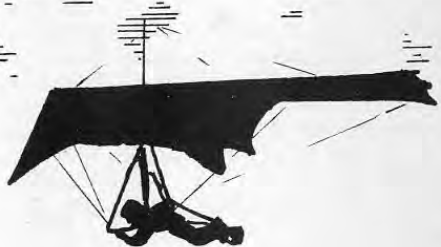


WINDS CK

MAY 1978

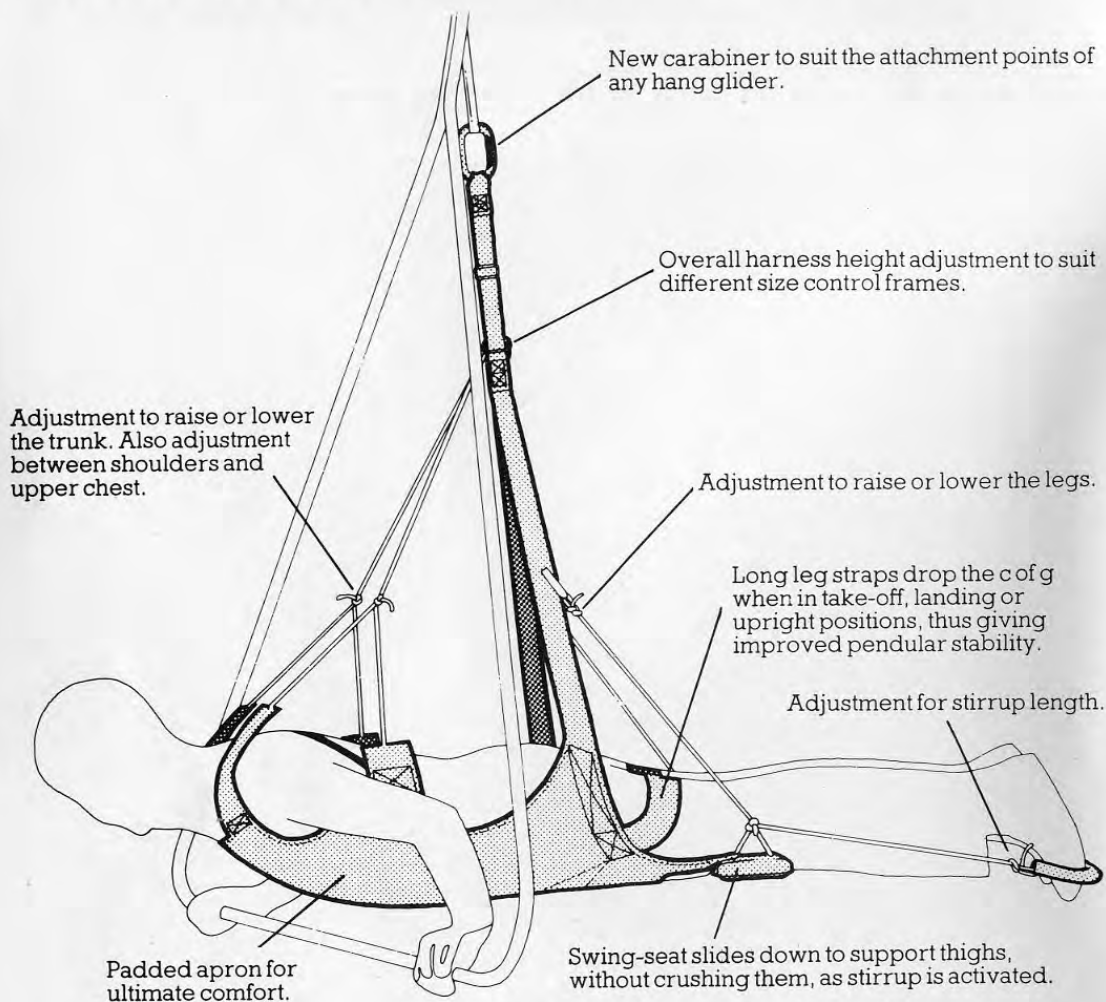
As always we stand at the threshold. It's all beginning to happen. Some will catch the wind, and a lot will be left behind. Perhaps there is a knowledge that evolution demands we know. Somehow kites seem to represent a valid future goal. For those who become involved there is the feeling of something unique and superior. The risks are great but the rewards are greater, and the only place to start is at the beginning.

Hang gliding is a reality, not just a dream. It would be nice if it could come to all.



Dedicated to Paul, from all who knew him as a friend.

Hiway have been producing and refining the design of prone harnesses for over 2 years.

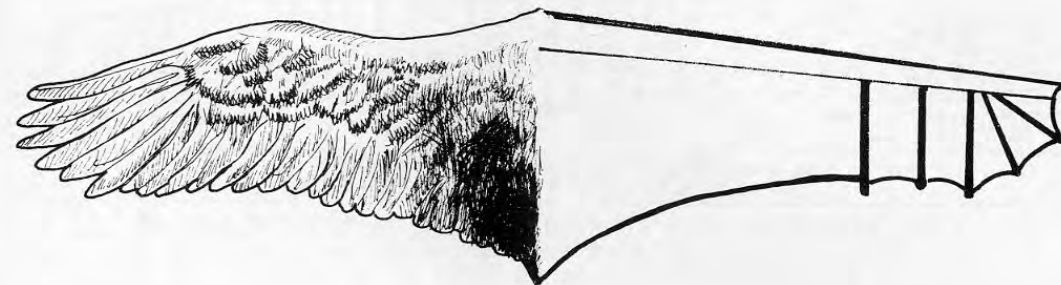


Just as no two people have the same fingerprints, so it is with bodies. Hiway have found that the secret of comfortable prone harness design is to build in adjustment points so that the geometry of the harness can be exactly suited to the individuals requirements.

The harness is of the stirrup type because we believe the movement of the legs should be independent of the angle of the body, unlike the knee hanger type. This gives you the freedom to adopt a far wider range of flying positions – a must for prone flight.



Send height, weight and a cheque or postal order for £47 (incl. VAT and postage) to **Hiway Hang Gliders**, 27-35 Bernard Road, Brighton BN2 3ER.



“For once you have tasted flight,
You will walk the Earth
With your eyes turned skyward;
For there you have been
And there you long to return”.

Leonardo da Vinci

**Paul, Editor of Windsock was tragically killed
whilst flying in Cornwall on May 18th.**

BEACHY HEAD BEACHY

the unseen force

MIKE ROBERTSON GIVES US A POSSIBLE SOLUTION FOR THOSE STRANGE DAYS AT BEACHY HEAD CLIFFS WHERE DESPITE APPARENT GOOD CONDITIONS AT TAKE-OFF POINT, A SOARING FLIGHT IS NOT POSSIBLE

Not much chance of soaring today, you surmise as you 'drag yourself out to Beachy Head on the 'off chance'. Hardly a zephyr moves the tree tops, yet the seagulls pin-wheel lazily around on nothing. You turn the corner at the junction and peer, just to make sure, but no one is soaring. On arrival a cluster of rigged gliders has formed just behind the take-off point on the cliff take-off bowl. A full blown wind-up session is under way, as some lightweight is goaded to the take-off ramp amid suppressed giggles, and assurances abound that of course he will not land at the bottom of the cliffs, but rather, rise and soar, no one of course actually believing this, otherwise such courtesy in take-off allocations would not be displayed.

The unknown wind dummy walks his glider off the ground, and contrary to expectation, and almost to the horror of the wind-up squad he does indeed rise with staggering ease to about 6 or 7 hundred feet above take-off, nicely silhouetted against the blue sky. How nice of them to let me take-off first he muses, and wonders why everyone has suddenly remembered that their harnesses are locked within their cars, and are scurrying back to the car park. Soon the cliffs resemble for the most part, a wildlife film on vultures, concentrating mainly on their habit of circling en masse above their dying victim, in ever decreasing circles and increasing numbers.

Several weeks later, some of these lucky fliers will revisit Beachy Head. This time there is no doubt in anyone's mind about the soaring possibilities. After all the wind is blowing a good 15 - 20 knots, and the seagulls are soaring 'effortlessly' 100ft. above take-off. The sky is overcast and to those who may have noticed, the clouds are moving south, but then who cares, because

the wind at take-off is blowing a steady south easterly. A check at Newhaven on the way will support this observation, if there were any lingering doubts.

After a frenzied rigging session a lucky pilot finds he is first rigged, how glad he is not having had to rig one of the new fashionable superships. He marches confidently to the take-off point and demands front wire assistance from the nearest likely person. He takes off, not even bothering to take his sail-velcros, so good is the lift bound to be, but finds himself struggling to maintain take off height, then plummets over the lip of the cliff with not so much as an upward lurch of the glider. 'The tide is in' he muses. Never mind, one beat along the cliff will suffice to retrieve the situation. Funny thing this, the wind is off to the west, never mind turn downwind towards the bowl end of the cliffs, he will gain height that way. No chance, the wind also 'feels' off to the East. By now he has sunk below the field at the bottom, and now a chilling prospect awaits. Within two minutes of take-off he lands in the foaming sea, straddling boulders if he is lucky. No velcros either, oh dear! By now these two different days will have rung a very loud and distinct bell in the minds of many of those reading this article. Why should this happen you ask? as to the uninitiated the sequences just related simply do not 'seem' to match the conditions.

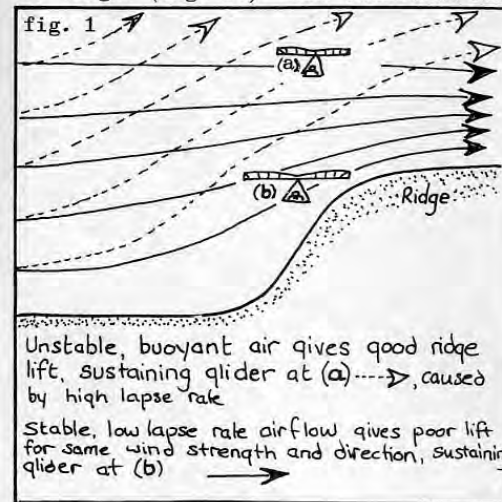
It should now be apparent that mere wind strength and direction are not the only factors governing the lift intensity. I have chosen Beachy Head as an example, because it is at this site that these phenomena are most pronounced. However these effects are apparent at every site

on every day to a greater or lesser degree and will change throughout the day, often within the space of minutes.

I will assume that the wind direction is blowing directly up the slope throughout the explanation, as this article does not concern the obvious effects of direction change, unless specifically mentioned.

The most direct factor governing ridge lift for a given wind strength, is the lapse rate of the air, ie. its reduction of temperature with increasing height. On a day with a high lapse rate the air will be accelerated upwards once the ridge has displaced it in the first place, independent of the convection and thermal generation which will be apparent at the same time. This is why on a good thermalling day the ridge lift will seem disproportionately good for the wind strength early in the morning before any blobs or thermals have started to form (fig. 1a) because the air does not resist upward displacement. Hence the first illustration deals with a good lapse rate day with very little wind but which in consequence forms adequate lift, this being exaggerated further by convection phenomena arising from the sea and any exposed rocks, pools and the cliff face itself. This represents an extreme example, where the lift is so good that you can hardly go wrong. fig 1a

Conversely a situation where the lapse rate is very poor, the wind will generate relatively poor lift since the air is inherently sluggish and does not wish to rise any more than is necessary to clear the ridge. (fig. 1b) This condition can

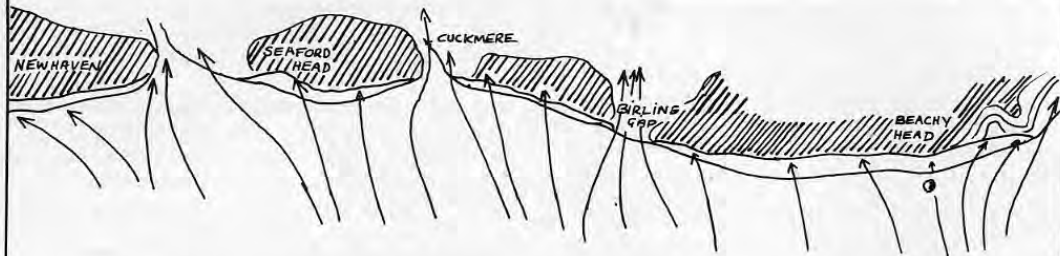


arise after a prolonged spell of hot weather associated with a persistent anti-cyclone, where the air temperature is high but a low inversion is present and the air is very stable, ie. it does not drop in temperature with increasing height. The horizon will be indistinct, due to the high concentration of smoke and dust particles present as it has probably not rained for several days, and there is no convection to carry these particles to a greater height, and disperse them. People will be flying in tee shirts and moaning about the minimal height gains being obtained, despite the 15 - 20 knot wind blowing. This represents the opposite extreme of the lift distribution above a wind blown ridge. The height gain difference for the same wind strength may show a 50 - 75% with the good lapse rate situation without assistance from the thermals present.

Relating these effects to the Beachy Head example, other factors come into play. The lapse rate, and therefore the buoyancy of the air, dictates the way the air behaves when it meets the cliff face. Given a south south east wind with a high lapse rate and therefore buoyant air, The path taken by the wind would take it straight up and over the cliff face, without change in direction, as the buoyant air experiences no resistance to vertical displacement. The same wind direction with a low lapse rate or stable air resists vertical displacement and therefore deviates its path in an attempt to flow around the obstacle posed by the headland at Beachy Head, so that at the take-off point the apparent wind may be southerly (fig. 2). I have exaggerated the deviation for the sake of clarity. This worsens the ridge lift in addition to the reduction caused by the low lapse rate, and on take-off, a glider will sink into the zone in the take-off bowl, where rotor formation is likely, as opposed to the high lapse rate situation, where the glider rises effortlessly above that zone, so further worsening the chance of a soaring flight. The seagulls however may be soaring, since they can flap their way up into higher more usable lift band, and if we could actually join them we could also soar, but would not be very high.

In the summer, when the southerly wind is due to sea breeze, a similar effect will be noticed, but for a different reason. The sea breeze only exists up to a limited

fig. 2



Arrows show deviation of wind direction as it flows around obstacles posed by the cliffs, to funnel through the estuaries, and deflect past Beachy Head. Which happens with a stable airflow. With an unstable airflow, the wind rises unimpeded up the cliff face without changing direction.

height, about 400' - 500' and Beachy Head is too high for the breeze to rise over, and an even more pronounced deviation, a wind direction occurs, giving rise to the effect where there may be no sea breeze at the Head, when at the same time a moderate wind is blowing at Newhaven, and coming from the south east. (fig 2) Further complications arise at the take-off bowl, since the air blowing along the face of the cliff will change direction on meeting the bowl, so giving the impression that the wind is blowing directly at the take-off point, (fig.4) and due to the stability of the air, will form a rotor much more readily than if it were unstable, (fig.3) due again to its resistance to the upward displacement.

A further clue to a stable situation, may be evident from low lying clouds moving in a direction markedly different from that of the observed wind direction at the surface, due to the 'squashing' effect in the stable situation of the layers of air. In the unstable situation, the same direction change would occur over a much greater height.

I hope readers will take these factors into account, and by observing the overall situation before, and on arrival at Beachy Head, be able to recognize the nature of the lift conditions likely to be encountered, than would otherwise be the case, and gain an improved understanding of lift conditions at other sites

MAY THE LIFT BE WITH YOU

fig. 3

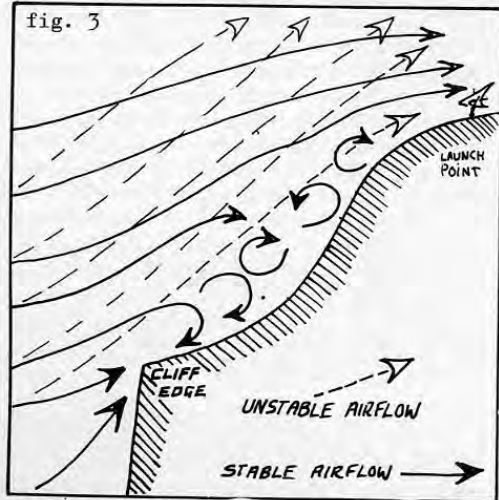
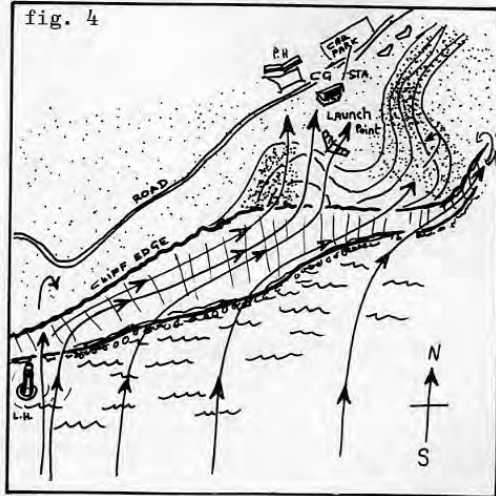
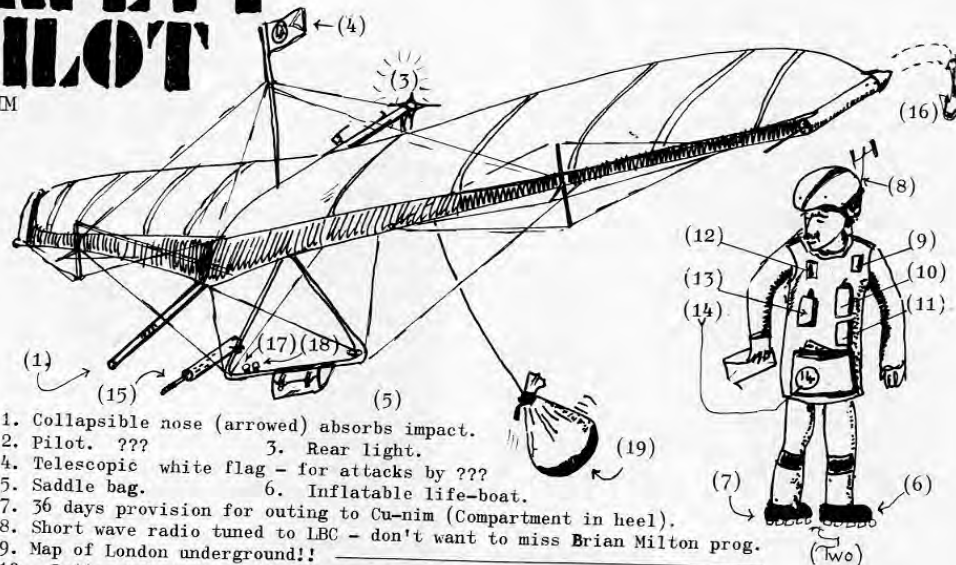


fig. 4



SAFETY PILOT

BY KIM



1. Collapsible nose (arrowed) absorbs impact.
2. Pilot. ???
3. Rear light.
4. Telescopic white flag - for attacks by ???
5. Saddle bag.
6. Inflatable life-boat.
7. 36 days provision for outing to Cu-nim (Compartment in heel).
8. Short wave radio tuned to LBC - don't want to miss Brian Milton prog.
9. Map of London underground!
10. Letts pocket diary (with map of world at the back) useful?
11. Letter from Queen - explaining who you are should identification be doubtful.
12. Sunglasses.
13. Sun-tan lotion. See Lester Cruse your local stockist.
14. Back copies of WINGS! (Optional best copies of Penthouse)(What's wrong with WINDSOCK)
15. Telescopic machine-gun incase of attack by aero - modellers.
16. Rocket for peristant larger models.
17. Control button for flag (See no. 4)
18. Control button for fire arms (15 & 16)
19. Weight to prevent glider flying ????????

After a long winter of development we are at last in production with our new high-performance glider for this year, the Moonraker '78. Our efforts took us through many different set-ups including a long session with a 100% double surface machine which looked terrific and showed a very good L/D but handled like a pig. Roll was non-existent and pilots found it unflyable. We may resurrect it at some time in the future but for now it is stored away.

We have felt for some time that gliders are becoming over-cluttered with wires and bits all over them. The '78 is a relatively simple machine relying on an exceptionally meaty airframe for its basic strength. Now that so many pilots are experiencing the thrill of thermal flying they are also realising the enormous forces present in the atmosphere and need the reassurance of a strong glider. We are very pleased to have some of this country's top competition pilots moving

onto the '78 including to date Johnny Carr Lester Cruse, Mike Atkinson and Jan Ketelaar. Johnny's 14-mile flight from Devil's Dyke to Newhaven, mostly across-wind, was a terrific encouragement to all the boys at the factory who had been working so hard on the glider.

We have been using six prototypes in the hands of a host of different pilots. The feedback is invaluable although it highlights the fact that every pilot is very much an individual with his own ideas. Wing loadings for the new machine are recommended to be between 1.2 and 1.4lbs per square foot, far cry from the more normal 11b per square foot.

The '78 is extremely light to fly and calls for a substantial modulation of most pilots' inputs. One feature of the handling that most people find reassuring is the fact that the machine will roll out into level flight as easily as it will roll into a turn.

Demo gliders are available, so anyone interested should ring for a trial flight.

FIRLE RULES O.K!

Everywhere I go on the hill, people keep asking me - what about these site rules at Firle? "Pea~~shy~~ to get the site back again, man. But all this hassle carrying your glider up the hill, no car parking, all that business - fergeddit!"

Oh hell! Is there ANY was of getting through to SHGC pilots that THIS IS IT. If we blow it this time at Firle, that's it. Final. Finish. Kiss it goodbye. Everytime you forget yourself; everytime you push it just that bit too hard in marginal conditions; everytime you diplomatically ignore the fact that the guy next to you hasn't paid his membership - there's another nail in the SHGC's coffin. Firle is the key. If we show that we CAN do it right, if we ARE responsible, if we CAN coexist with the other, more powerful interests which want the South Downs kept for more traditional uses, then other sites will start falling to us. If we can't, well ...

Firle is without a doubt one of the finest sites anywhere. It's worth taking a bit of trouble over. As one who has seen just a teensy bit of the ups and downs of the site negotiations over the last few years, let me assure everybody that NONE of those rules was agreed to by a wishy-washy committee who couldn't say boo to a goose - turn to the list of committee members at the front of this magazine. Most of us, you'll see, are fairly hardcore fliers. We have no interest in rules for their own sake. But we have to recognise that Firle is a special place for people other than hang gliders. Ramblers, hikers, birdwatchers, horsemen - all have their own pleasures and rewards out of the place, and they are just as vocal and upset when they are done out of their pleasures as you would be. AND they have the big advantage that they're sanctified by time and custom - we are NOT, therefore we have to work harder.

Actually, when you look at the rules, you can see the common theme quite easily. It is to minimise the ecological and visual effect of hang gliding at Firle, and to ensure that non-fliers can get a look in at the car park, which is NOT the property of the Firle Estate - it is leased to the County Council as a recreational area. So

in the summer, leave your car at the bottom and WALK - it takes no longer, and makes you fit and healthy. Don't camp up there, and don't block up the road. When you get up top, remember that a rigged glider can be seen for MILES - drop it flat, if you aren't going to fly immediately, and keep it well back from the ridge. Since this year we have a very difficult bottom-landing area (we're working on the tenant farmer!), the site is restricted to EPC holders, but since it's soarable on an intermediate kite in most conditions if the wind is over 12 mph this should be okay - it's the easiest place to top-land I know of. If you go down, you're in trouble - crop landings will be viewed with disfavour and a mistake while blob-hunting could cost you £2, a mention in the mag, and the sickening certainty that you've helped us one stage nearer to losing it. It is actually not difficult to land on the hill side of the fence - if the wind is that light at the top it's flat calm below, so just stuff it in, and the odds are that it'll be all right.

No flying schools, no beginners (obvious really). No day memberships - with a 30-kite limitation, paid-up SHGC members get priority. That site costs us £1000 per year. One thousand pounds. Twenty pounds a week. And it's worth it. So don't get uptight if people ask you to show membership cards - they're helping the club. Remember we've only got take-off rights to Little Peep, although you can use the whole ridge once you're up. Don't land midway and take off again (I saw you, Goepel!), and I will personally strangle anyone I see taking off from the car park area - if any one thing will blow it for us, this is it. Bottom landings for people in trouble we can handle - no blame attaches, except a certain amount of censure for lack of judgement or ability. But taking off at the car park has no excuse - it's a deliberate, conscious two-fingered gesture to all the people who have worked so hard for this site over the years. The Committee want to know if anyone does this, so that we can take appropriate action.

GO TO IT
FLY, FLY, ENJOY, ENJOY!
BUT THINK!

IF CHRIS JOHNSON CAN DO IT SO CAN YOU

CHRIS JOHNSON HIWAY'S SAILMAKER AND ONE OF THE PROMINENT ORGANISERS INVOLVED WITH SENDING THE BRITISH TEAM TO THE WORLD CHAMPIONSHIPS, GIVES ENCOURAGEMENT TO THOSE WHO ARE CONSIDERING DISTANCE AND THERMAL FLYING THIS COMING SUMMER

It was Monday, 10th. April, and I was competing in the last day of the League competition. The first two days had not gone well for me (all the usual excuses!). The morning was cold - it had snowed in the night - and the wind was North-West, fresh. Tony Fuell had set the day's task; for me it was to be the start of a very important day. We had to fly from Devil's Dyke and land as close as possible to a wind sock set 200 yards short of the traffic lights at the crossroads behind the Dyke. Rules were very strict: All landings had to be made on the East side of the road on the grass strip which is about 100 yards wide and which runs most of the way to the crossroads; no landings to be made in any fields or private property.

I managed to sign on and get my Hiway Morpian into the air first. My take-off was into a fresh wind with one or two large holes but conditions looked really good. I had the sky to myself (THE FIRST TIME AT THE DYKE FOR YEARS) but not for long - Bob Calvert was hot on my tail. I was in ridge lift at about 150 half way out to the road when I ran into my first blob. Up I went, I was going for 750' before I would make the down wind run, I had told myself. I had no vario only an altimeter.

I made 500' with Bob coming up fast. I made 750' just over the back of the hotel, turned downwind determined to beat Master Calvert at something. The run was easy, straight through more blobs to land at the crossroads just as some of the league pilots arrived by car to check the landing area. Man, I was really full of myself - star at last, and all that rubbish. The second pilot to arrive at speed, was in fact Graham Slater thinking he had been chasing Calvert! Bob landed soon afterwards. Steve Hunt took us all back to the Dyke. After a dark brown lunch I was back ready to fly anywhere: "I'm going to fly to Brighton Racehill!" I said to John Ievers, but he just smiled.

The sky was full of flyers still doing the competition task when I took off so I kept myself well out of the way. After ten or so minutes that was no problem because

along with Andrew Hill, I blobbed out at around 1000' to leave all the others far below. By the time I reached the crossroads I had 1600'. Bloody marvellous! Now where's the Racehill? I couldn't find it, but I could make out lots of good landing places so I pressed on. I now had 2000' on, and a big grin.

Without a vario it was difficult to tell if I was going up or down, but a look every couple of minutes at my altimeter told me I was still gaining height, my best altitude was 2700'. Soon after reaching this height I ran into snow and hail. The noise of the hail on my helmet and sail made the cork move a bit, and I decided to run for the Racehill which was now visible to the South. Ground speed must have been around 50 -60 mph. I'd had enough of the hail and cold and, now in sink, was running for the football pitch East of the Racecourse.



I landed at 1.45 Having spotted me over the factory, the Hiway boys joined me in time to see Graham Slater fly over the Racehill at about 2000' heading for the coast. We're not sure if he was lonely or he realised the Walmer Castle (a pub) was still open, but he turned into wind and flew back to the landing field, from which we departed together for the Walmer.

The point of this article is not just to brag about my first crosscountry (a modest 6½ miles - not quite a Johnny Carr yet) but to tell those of you who have not yet had the pleasure of free thermal flying to have a go. The run from the Dyke to the crossroads is 2½ miles and not a bad start, and the only things to look out for are power lines (one only) and not to land on field or private property.



A. Southern Competitors at Perran Sands Rally
 B. Secret weapon (details later)
 C. Editor watches Treasurer
 D. Perran Sands
 E. Paddy tries a new position with his Girlfriend
 F. Super Scorpion C takes off
 G. Fuell instructing daddy Fuell
 H. Paul King test the Gryphon to destruct
 I. What a ground loop can do (pilot unhurt)
 J. Lester Cruse flies the Manta Fledge in search of prey
 K. Tom Knight's latest bird
 L. Someone's Crew
 M. Printer going home to print next month's mag!
 N. I thought that sign said Glider Park

Photos by Anne Welch, Graham Gaulden (Hipco), Nick Eves, Paul Renouf.



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B.H.G.A. Council

Proposals for the regulation of powered hang gliding were passed at a BHGA Council meeting on Sunday 7 May. All powered hang gliders in Britain must be registered with the BHGA before use and must all have a BHGA certificate of airworthiness.

The flying of powered hang gliders will be restricted to those who hold a BHGA Pilot 2 rating and, without supervision, by those with a BHGA Powered endorsement to

Pilot 2. To be awarded a power endorsement a pilot must safely complete a number of tasks to the satisfaction of a BHGA examiner. These will include six safe stand-up landings within a 25-metre radius, the flights being a minimum of 10 minutes' duration each, with the power unit being the essential means of staying in the air. Other tasks will be completed with and without the use of power.

At the same Council meeting, BHGA Council voted in favour of £2000 being allocated towards sending a British team to international competitions this year. The proposal was opposed by Garth Thomas and Jeannie Knight who felt that such a large

potention expenditure of members' money was not justified in this field. Council had earlier been told that it was intended to send a British team to compete in the Bleriot Cup in France, the European Championships in Küssen and to an event in America. Total cost was not yet known but could be £10,000. The Competitions Committee was trying to raise money by holding a lottery, and some sponsorship money was hoped for, but the Competitions Committee felt plans could not be made for the event unless it could rely on £2,000 from the BHGA if other funds were insufficient.

It was decided by Council to hold a public event at Mere in August, regardless of sponsorship availability. Some members were worried that such an event might lose money and Brian Milton reported that other potential sites for the event were not suitable. Jeannie Knight and Garth Thomas pointed out that any loss on this event, which was for a greater proportion of the hang gliding community, would be small compared with the expenditure on European competitions.

Jeannie Knight also raised the question of foreign flyers using sites in this country. She brought the attention of Council to an article in the latest edition of Vol Libre, which listed some of the best sites in the country, including many Southern sites, and gave full details of how to reach them. The article suggested that if the French had smooth winds like England's, then they would find it easy to soar. As it was they had to cope with far more turbulence than English flyers. It suggested that they could try out English sites and discover why the English find it so easy to soar.

Council was informed of the increasing problems faced by clubs whose sites are

invaded by foreign flyers. Jeannie Knight requested that the BHGA should notify all European countries that while foreign flyers were welcome here, they would be required to produce proof of their flying ability. Council agreed that the matter needed immediate action and directed Chris Corston to write to the appropriate bodies on the matter. It was agreed that by informing European countries that proof of flying ability was required, clubs would be able to grade foreign flyers to different sites, rather than asking that an FAI Delta Bronze badge be required (which might be insufficient on some sites).

LETTER TO TONY FUELL FROM SCOT - KITES.

Dear Sir, On return to Scotland I am writing to express our apologies for the flight of our powered glider at Devil's Dyke.

On the Basis of your vehemence of protest, it was obvious that this was a gross error of judgement on my part which could have threatened your club's use of the site.

If any damage in this respect had been done then I am willing to travel South and

explain to anyone concerned that the flight was made without the control of the SHGC, was an isolated incident, and will certainly not happen again.

The experience had certainly underlined to me the considerable differences which exist throughout the country not only in attitudes to powered flight but to site useage.

Yours sincerely, BRIAN HARRISON
225 Granton road, Edinburgh.

FLY WELL FLY WASP



KEITH REYNOLDS
(REN)

NEW AGENT FOR THE SOUTHERN AREA

I am the Wasp Agent for the Southern Area. I will be pleased to discuss all enquiries and problems with old, new and future Wasp pilots. See me on the Hill and ask about the full range of Wasp Gliders & Accessories.

Full Spares Service

Ring Brighton 739541 (Weekends & Evenings)
Brighton 592108 (Daytime)

out on a limb...

ANATOLY COHEN A RUSSIAN NOW LIVING IN ISRAEL AND RESIDENT IN A KIBBUTZ TELLS US, THROUGH HIS INTERPRETER MYRON JOSHUA HOW HANG GLIDING DEVELOPED IN ISRAEL. ANATOLY HAS JUST RETURNED FROM A STAY IN HOSPITAL AFTER CRASHING ON A TEST FLIGHT.

As a child I was very keen on model airplane flying and then went on to study mechanical engineering in Russia. At that time I tried to develop my interest in gliding (flexy-wing) as a possible means of escape from Russia. In 1972 I managed to get to Israel flying in the more conventional way.

In Israel I decided to continue my research in the field of gliding in spite of a lack of information. In 1974 after finishing army service, I took my first flight on a standard glider made of primitive materials. It took six months of attempted take-offs to become airborne as there was no one to teach me the techniques of flying.

Later I met an Israeli who had just returned from England with a standard glider and together we advanced. I decided to continue constructing gliders to improve the quality and performance. I built ten gliders which I sold to Israeli's and taught them to fly. Progress in construction and flight was gained from professional journals. I also decided that a Kibbutz was needed as an industrial base to produce a high quality product at a competitive price. I have been at Kfar Etzion (the Kibbutz) for two years now.

We are producing a FAE 1 class and a open class up to an aspect ratio of 5:5. This is the limit due to the inexperience of the flyers.

I build my gliders in a large metal factory which also makes sports and camping equipment. Because of there experience and machinery I am able to produce at a low cost a glider with a frame of high quality design, easy assembly and a high safety level. As a manufacturer of hang gliders I have difficulty in convincing the Israel market that I have a viable product. There is also a psychological barrier, I must break through. The Israeli's don't trust local products and are wary of anything that differs from import.

Israel is the ideal place for flying. The summer is very long and the predominant westerly breeze is at a fairly constant 15 mph. There are numerous mounts and cliffs within a small radius, including

the Golan heights, Mount Tabour, Mount Gilboa, Mount Carmel by Haita and many more. We can only fly on Saturdays as that is the only day the Israeli airforce are not using the airspace. Our flights last for at least 2 hours aloft!

This sport is new here and because of the excitement aroused by it the schools cannot absorb all those who want to learn, although the mass media has taken great interest in the sport. We feel the local market is too small and we are making attempts to reach the export market. We would intend to manufacture gliders for foreign companies, to our own or their specifications. We work in close conjunction and under strict control of the 18 month old Israeli hang gliding association.

Although we have had a number of minor accidents, so far we have avoided any fatalities.

In 1976 we corresponded to Tony Fuell who was then the editor of Wings! and we are interested in keeping in contact with overseas flyers. Any information about advertisement possibilities or anyone wanting information from us will be gratefully received

GOOD FLYING

Anatoly's address is:-

c/o ETZION METAL WORKS
KFAR ETZION
D.H. HEBRON
ISRAEL



WHAT'S NEW AND WHAT IT DOES FOR YOU

SENSATIONAL BREAKTHROUGHS IN KITE DESIGN BY MACBIRDWAYBROOM GLIDERS

Perhaps Wasp and Hiway and all the other manufactures have been developing their hang gliders along the wrong functional principles. There have been significant new discoveries at Milly Hilly which are allowing pilots the exposure of a unique and totally satisfying new experience with their flying.

Instead of thrashing about the air 600' above Devils Dyke, searching frantically for air space, and avoiding the imminence of a mid-air collision.....You to can share the joys of soaring and effortless and carefree flying as you skim across the ground ten feet or more high.

This SUPER NEW LOW PERFORMANCE MACHINE has been designed exclusively to give the the top thermal pilots exceptional poor machine performance, and compares most unfavourably with any other glider made during the last ten years! Have the sky to yourselves. Completely alone. (Except for Charlie Barnes.....Chas!)

After years and years and years and years of research of what makes a hang glider -- GO UP...AND...STAY UP...THEY GAVE UP...!

The MACBIRDWAYBROOM SKY-DRAGGER a must for all you competent pilots who want the sky to themselves, only this time at the lower altitudes. This machine is and always will be guaranteed never to exceed 100' above the ridge.

Some of the many refinements that have been perfected to combat high performance and fingertouch control are - Sail perforations, A tool provided with each machine allows you to punch holes in the sail to reduce its lift factor ensuring that you fly lower in the higher winds. SQUARE BOOMS this feature encourages high drag potential. LEAD TIPPED sail-battens for that extra weight, this combined with a very low aspect ratio and a 25° nose angle gives a superb and exciting experience to walking and flying with your

—LOW PERFORMANCE—
MACBIRDWAYBROOM SKYDRAGGER HANG GLIDER

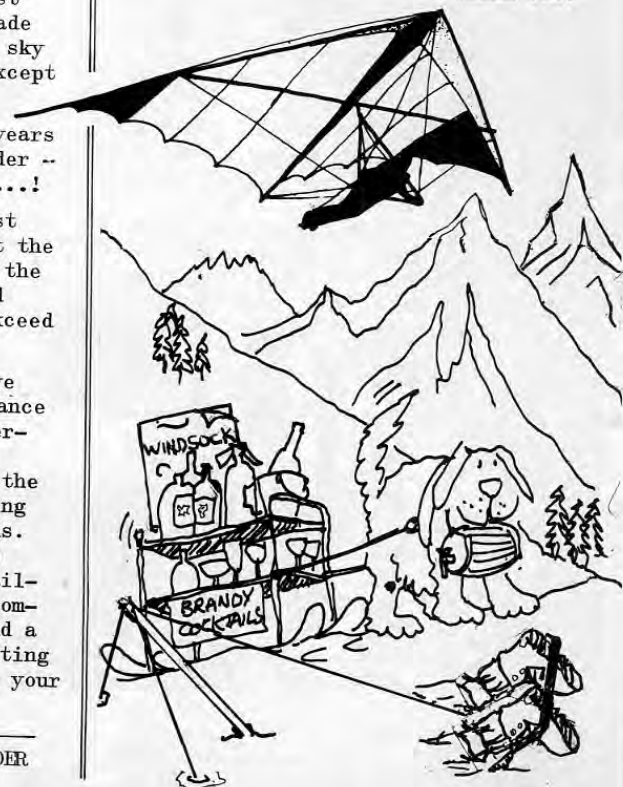
Believe It or Not!

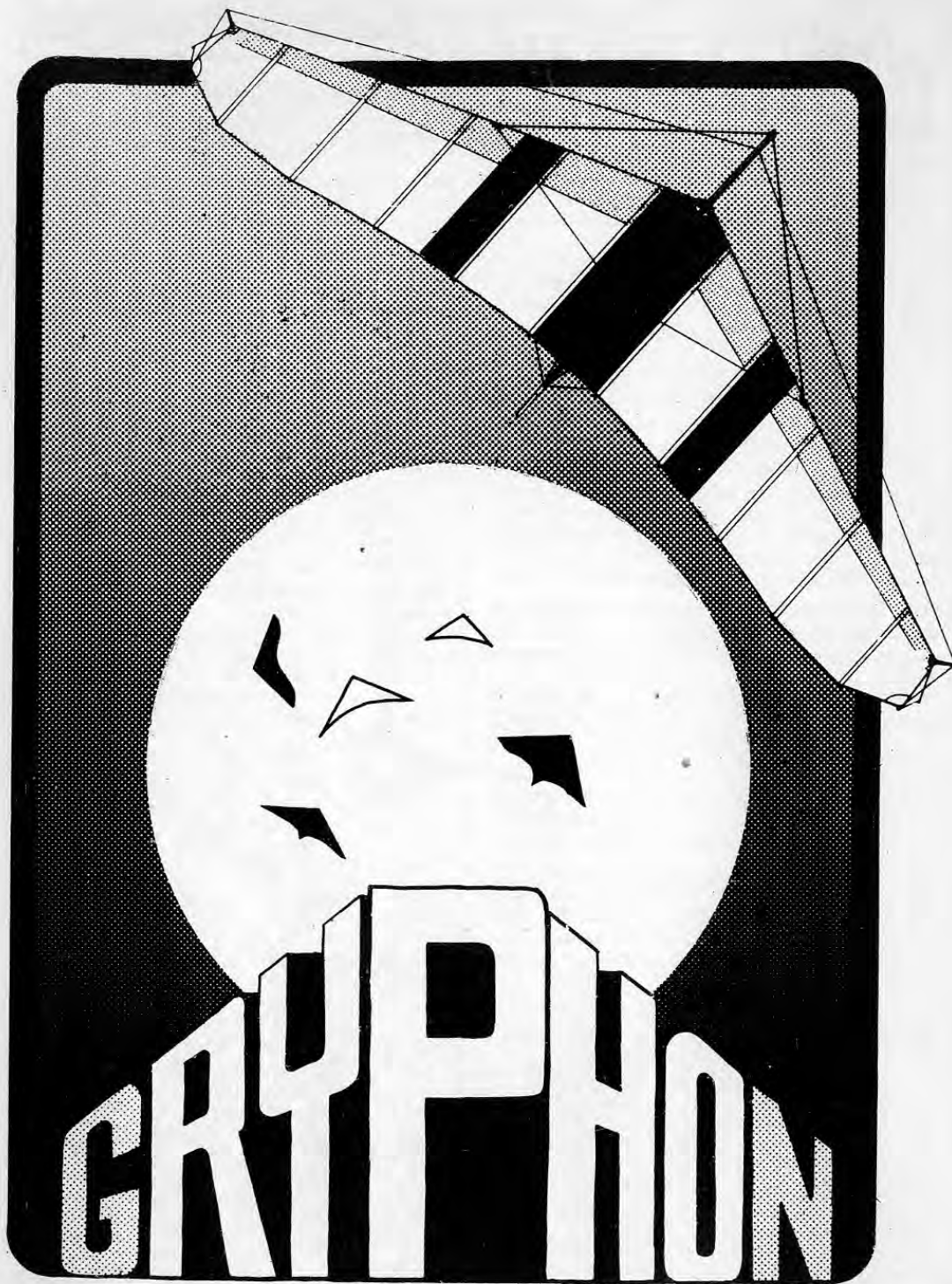
One of their accessories for this superb machine is a radically designed harness. THE STAND UP - STAY UP - NEVER SIT OR LIE HARNES.

This harness ensures maximum pilot drag, and always holds you in the vertical position even when you are wing overing or undering. A feature of this harness is the built in Clattershute, this warns others of your approach and is easily audible from a distance of four to five feet. Operates automatically on at least one in any ten crash landings.

At present on the design board is their new improved model. This machine will have cast iron leading edges, which will replace the lead tipped sail battens. ALSO.... superfluous deflexer blades, cast conspicuously in wrought iron and pleasantly shaped as early Victorian candlestick holders..... useful for those occasional night time flying jaunts.....!

THIS LOW PERFORMANCE MACHINE IS THE HOT DOG PILOTS DREAM.... EAT YOUR HEART OUT TONY FUELL THE ANCIENTS AND STANDARDS ARE WITH US FOR A LONG WHILE YET.



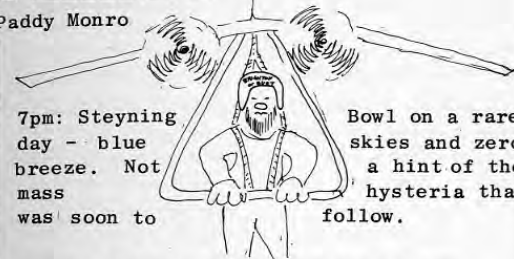


Wasp Gryphon

THE BRIGHTON TERROR

POWER FOR THE
PEOPLE!

Paddy Monro



7pm: Steyning Bowl on a rare day - blue skies and zero breeze. Not a hint of the mass hysteria that was soon to follow.

"Okay, Kev and Bazzà, run like crazy, there's no wind and it's going to be tricky getting off. Ready Steve - ignition off," Steve pulls the starter a couple of times to get the fuel through. "Ignition on." The McCulloch 101 gives a cough and then roars into life. I feel grateful for the loan of Ziggy's ear-enclosing helmet - the previous flight I ended up flying with my elbows and my fists in my ears! Steve steadies the nose; with difficulty I lift up the 80 lbs dead weight and, with the motor on tick-over, I start to run. Steve disappears into the ground, no mean feat for Mr. Hunt. Kev and Bazzà drop away, and my feet can't run any faster so I whack the throttle open. The glider drops a little but my arms are fully pushed out and my feet tingle as if to remind me of the toe-chopping monster behind me which theoretically I cannot reach; and the glider blasts off into the sky.

This sensation of flying off a ridge but completely ignoring it, going straight up and into the deep blue sky, is a sensation which I know is going to develop powered hang gliding into a sport in its own right. The flight was straightforward, although with the engine not developing full power the climb rate wasn't very good. I flew out of the mount of Steyning Bowl and headed for the aerial at the top of Truleigh, reaching it with a height of 700 ft above take-off. Then I followed the Truleigh ridge until a mile or so from Devil's Dyke, where I turned

right at 1200 feet to avoid aggro in that direction (unsuccessfully in the event). By the time I reached the outskirts of Brighton some brown fields had helped me to 1800 feet. Going round the edge of Brighton I followed a flight path that gave me possible landing fields all the way to Race Hill and I arrived above the Hiway factory at 2400 feet after 40 minutes of flight into a light head-wind. Still having fuel left I ventured out to sea about a mile to give me a feeling of what it would be like crossing the Channel. Bloody cold, so I turned round, cut the engine at 2700 feet, revelled in the beautiful quietness and spiralled gently down.

What a reception! Police cars were wheeling in from all directions and quite a crowd had gathered. "Would you mind stepping this way, sir?" "Can't hear a thing, do you mind if I finish this bottle of Bubbly?" Then after the celebration, the INQUISITION! "We've had a lot of complaints about low flying and noise and -" "Excuse me, officer, but do you know what the law is?" says Steve Hunt. "Let me tell you." AND HE DID. The officers duly placated (How do you spell West Tamikee Road? Er - that's not in England, is it?), celebrations continued in the Walmer (The Hiway Local) and then at the hamburger shop with a party.

My main thoughts after the flight were (1) never to fly without ear-plugs or an effective silencer, (2) what an amazing people the English public are, and (3) how the hell am I going to wangle a powered hang glider out of Hiway?

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