the 19-up variety.

That's what Bjorn Elton promises at an April XC meet at Dokka, 110 miles north of Oslo next year.

Cloudbase then is between 6 and 9,000ft. ASL and the temperature gradient between the snow-clad hills and valley floors gives for a superb lapse rate with ten-ups common.

This year's Norwegian champ-

ionships at Dokka saw a best distance of 71km — into a head-wind.

The main take-off at Dokka is about 1,200ft. top-to-bottom and there are roads up all hills.

Either Dokka or Vogo — where one take-off is more than 4,000ft. top-to-bottom — will be the venue for the next European championships.

If the idea of big distances next spring appeals to you, just remember one other key fact... take-off at Dokka in April usually basks in sub-zero temperatures and you can expect it to be as hot as -20 or -30C at cloud-base!

## YUGOSLAVIA

**The big walk-up**

NEXT time you rub your aching calf muscles and ponder on the two gallons of sweat you shed lugging your CFX up 400ft. Buggins Hill, spare a thought for the growing band of hang glider pilots in Yugoslavia.

Some of them are so dedicated they will spend seven hours carrying to the 9,300ft. summit of the country's highest peak.

To be fair, says national team leader Zlato Vanic, that's not every airborne Yugoslav's idea of fun... most of the flying by the 100 or so pilots takes place in the northern republic of Slavenia where winter ski resorts offer their cable lifts to summer hang glider pilots.

Yugoslav participation in international events is heavily dependent on outside finance, but the team came 11th at this year's Europeans with Kos the highest individual placing 26th — not bad for an emergent nation.

The sport in Yugoslavia comes under the umbrella of the national aero club and organisers are currently lobbying the authorities in Belgrade to stop dragging their feet on ratifying proposals for regulation of the sport.

The best XC distance to date is about 30 miles.

## USA

**Spectra's new one**

CALIFORNIA's Spectra Aircraft is testing its new Sonic, successor to the distinctive tailed Aolus.

The Sonic clearly shows its heritage, sporting a similar Alien-type tail configuration to the Aolus, but without the bowsprit.

It is a 95 per cent double surface machine with free-floating bottom surface and a 150-degree nose angle.

Spectra spokesman John Reisig said the company aimed to get the design "just right" before marketing its new product.

*Glider Rider*

## NORTHERN GLIDER SALES

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All small ads should be sent to Ruth Kohlman, BHGA, 167a Cheddon Road, Taunton, Somerset, TA2 7AH, and marked on the envelope "Wings! ads".

For your own safety, if you are purchasing a secondhand glider, see it test flown, test fly it, and inspect it thoroughly for damage or wear to critical parts. If in doubt, seek advice from the club Safety Officer.

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**MOONRAKER '77.** Suit 10½-13st. pilot. Well cared for, new bolts, pip-pins etc. Seated or prone. Loves Carlton Bank. Purple/yellow sail, seated harness available. My first kite. Phone Paul on Durham 61299. £150.

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**TYPHOON 'S'** 180. Excellent condition, six months old, red double surface and tips, rest white. £875. Skydeck vario £165. 0539 27673.

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## mainair sports



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Full and part-time **TRAINEE MICRO-LIGHT** instructors for Eagle and Trikes at **BREEN AVIATION Ltd.** Previous experience preferred. C.V. please to L.Breen at Enstone Airfield, Church Enstone, Oxon.

## Personal

**Energetic** pensioner seeks sincere lady companion to share interest in triking, ferreting and old motorcycles. Must be sympathetically disposed to off-white gymshoes. E. Jessop Box 234 c/o Wings! or reply anonymously through these columns.

## CHRISTMAS!

Well it isn't far away, so why not let everyone know that you want a **WONDER-CLAMP** the versatile little clamp that has already been selected for use by the British Team! They are only £2.28 from your friendly dealer, or £2.50 inc. p&p from me (also friendly!).

If you want something still more exotic I can supply a wide range of good equipment. **DIPLEX** altimeters £23. Cocoon harnesses £79.50. **ARBEE** varios £107. **SKYMASTERS** £345. **MAGICS** from £965.

New Magics are coming to and going from, the Turfhouse with increasing regularity, so ring for the latest stock situation. You may even persuade me to sell my on rainbow Magic Two!

Second hand goods often sell before they are printed, so it pays to telephone quickly. Bargain of the month is a Cyclone 165 for £175, or a lovely mark 2 Cyclone 165 for £350. Triker's dream — a large nimrod for £800. Magic Comet 165 £750. Airwave and Chargus spares in stock **NOW**

**SIMON MURPHY,** Luppitt (040488) 685 Turfhouse, Luppitt, Honiton, Devon.

## FLIGHT BRIEFS

### Double challenge?

A slight correction for Wings! re Challenger project, writes John Hudson... although Bob Calvert aims to pilot the craft, his place is being hotly contested by Geoff Ball, our power manager and company test pilot. Geoff has proved to be an extremely valuable addition to our company and is a very competent pilot. He has also built the Challenger from scratch and it is he who will be making the altitude record attempts.

Bob already holds this record and has a number of other records he wants to go for. It looks as though Mainair may be forced to field two Challengers this year.

### Payment urged

Council endorsed a recommendation by competitions chairman Derek Evans that meet directors and chief marshals in sponsored competitions should be paid for their services, with a fee of £500 plus expenses for the director of a week-long meet and £250 for the chief marshal suggested.

Derek informed council competitions committee had sent some 30 pilots to competitions abroad this year.

The committee has agreed to run a manufacturers meet as the first event on next year's calendar, given sufficient manufacturer interest.

### Sponsorship

All sponsorship deals benefiting the BHGA should be concluded by Principal Executive Officer Barry Blore, Council agreed. Barry also urged individuals seeking sponsorship to advise him to avoid embarrassing conflicts of interest.

# Para Dave is Army champ

PROBABLY the most famous Army hang glider pilot (and the current Army Champion) is the man you saw on TV, venting his wrath on the Argentinians for having scattered unrecorded mines around the Falkland Islands.

It was him and his men's unhappy lot to make the first attempts to clear them.

Another, though not so identifiably famous, is the guy who raised the Union Flag again over Port Stanley after its recapture.

Maj. Rod Macdonald RE and CSGT Dave Fenwick, PARA made it back to Britain with a couple of weeks in which to get hold of their "new" gliders and practice for the third Army championships after their three month sabbatical from the sport.

It so happens that Dave Fenwick took away Rod's title and several others, to become overall (services) champion, winner of the P2 class and, of course, Army hg champion.

He left for Brecon loaded with the NATO CARS of Bridgwater Trophy — a magnificent 15" silver cup, the Rhine Area Rose Bowl, inscribed pewter tankards for both, and a silver goblet for the P2 class.

□ □ □

The championships were held on Dartmoor with Mike Atkinson as Competition Director. The Western Counties HGC gave us their blessing and their Chairman Colin Graham took part. Neil Atkinson and Carl Tomkins gave sterling service as wind dummies.

On day one the wind was ENE, light with low cloud making Winter Tor the obvious choice. Mike organised a simple two pylon, timed ridge run, flown in groups of four.

For the less skilled and those odd P2s who dropped out of the narrow lift band, there was a large target LZ and an alternative scoring system.



Rod Macdonald overshoots the score line — pic Pete Osborn

### by Jim Taggart

Later, the weather changed and it got too choppy on the ridge for our Students Class, so Open XC was declared.

Apart from Neil and Carl, only five pilots left the ridge, with three making 2½km, one covering 3¼km and Dave Fenwick flying 9.6km into Dartmoor's hinterland, using the marginal conditions in grand style, netting 106 points which put him well in the lead.

Television South West came and interviewed our novice novice — he'd finished his P1 course at the AHGC that Wednesday and flew a Stubby with wheels — cross-country on the Sunday, too.

□ □ □

Submarine Commander Paul Hind flew for the first time since his P1 course a couple of months ago; flew his Super Scorp for the first time; soared it for the first time; top landed for the first time and went cross-country (twice) for the first time.

An extra-ordinary chap, the adventurous courses he's done during his Naval career reads like the Sports Council index and he seems to be an Instructor in most of 'em.

Day two saw very light winds from an overcast sky, NE but threatening to back north later in the day saw us back at Winter Tor for a bash at "Bob Mackay's Timed Precision Flying task.

Nil-wind take-offs were the order of the day, several experts modifying uprights in their attempts to get away.

Day three was cross-country "for all", with a light drift but clear blue skies and the promise of a hot sun.

What a magnificent view spread out below us at Corn Ridge.

The task was simple. Either, head for the water treatment works beyond Sourton and over 1½ miles away or, get as far as you could in whichever direction you choose.

Colin Graham wind dummied and flew all of ½ mile before retreating to land back at the base of the ridge. The wind was drifting north and an occasional teeny "thermal" came through, giving Carl lift across Sourton Tors and into the prescribed LZ by the works. A trickle of pilots launched to follow him.

Allan Smith launched and, incredibly floated on and on and on, well over the works and then down the valley beyond the A386. Unfortunately, this put him on an arc from take-off so his point-to-point distance didn't increase. But what a superb flight from the only league pilot in the Services.

The 3.00 p.m. deadline loomed and all the untried experts were forced to go. They all chose to go left and the skies above Southerly and Lake filled with hang gliders, a flock of gaudy coloured wings floating a bare 2½ — 3.8km in the soft conditions. We found later that EVERY competitor had flown cross-country, students upwards.

### Team results

(4 to count)

1.	Army	1309.1
2.	RAF	1280.6
3.	Navy	713.4
4.	Civilians	687.3

(Only 3 competitors)

### INDIVIDUAL RESULTS:

1.	D. Fenwick	A	P2	Typhoon	355.6	Overall, Army, P2 class
2.	A. Clifford	RAF	P2	Typhoon	342	Best Guest, 2nd P2
3.	N. Higgs	CIV	P2	Nimrod Up	335.2	2nd guest, 3rd P2
4.	J. Teggart	A	P2	Magic 1	323.5	2nd Army
5.	R. Moseley	A	P2	Demon	321.4	3rd Army
11.	H. Wigham	A	P1	S. Scorp	286.7	1st P1 class
18.	T. Beese	A	P1	Magic 2	251.0	2nd P2
19.	T. Searle	N	P1	S. Scorp	233.0	3rd P1
24.	P. Hind	N	Stud.	S. Scorp	127.1	1st Student
27.	G. Ellis	RAF	Stud.	Vortex	97.0	2nd Student
33.	J. S-Barron	A	Stud.	Cherokee	55.7	3rd Student

# Silhouette probe goes on

A fuller account of the fatal accident involving a Skyhood Silhouette on September 18 is now available.

**Attention Skyhook Silhouette owners**

Following the fatal accident at Nont Sarah's on September 18 last Wings! all Silhouette owners are advised NOT to fly this glider pending the outcome of an investigation into the cause of the accident. Owners are meanwhile advised to check the batten plan against the batten drawing provided by Skyhook. If they have not got one, a new one will be provided free of charge.

Skyhook Ltd, 100 Mill Clumber Rd, Nottingham, Notts. NG11 6JF.

The accident, at Nont Sarah's, Pennines, led to a notice being sent with last Wings! warning Silhouette owners not to fly their gliders pending the outcome of investigations.

The decision to request Skyhook to advise the "grounding" also took into account another incident reported in June Wings!, in which a Silhouette tumbled in similar circumstances to the Dennis Searby fatality.

The following account should not be taken as prejudging official investigations.

Eyewitnesses Gordon Thorne and Paul Woolman told how Mr. Searby, 38, was tracking westwards along the southwest face of the southerly-facing bowl when he gust stalled about 70ft. above the "gully" which marks the point where the main Huddersfield to Rochdale road

comes to the lip of the bowl, a beauty spot owned by the National Trust which was busy with sightseers when the accident happened.

On stalling, Mr. Searby appeared to pull on speed and the glider rotated round him, impacting with the end of the wall where the road reaches the edge of the ridge. No attempt to "push out" was seen.

Other fliers took turns administering heart massage and the kiss of life, but were unable fully to revive him.

Although said at the time to have been a flier of some three years' standing, he was known to few Pennine or Dales club fliers and is thought to have had very few hours' experience, most or all of it at Nont Sarah's. His glider appeared in almost mint

condition. He lived at Huddersfield.

Reports as to the conditions at the time have been conflicting. Jerry Whitehouse commented: "No way would I describe the conditions as radical."

But other pilots had apparently landed as an approaching front was shifting the wind off the hill to the west and the accompanying fall in temperature was making thermals punchier.

Some pilots commented that by the time the accident happened, the wind was well off to the west and coming over the smaller March Hill, a notorious direction for Nont's. It had also freshened somewhat from the steady 15-20mph to 20-25, they said.

Meanwhile, investigations continue and, while the glider has not yet been rig-tested, Wings! is assured it will be at the earliest opportunity.

Skyhook's Len Gabriels said earlier drop tests in Germany had shown the glider to be pitch-positive and he urged owners to check their battens against the batten plan provided.

• See leader comment, page 5.

## New addresses

Three BHGA councillors have changed address: James McMenemy... now 4 RTR LAD REME, Bhurtpur Barracks, Tidworth, Hants SP 9 7AS. Tel (day) 0980 46221 (x2716) and (eve) 0980 46147. Mike Watson... now 5 Thompson Rd., East Dulwich, London SE22. Tel. 01 299 1199. Jim Taggart... now AHGC, Sennybridge Training Area, Brecon, Powys, LD3 8PN. Tel. 0874 82366.

## Comp venues

The next world championships will be held in the Tegelberg area of Germany from June 5-19 with a pledge that the emphasis will be on "state of the art" cross-country flying. Norway will host the 1984 European Championships and France the 1985 World Championships.

# Mainair prize crosstube word

## CLUES

### ACROSS

1. Insect as a bird of prey — all flyers want to do this! (3,4,2,5)
6. Hang from it, or the gallows contain it. (7)
9. Owens Valley flights? (4)
11. Stop! makes a decision to change. (4)
13. Bullfighter's nightmare. (4)
14. With Argentine currency he makes fables. (5)
16. Paris tan, a French adherent maybe. (8)
20. Your walk to get into a field. (4)
21. Crosscountry start with a fig root? (2,3,2)
22. Best direction to think. (2)
23. A triange in Italy. (7)
27. Is needed to land well, we hear. (5)
29. Everything. (3)
30. You know who! (2)
31. Alert Vic! he should not be at that attitude. (8)
32. Tip into one of these. (3)
33. The ocean we fly through. (11,3)

5. Get away — from the blades, especially if landing. (6,3,5)
6. Hard to find. (4)
7. That world of which flying is the most important part. (8)
8. Shortened operation. (2)
12. Dotted true airspeed. (3)
15. Pans to break. (4)
17. Talking rubbish. (3)
18. Creative thought. (4)
19. Beginner's glider's handling. (6)
24. Trendy type of madman. (5)
25. Dotted adiabatic lapse rate. (3)
26. A constellation made mainly of iron ore. (5)
27. A criminal or outlaw. (5)
28. Greek Beginning. (5)
30. Wise men of the East. (4)

### Thanks!

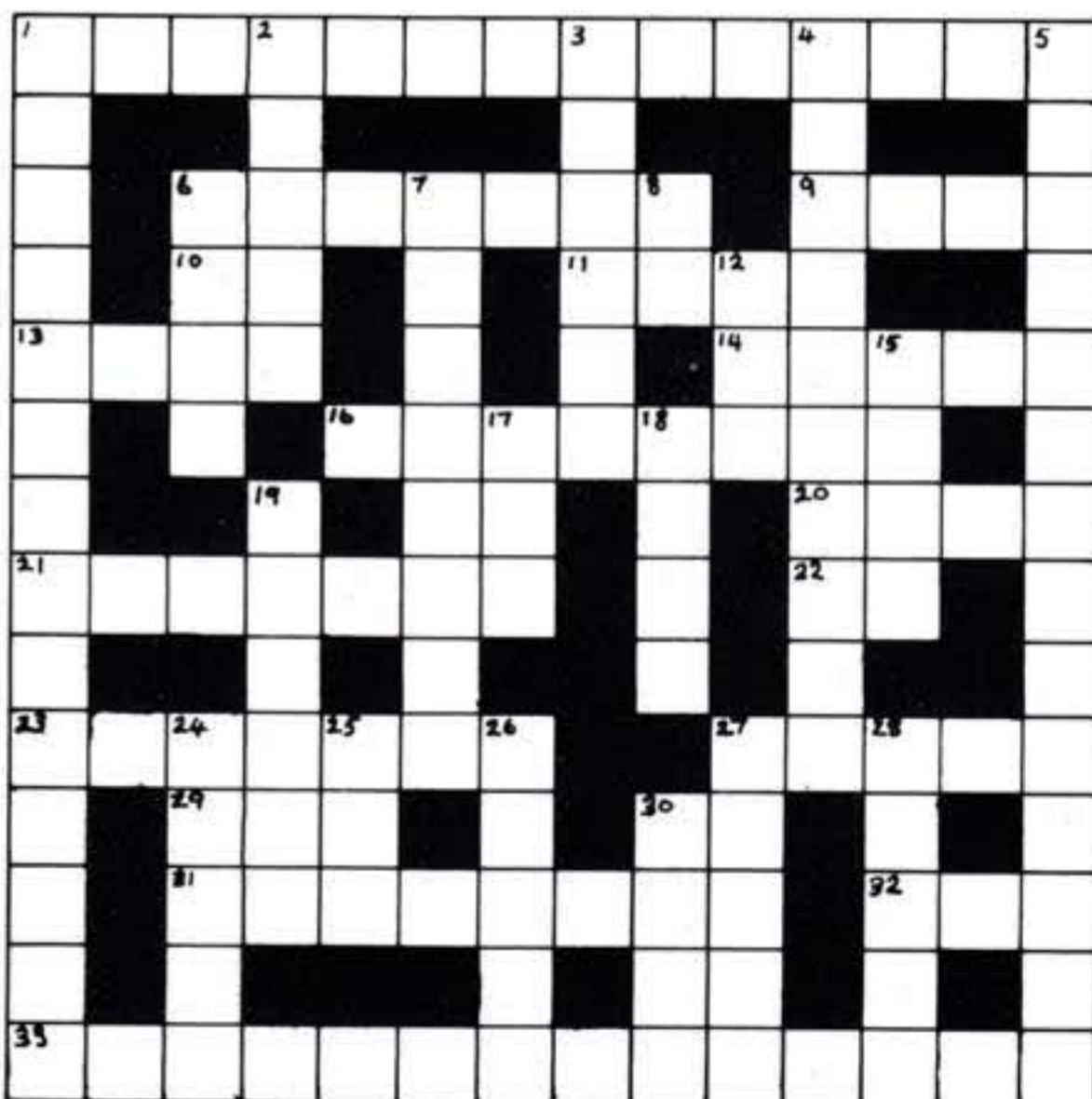
...to John Hudson and all at Mainair for extending this popular "sponsorship".  
...to all those who have compiled puzzles — the supply has now run out so any budding compilers, get to work now! £5 paid for puzzles published.

### "lan"

I can find no address to which to send your fiver. Please contact me.  
Last months winner and solution will be published next month.

## No. 13 by lan

Send your entries, by November 19 to: 72 Hartley Ave, Leeds LS6 2LP. Mainair Sports of Rochdale will forward their catalogue and £10 credit note to the first correct solution selected at random from all entries.



## Lost and Found



LOST at Combe Gibbett, earlier in the year, 'Lindsay Ruddock' vario. Grey with digital read-out. If found please contact Mike Hibbit. Tel: Reading (0734) 864543

## Power



**TRIFLYER 330** Twin-cylinder. Immaculately built, ultra-reliable model. 10 hours only. Now over £1100 as kit. Accept £900. Telephone Grange-over-Sands (Cumbria) 4220.

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**DEMON 175**, almost new, and **HIWAY SKYTRIKE** for sale. Excellent condition and will sell to any competent flyer, who makes a fair offer. Ted Battersea 64, Bekesbourne Lane, Littlebourne, Nr. Canterbury, Kent. (0227) 78614.

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**TRI-PACER SKYTRIKE** 250cc ROBIN engine. Good condition. Registered G-MBDW. £650. Reason for sale — going dual. Tel: evenings Bfd. 0274-630494.

G—MBCB Southdown Lightning and trike 250cc Robin engine. Superb condition. Going two seats. Any reasonable offer accepted. 070131 263 (Sussex)

## Schools

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*Details — 2 Denton Avenue, Leeds 8. Tel. 662518*

## Miscellaneous

The B.M.A.A. is the Association for all seriously minded MICROLIGHT AVIATORS. Our magazine FLIGHTLINE is full of the latest information. For further details please send s.a.e. to Secretary BMAA 20 Church Hill, Ironbridge, Telford, Shropshire.

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9. Aircraft must not be depicted in situations which contravene Air Law, the B.H.G.A. Code of Practice, or commonsense.
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**STANDARD ROGALLO**, 18ft or 19ft WANTED for my son (Skyhook 3A or 4A preferred). Must be in good condition. EXCHANGE for: fibreglass slalom canoe, fully buoyant, complete with paddle and skirt! All in good condition. 051-427-8178.

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**SWOP**, a Fujica SLR 50mm lens camera with leather shoulder case, used only once, for a good working audible vario. Phone Grangemouth 0324 473409.

**WANTED SEALANDER or STRIKER** in mint condition, very low airtime. Also, vario, altimeter, ASI. All must be in good condition and reasonably priced. Tel: 01-852-0763.



Fédération Internationale Aéronautique



BHGA



Member of the Royal Aero Club of the UK

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).

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

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

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

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

The Editor reserves the right to edit contributions.

If your Wings! does not arrive, or if you

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

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

## The BHGA Council

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

**Members**: David Bedding (08444 — 7186); Diane Hanlon (051-652-5918); John Ivers (049-525-4521); Mike Watson (01-299-1199); Terry Prendergast (029673-8033); Jim Taggart (0874-82366); James McMenemy (09804-6147).

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cont p25