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Prices

Harness including zip-on back section & parachute container: £199

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WINDSOCK

THE JOURNAL OF THE SOUTHERN HANG GLIDING CLUB

AUG. 1991



S. H. G. C.



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MORE DETAILS INSIDE

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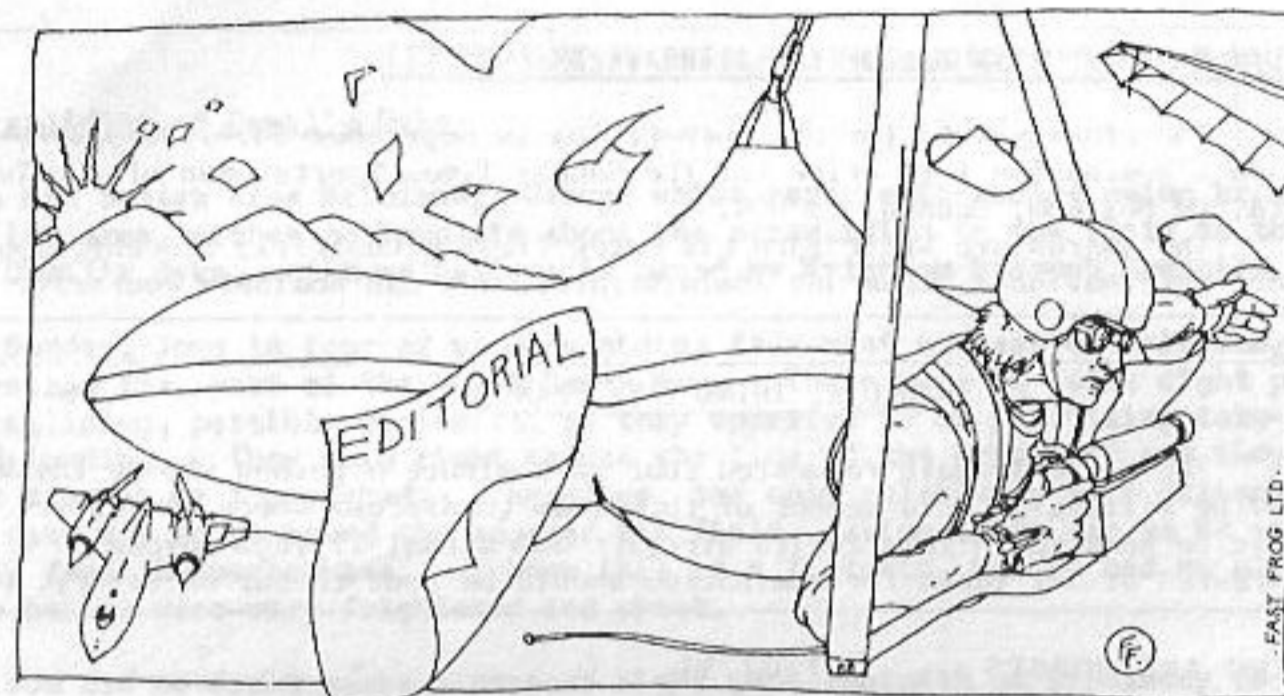
Oriole Elliot-Webb
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Readers please note

Contents of this magazine
CANNOT be reproduced
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E.Bilous, T.Luccesi, N.Ward.



Jo Cattlin has, unfortunately, had to resign as Airspace Officer due to moving from the area. He has been an active member of the club for many years and I hope you'll all join me in thanking him for his many efforts and contributions. We hope to see him back soon. The position is currently vacant.

Keith Stainer has suggested that the Andy Napolitan Trophy should be awarded for a combination of good airmanship with promotion, helpfulness and a willingness to spend time and effort to encourage the sport as a whole. This seems like a good idea to me as it is in keeping with the spirit of Andy. Could everyone please try and help collect £2 daily membership fees from non-members as you've only got to look at the annual accounts to see how much we have to pay to farmers to keep the sites open? We have had complaints about pilots using the Truleigh ridge as a take off site. The only public right of way along there is the South Downs Way, which is a FOOTPATH. The rest of the land is private.

Many thanks are due to Tony Turner who has done an excellent job of rebuilding the fencing and gates at Firle car park. They are now far more substantial, and so is the lock, which now has a combination of 0360. When you set the combination it does not spring open until you press the catch in.

In the competition 3/4 Aug. the I.O.W. team beat the Southern Club in poor weather conditions which only allowed a couple of spot landing tasks. The one on Sunday was very interesting as it resembled a Super Mario Bros. screen, with two tractors crossing the landing field in front of the spot, cutting the hay! Let's hope we have a better showing for the semi-final, now confirmed as a home comp., on the 31st Aug/ 1st Sept, as in the last comp. only three Southern Club pilots took part!

COMPETITION DATE.

AIRWAVE CHALLENGE SEMI-FINAL 31st. AUG./1st. SEPT at THE LONG MYND.

The above competition is NOT to be held on our sites but at the Long Mynd. We have qualified and can field a team of up to six named pilots who, I believe, can be hanglider or paraglider on an equal footing (paragliders could be an advantage in the event of a spot landing!). Contact Kevin Pickering, Away Competitions Officer, if you are interested.

STOP PRESS!!

On Thursday 8/8/91 Richard Carter broke his own British record with a paraglider flight of nearly 90 km. from Bradwell.

THE SOUTHERN HANG GLIDING CLUB

SUNDAY TIMES SPORTSWOMAN OF THE YEAR AWARDS 1991

The closing date for the competition is September 13, 1991 and to obtain a nomination form write to: The Sunday Times Sportswoman of the Year Award, PO Box 480, London, E1 9DN.

The Awards are split into six categories: Schoolgirl, Student, Sportswoman, International, Team and Administrator. You can nominate yourself.

B.H.G.A. THINK TANK TEAM.

The B.H.G.A. have requested that we nominate a person who we think would be willing to be a member of this team to discuss where the sport should be heading in relation to aircraft and actual flying. Anyone interested or any ideas for nomination should be sent to our secretary.

FLYING AND HORSES 19.07.91

Attached are two letters (Complaint and reply) The Complaint is from the Chairman of the Mid Sussex Area Bridleways Group and is a legitimate complaint about the conduct of Paragliders at the Dyke on Sunday June 16.

The reply is from Brighton Borough Council.

My wife Mandy is a Member and Committee member of the Bridleways group, hence the intervention of these letters.

This incident needs to be acted upon immediately to protect our credibility as caring and considerate pilots.

For those of you Townies who don't know a horse from a thermal, Horses are subject to whims, capable of violent changes in behaviour, and dangerous at times, particularly to the rider.

In other words 'JUST LIKE THE WEATHER.'

Please treat Horses with care and respect, they have right of way.

The 'South Downs Way' is a right of way/Bridleway, and as such is permanently available to those who wish to use it. It is located in what we refer to as the North bowl. Please make yourselves aware of its existence.

If you see a horse coming please lower your canopies or gliders and stop it flapping in the wind until the horse has gone well past, a horse has almost all round vision and can see and hear remarkably well. It will have seen you long before you see it. The danger is not to us Pilots, but to the riders of the Horses, who may have a horse reach a blind panic and shy into a barb wire fence, or bolt.

As a horse rider myself, the thought of my mount bolting down the Dyke fills me with horror. A very real possibility of a dead horse and rider at the extreme, some injury to horse and rider are probable.

Please THINK, and show the S.H.G.C. to be considerate and responsible.

Complaints from any source we do not need; particularly from Brighton Borough Council.

Dave Keepax.

LETTER SENT BY BRIDLEWAYS GROUP TO B'TON COUNCIL.

Paragliding at Devil's Dyke

The Mid Sussex Area Bridleways Group, which represents riders using bridleways in the area, wishes to complain about the paragliding in the field to the west of Devil's Dyke, which we believe is owned by Brighton Borough Council.

On Sunday, June 16 four of us were riding from west to east on Bridleway Poyninge 15a, part of the South Downs Way. There were at least eight people paragliding, possibly beginners, as they appeared to be practising take-off and landing. They were right across the line of the bridleway and they did not stop as we approached. Therefore, the only relatively safe action for us to take was to go round the edge of the field, taking us as far as we were able away from the parachutes. I know this is a footpath, but we had no alternative. The horses were very frightened and upset.

As you are no doubt aware a person's right on a footpath or bridleway is limited to passing and re-passing. "He may also do anything reasonably ancillary to his journey, such as pausing or sitting down for a rest, but if he does anything not directly referable to his right of passage he is a trespasser." (Quotation from 'Rights of Way: A Guide to Law and Practice' by Paul Clayden and John Trevelyan.)

We do not believe that paragliding is "reasonably ancillary to a journey" and therefore they should not have been on the line of the bridleway. Presumably you know the paragliders and have given them permission to use the field. Would it be possible to ask them to keep well away from the line of the bridleway and could they be made aware that parachutes frighten horses, before there is a serious accident?

Looking forward to receiving your comments.

BRIGHTON COUNCIL'S REPLY.

Paragliding at Devil's Dyke

Thank you for your recent letter regarding the above matter and I am sorry to hear about the incident which occurred whilst you were riding in the area.

Unfortunately the area of land in question is not owned by Brighton Borough Council but privately by a local farmer. However, we have been concerned about the use of the area and for some considerable time have been looking at ways of reducing the potential conflict between paragliders and other users. A code of practice is presently being developed for hang/para gliders in Sussex which we hope will help to address the problems.

As you suggest in your letter, the incident raises a number of questions relating to rights of way and I have therefore sent a copy of your letter to West Sussex County Council's Rights of Way Officer. I shall also talk to the Chairman of the Southern Hanggliding Club to make him aware of the incident.

Please do not hesitate to contact me if I can be of any further assistance.

Yours sincerely

IT'S THE SOCIAL EVENT OF THE SEASON!

BE THERE, OR BE SQUARE!

(I'll give anyone a free drink who flies there, without the use of an engine, from a recognized S.H.G.C. site!

D.W.)

S. H. G. C.

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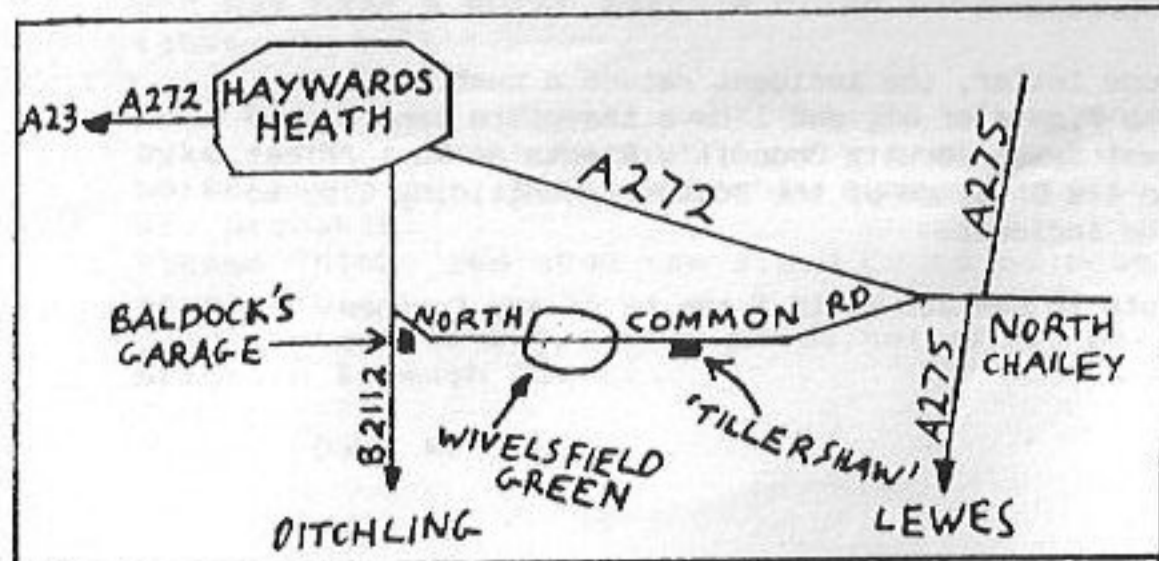
TICKETS FOR FOOD £3.00 IN ADVANCE FROM ANY COMMITTEE MEMBER OR BY POST FROM WINDSOCK EDITOR (MAKE CHEQUES TO S.H.G.C.)

Once again Diane and Johnny and family have generously agreed to hold the barbecue at their house. It has proved to be a very successful venue with loads of grounds outside and plenty of space in the house should the weather not be too good (NO MUDDY SHOES IN THE HOUSE THOUGH!). Members friends etc. welcome but please buy tickets for food in advance if you want to eat so Johnny knows how much to supply. Bring your own booze.

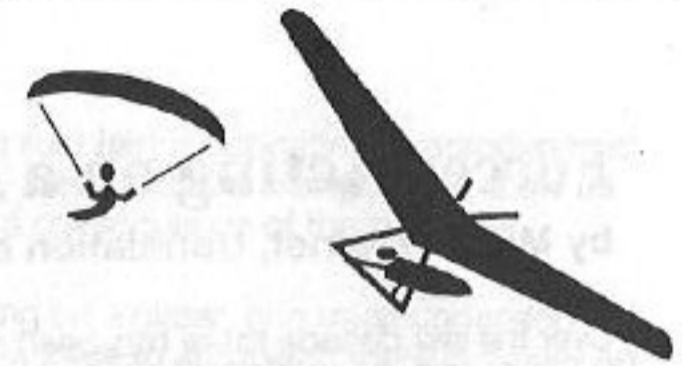
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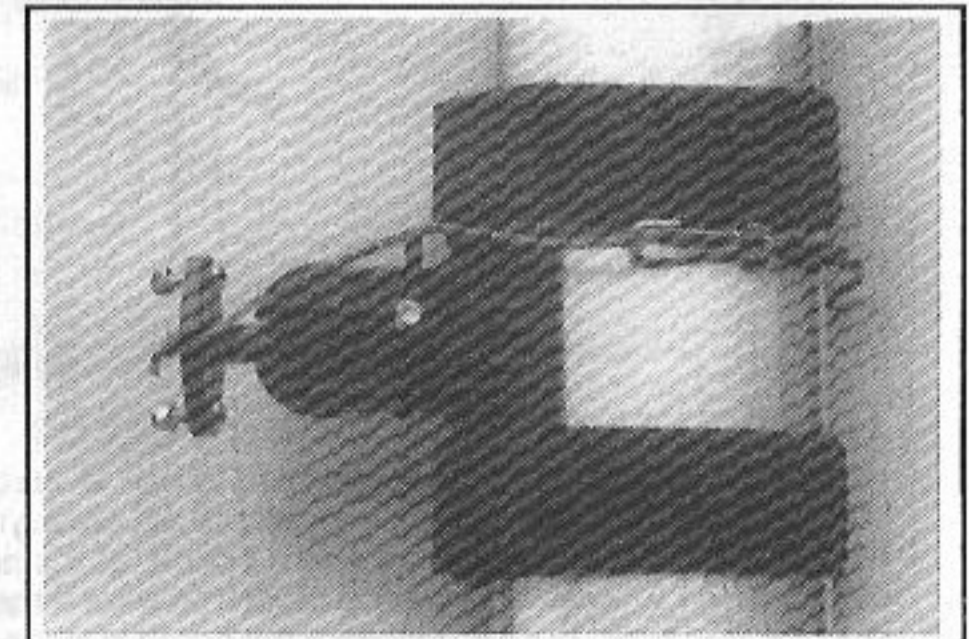
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Forces Acting on a Footlaunch Glider

by Michel Carnet, translation and illustrations by Gary Cook

Over the last decade there has been much misconception and misinterpretation in many specialised hang gliding books - as well as in SkyWings - regarding the forces acting on a glider (be it hang- or para-). It is essential for a proficient pilot to understand at least the basics and interpret his observations and feedback in order to improve the performance of the man + machine. Even more importantly, by understanding the physical limits of the safe flight envelope, he or she may become a safer pilot.

Gravity & Weight

The energy for gliding flight is supplied by the mass of man + machine being attracted to the centre of the Earth by gravity. Every single particle of the aircraft is attracted in this way but instead of showing thousands of vectors (Fig 1a), we can by convention represent them all by one single resultant vector (Fig. 1b). A vector is a graphic representation of a force, which must give us FOUR pieces of information: 1 - The axis of the force; 2 - The direction of the force on the axis; 3 - The point of application of the force; 4 - The relative value of the force.

In the instance of the vector of all gravity forces which we call **Weight**, the axis is vertical, the direction downwards, the point of application is by convention called the **Centre of Gravity** and the value is, to put it simply, how heavy it is.

By convention, weight is given in Newtons, the value in Newtons is equal to the value in Kgs multiplied by the Gravity factor G. The standard value for G is 9.8 at sea level and normal pressure and temperature levels, so a mass of 1 Kg has a weight of 9.8 Newtons. As you probably know, the acceleration rate of a mass is 32 feet per second per second, 32 feet = 9.8 meters, this is why overloading is measured in Gs.

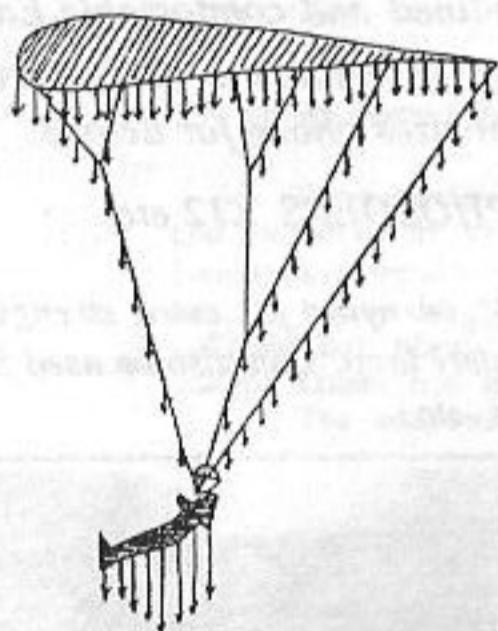


Fig. 1a: A paraglider (& pilot) showing many little gravity forces

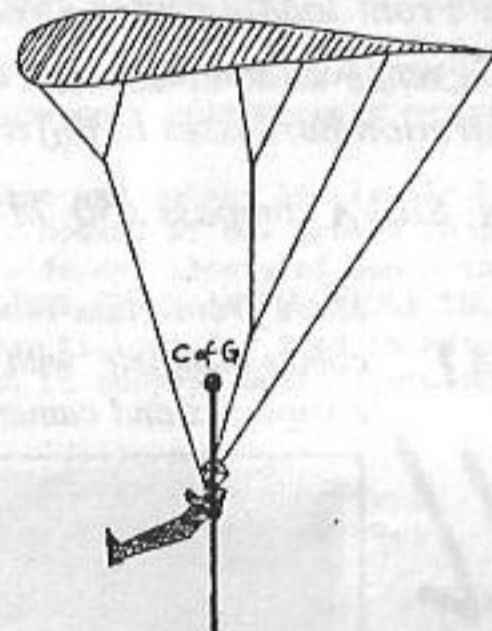
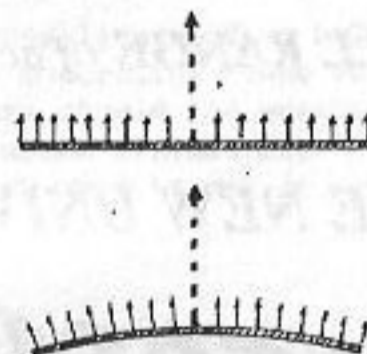


Fig. 1b: A paraglider (& pilot) showing just one vector - Weight.

Fig. 2: Forces acting on a straight board and a curved board.



The Centre of Pressure & Forces

Enough on masses already - we're here to look at aerodynamics. By definition, as soon as an object moves through a fluid, be it water or air, aerodynamic forces become involved. In the instance of a flat object (for example a board), all the aerodynamic forces acting all over the board can be represented by one single resultant force, in an axis perpendicular to the board, in a direction away from it (Fig. 2). If the board is curved instead of flat, each single little aerodynamic force would be perpendicular to the surface at its point of application and it would be much more difficult to represent the resultant force, unless you knew exactly where that resultant had its point of application. By convention this point of application is called the **Centre of Pressure**.

On a glider, every single part which is flowing through the fluid (air) is submitted to aerodynamic forces. Some of the forces are useful - they are purposely created by the designers to allow us to fly, while some forces are adverse or parasitic, merely a consequence of the particular materials, parts or techniques used (Fig. 3).

Before trying to represent all the aerodynamic forces acting on a glider, one must understand the concept of **Action = Reaction**. Whenever you apply a force to an object, there is initially an acceleration which can stop if the object is offering a Reaction to the Action in such a way that it is not accelerating any more (we accept that a deceleration is an acceleration in reverse). When an object is not accelerating or decelerating, it is said to be in **Equilibrium**, with all forces cancelling each other.

To use an everyday example, if you stand on one foot, in order for you to remain stationary your centre of gravity must be above and within your foot print. The ground must also exert a force upwards equal to your weight. If it doesn't then you will go down through the ground until it does. This is what happens when you walk in fresh snow, for example. You accelerate

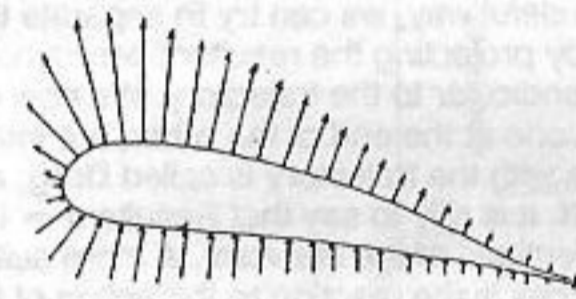


Fig. 3: An aerofoil section with many aerodynamic forces acting on it.

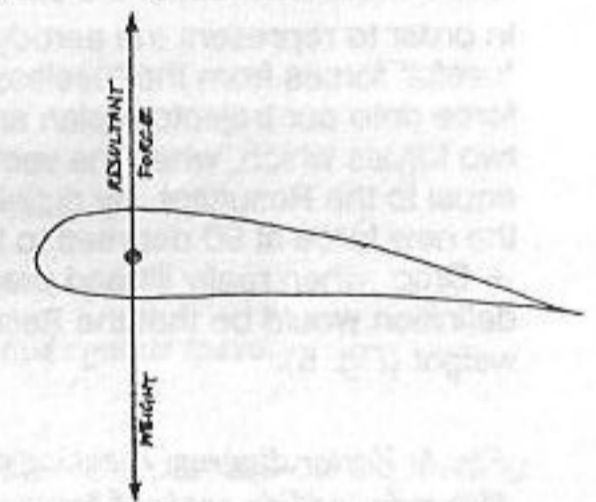


Fig. 4: An aerofoil section with Weight and Resultant Aerodynamic Force vectors.

downwards through the snow then decelerate as the snow is crushed until you stop in equilibrium.

On a glider, the same thing happens - the mass wants to go down (Action), aerodynamic forces are generated and eventually equal the weight (Reaction). The fact that a glider in equilibrium is still going down and the speed at which it is going down is totally irrelevant. A glider in equilibrium is simply a glider flying at a constant airspeed - not accelerating or decelerating. As you know, a glider by definition always goes down within its relative airmass, with a range of airspeeds and a corresponding range of glide angles.

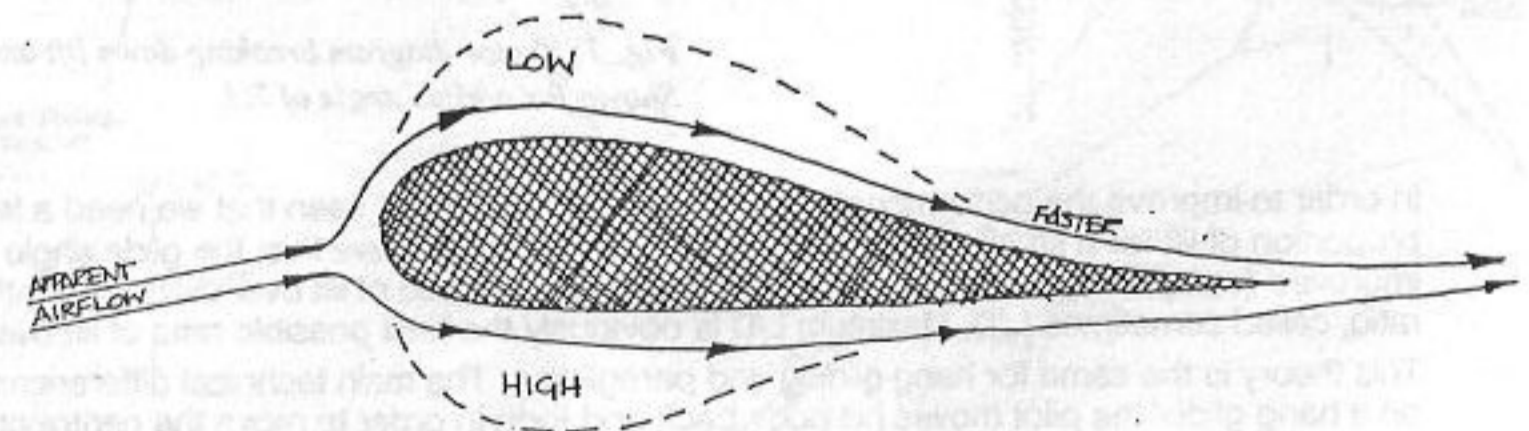


Fig. 5: Aerofoil profile showing airflow over the wing and relative low and high pressure areas.

(cont.)

Lift & Drag

Back to the vectors now - Fig. 4 shows an aerofoil with the **Weight** vector along with the **Resultant of all Aerodynamic Forces**, which can only be represented by a vertical vector facing upwards, equal in length to the weight, and starting from the accepted centre of pressure. It is essential to show the centre of pressure at a point vertically above the centre of gravity. Everything we have so far discussed is "known quantity" and can only be accurate as it is accepted by convention as being so. The only thing which is needed now is the angle of the airflow through the glider, which is also the angle of the trajectory or glide path. This can only be found out for a particular wing by test flying and measuring.

We shan't go into too much detail on how a profile is designed, but the main idea is that when a profile moves through a fluid, the distance of travel between the point of separation of the airflow at the leading edge and the point of reunion at the trailing edge is longer on top than it is underneath. This then creates a relatively low pressure area (a sucking force) on top and a relatively high pressure area (a blowing force) underneath. This difference in pressure is responsible for most of the aerodynamic forces acting on a gliding wing (Fig. 5).

In order to represent the aerodynamic forces in a more useful way, we can try to separate the "useful" forces from the "useless" ones. We can do this by projecting the resultant aerodynamic force onto our trajectory plan and also onto a plan perpendicular to the trajectory. We now get two forces which, when the vectors are added together, one at the end of the other, are exactly equal to the Resultant. By definition, the new force in line with the trajectory is called **Drag**, and the new force at 90 degrees to the trajectory is called **Lift**. It is silly to say that Resultant = Lift + Drag, when really lift and drag are representative projections of the resultant. A more suitable definition would be that the Resultant of aerodynamic forces is the reaction to the action of the weight (Fig. 6).

Fig. 6: Vector diagram breaking down lift and drag. Shown for a glide angle of 3:1.

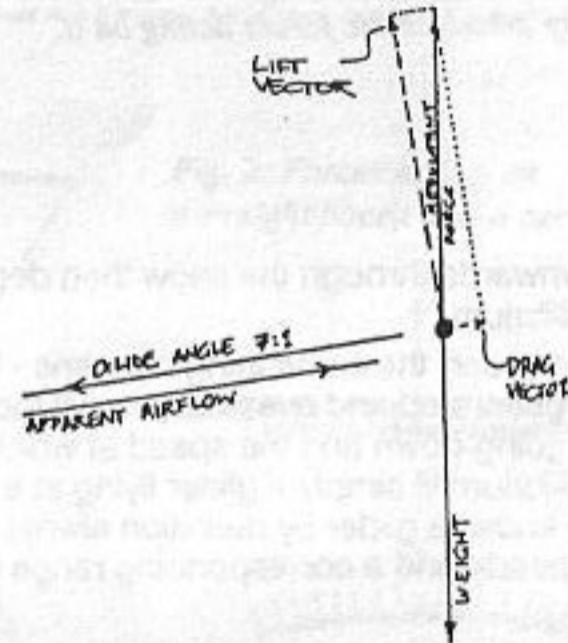
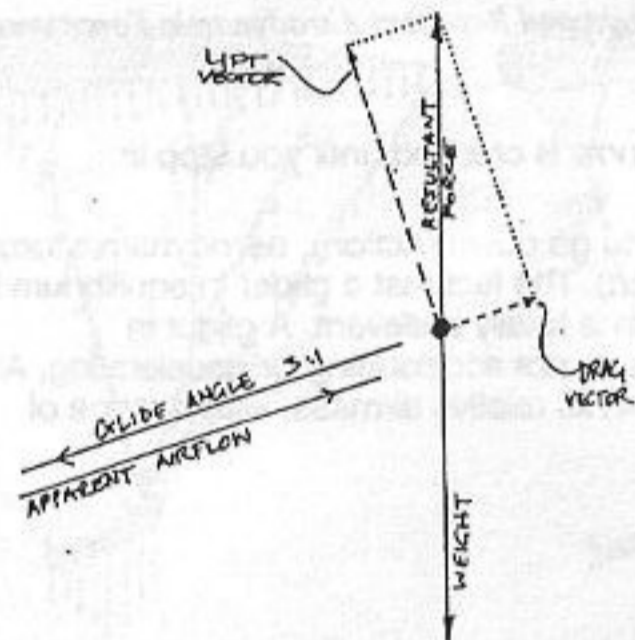


Fig. 7: Vector diagram breaking down lift and drag. Shown for a glide angle of 7:1.

In order to improve the performance of a glider, it can be clearly seen that we need a larger proportion of lift for a smaller proportion of drag. When we achieve this, the glide angle is improved (compare Figs 6 and 7). We then accept that a ratio of lift over drag equals the glide ratio, called sometimes L/D. Maximum L/D is obviously the best possible ratio of lift over drag.

This theory is the same for hang gliding and paragliding. The main technical differences are that on a hang glider the pilot moves his body back and forth in order to move the centre of gravity in relation to the vertical of the centre of pressure. The centre of pressure then tries to come back over the centre of gravity to regain equilibrium. On a paraglider, the pilot remains in a fixed position, and uses the aerodynamic controls (brakes) to alter the position of the centre of pressure within the canopy, which again results in the CofP wanting to come back vertically above the CofG.

If you have a hang glider or a paraglider which has a CofP which wants to move away from a position vertically above the CofG, give it back at once to your dealer, as it is unstable. By doing nothing, a glider should quickly stabilise into equilibrium (not accelerating or decelerating).

The total drag (as shown in Fig. 6 by one vector) is in fact the resultant of thousands of little drag forces which can be sub-divided into 2 main groups:

1/ **Parasitic / Profile Drag**: Profile drag is produced by the "stickiness" of the profile surfaces and the viscosity of the fluid, and Parasitic drag by all the parts exposed to the airflow like pilot, rigging, etc.

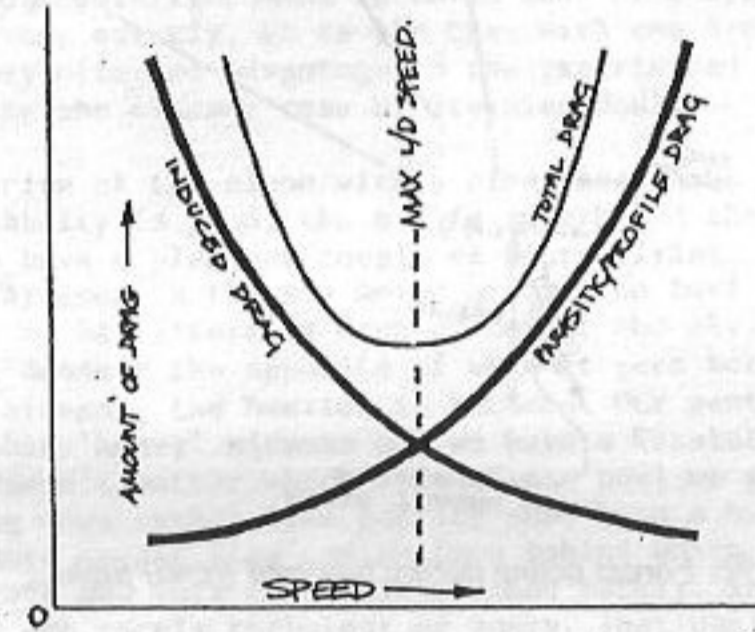


Fig. 8: The two groups of Drag and Total Drag plotted against speed.

2/ **Induced Drag**: produced by the energy lost when the airflow is separated on the leading edge and reunited at the trailing edge, and also by the tip vortices created as the wing flies. Parasitic/Profile drag is proportional to the square of the airspeed (twice the speed = 4 times the drag) while Induced drag is inversely proportional to the square of the airspeed (twice the speed = 1/4 of the drag). There is therefore a given airspeed at which the sum of the two types of drag (total drag) is smallest (Fig. 8), which is called **Max-L/D speed**.

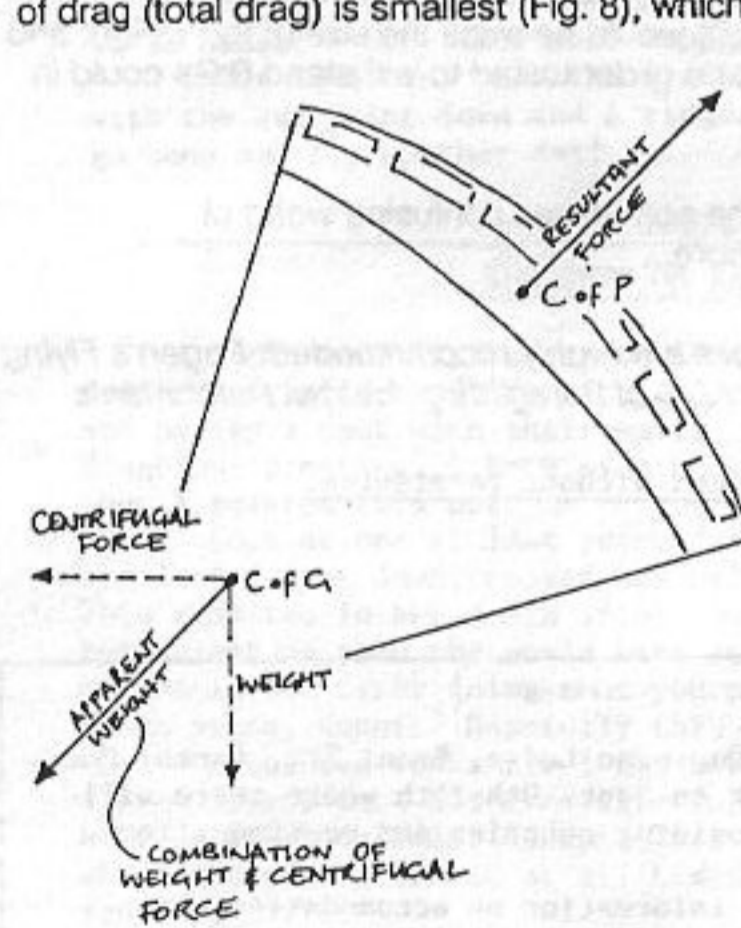


Fig. 9a: Forces acting in a turn.

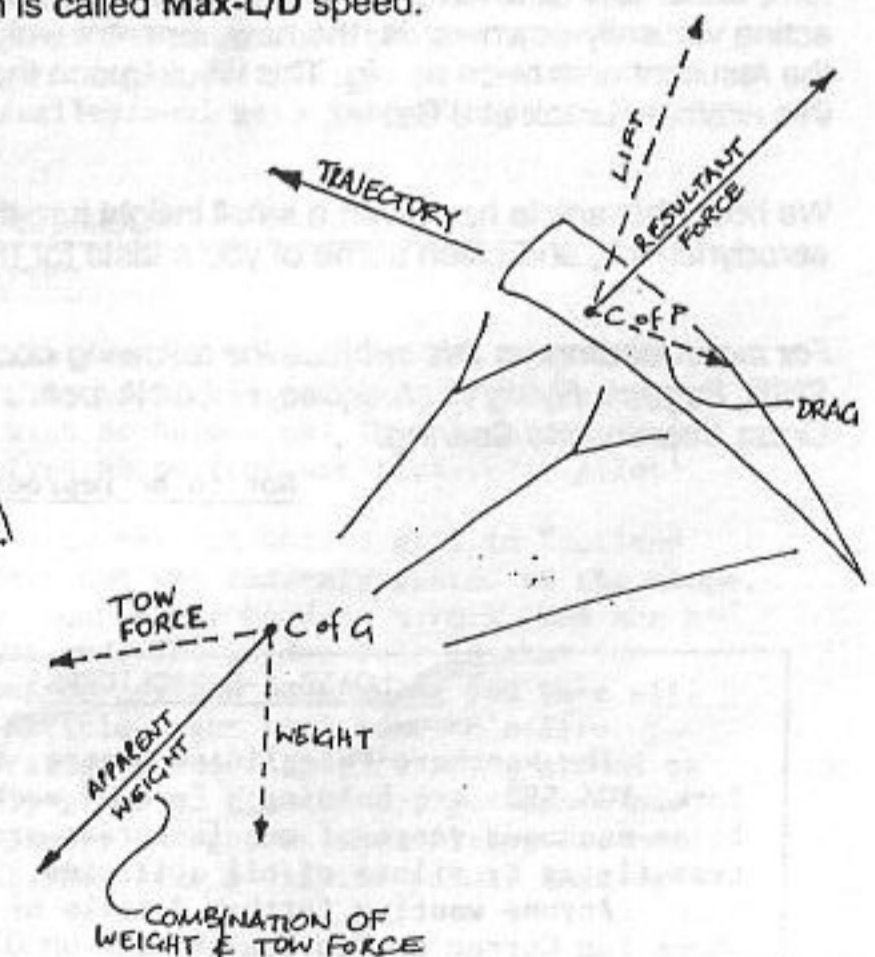


Fig. 9b: Forces acting on tow.

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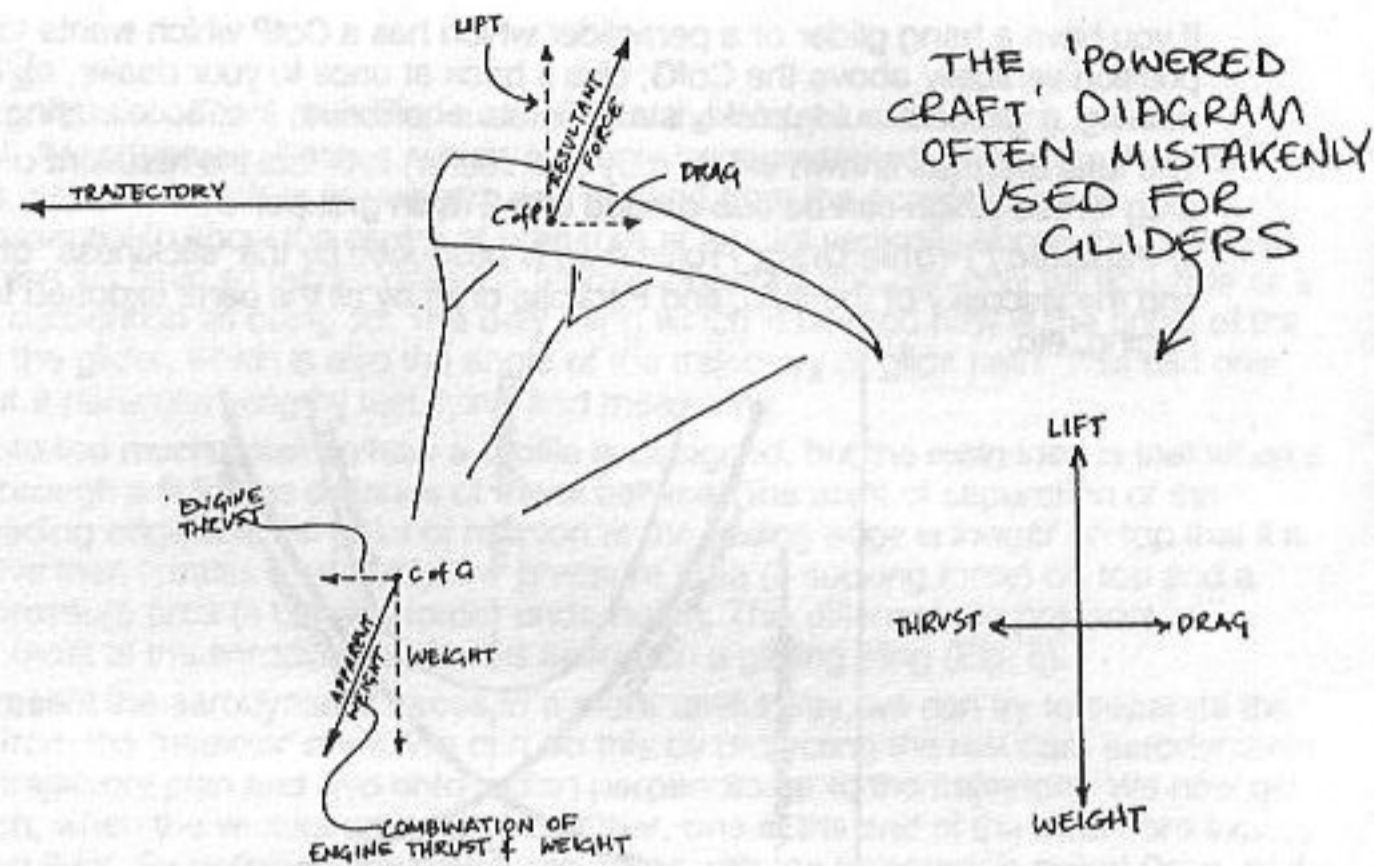


Fig. 9c: Forces acting during powered (level) flight.

All the above theory is arrived at by accepting that the gravity force acts straight downwards. Sometimes the vector Weight is not pointing vertically downwards. In these cases we have an **Apparent Weight**, which is a resultant of Weight and the new force involved. This new force may be the centrifugal force created when in a constant 360 turn, a tow force when winching, or a thrust when powered. In any of these cases, if the aircraft is in equilibrium then the resultant of all aerodynamic forces will have the same value as the Apparent Weight, with its vector on the same axis, facing in the opposite direction (Fig. 9). We can see straight away that apparent weight is generally greater than weight, meaning that aerodynamic forces are greater when in a turn, under tow or when powered. For instance if a tow force was equal to the weight and acting vertically downwards, the new apparent weight would be twice the size of the weight and the resultant also twice as big. This would mean that a glider tested to withstand 6 Gs could in this example break at 3 Gs.

We hope this article has given a small insight into the sometimes confusing world of aerodynamics, and given some of you a taste for more...

For more reading on this subject, the following books are highly recommended: *Pagen's Flying Skills*, *Pagen's Flying Techniques*, *Hubert Aupetit's ABC of Paragliding*, *Helmut Reichman's Cross Country and Soaring*.

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LOADS-A-PARAGLIDERS!

The Northern Paragliding Centre, Dunvegan Lodge, Front St., Barmby Moor, York, YO4 5EB. are holding a "promo" week on Sept. 9th-15th where there will be an enormous range of manufacturers providing canopies and equipment for test flying by pilots of all abilities.

Anyone wanting further details or information on accommodation etc. phone Ian Currer or Rob Cruickshank on 0759 304404 or 0325 460542.

KATABATTIC WINDS - EFFECTS ON FLYING

Once again this article is directed towards the inexperienced pilot relatively new to the sport of hang/para gliding. Katabatic is a rather ugly word which means that the wind is, basically, falling down the slope making it potentially dangerous to attempt to take-off! These nasty breezes usually occur between the months of November to March and are particularly common in bowls such as Steyning. They change the wind direction very quickly, as is the case with sea breezes, but, unlike sea breezes, they offer no advantage to the experienced pilot. Let's take the classic case of Steyning Bowl:

We arrive at the slope with a nice, gentle SE breeze. It's November, it's cold, visibility is good, the air is smooth and there are, of course, no thermals. We have a pleasant couple of hours flying.

As the day goes on the sun moves across the bowl from East to West and by about 2.30 p.m. has literally dropped out of the sky! When air gets colder it becomes more dense - the opposite of when it gets hotter. To put it simply the denser the airmass, the heavier it becomes. Our gentle SE breeze can no longer oppose this 'heavy' airmass and we have a Katabatic wind rolling down the slope. It doesn't matter which side of the bowl we go to, the air will still be falling down rather like pouring sand into a bucket.

We now have an air flow coming from behind which makes it useless to attempt a take-off and very difficult to land safely. In my experience Katabatic winds are rarely turbulent or gusty, just useless for flying. devil's Dyke can also be effected, though not as notably. You can end the day with a nil wind take-off, after thinking: "Yes, I'll have one more flight," only to find that at the bottom the airflow can be coming from any direction other than the one that you want to land into! Result: bent upright!

So, to simplify: when it's cold, damp, light winds and the sun is going down, de-rig your aircraft and go home.

When flying abroad in Europe, however, it's a totally different ball game during the winter months. If you are in the Alps make sure that you speak to a qualified person before flying; it might save your life.

Again, this is a very basic simplification of a fascinating subject. To be honest I only know what happens at Steyning when the sun goes down!

But remember: when the wind gets light and changes direction, combined with the sun going down and a ridge/valley/bowl gets into shadow, pack away, go home and fly another day!

EDDIE BILOUS.

THOUGHTS ON SAFETY

Often when flying, or taking the dog for a walk, at the Dyke I have noticed paraglider pilots sitting on the hill, clipped into their canopy and having a chat with their mates, with no helmet on. This is a stupid and dangerous practice. I have even received abuse from one particular pilot when I pointed this out.

Look at one of last years fatality reports when a girl in Scotland had landed, sat down, removed her helmet and was suddenly gusted up the slope. This resulted in her death after she smashed her head on a rock. Had she had her helmet on then she would have survived. The golden rule is that the helmet is the first thing that you put on and the last thing you take off. Makes sense, dunnit? Hopefully this article might save someone's life.

About two weeks ago I was horrified to see a guy floating around on a Free Spirit with his eyes blissfully glued to his canopy; god knows how he didn't hit anybody. Canopies are pretty things, but when flying the head should be moving around at all times: just like a fighter pilot; that way you stay alive.

E. BILOUS,
Club Coach.



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**SCORPIO HARNESS
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Get on that winch Mikey!

Having only recently qualified as an instructor to winch tow paragliders, I was still fairly unconvinced about the potential of winch launching at Devil's Dyke. Mike Allen's ex-British-record flight from Walderton was just a one off I thought - a combination of luck, a good pilot and a good glider. On Sunday 21st July, I changed my mind.

After flying the more advanced students in the school from the Dyke to the pimple field in a fairly nice North-Westerly all morning, the inevitable happened - Sea Breeze. This time we were ready. The winch was there, the members of the winch syndicate were there with their tow releases ready, and our students had been briefed and experienced hand tow and releases the previous day. While the school broke for lunch, Dave Perrin and I prepared the winch. The sky was still pretty nice looking, and the wind was in a perfect direction for the tow field behind the monument.

After checking all was ready and gathering the potential winchees together, it was decided that Mike Millwood was to have a tow first to demonstrate take off and flight planning. Noisy Nigel discouraged Mike from wearing his warm clothes, because "You'll not get away". Mike clipped in and take up slack was given.

I gave a nice gentle tow at first, expecting a wind gradient, and sure enough it was there. I eased Mike through it, and responded to his request for a bit more power. The tow was nicely on line, but got a bit bumpy at about 200' - at one point the winch stopped reeling in and the fluid drive allowed Mike to start paying out the line. More thermic than it looked!

After a quite bumpy ride up, Mike signalled for release at about 500' AGL, quite low. Fair enough, I thought, it just looks a bit bumpy and Nigel's right - not really any chance of going anywhere on the small scrappy bits of lift.

Five minutes later, Mike was gently drifting eastwards at about the same height, then he was up and away. Ten minutes later, the students (and us) were excitedly looking skyward as he disappeared off. Although the resulting flight wasn't the biggest distance ever (and he did a lot better the next week from the Dyke, but that's another story), it was still proof to me that winching is part of the future of South Downs footlaunching.

Final Score: Release point: TQ249117. Landing: TQ294146. Distance: 5.35 k. Glider: Apex MR.
Me, I can't wait to get more of the hot pilots - of both disciplines - up on the winch on a corking day and see some big distances back where they belong - in the Southern Club.

- Gary Cook

TREVMAN IS A HERO!

I neglected to mention, last month, that Trevor Acroyd wrote the text for the new sites guide(out soon) ; Kirran Patel transferred it to disc. Many thanks are due to Trevor, who also says that if anyone wants to go up to Burton-on-Trent to stay with him they are welcome and he has lots of space.

The address is:

65c Berryhedge Lane,
Winhill,
Burton-on-Trent.

Phone:0283 517658

He is situated about half way between the Long Mynd and the Derbyshire Soaring Club sites, both being about 1½ hours drive away.

NO RIDGE HOPPING!

We have no agreement with the landowners along the Truleigh ridge to use their land for flying and they have complained that pilots are landing and taking off there. When flying along the Truleigh ridge the only landings allowable are emergency bottom landings, which incur a £10 fine, and landings on Sky Systems sites by arrangement with them. The only S.H.G.C. take off areas are at the Dyke pub end of the ridge, so only fly to Truleigh and back when conditions allow you to stay airborne throughout.

MINUTES OF THE SHGC COMMITTEE MEETING, 3RD JULY 1991

Present : J.Carr, M.Brady, A.Turner, M.Woodhams, N.Ward, D.Williamson,
N.Gibson, K.Pickering, M.Carnet, M.Johns

Apologies : A.Shaw

1. Minutes From Previous Meeting

The following amendments were agreed :-

- Section } 2.4 Heading should be "Replacement Lock At The Dyke".
 } 2.7 Heading should be "Lock And Chain At Firle".

2. Matters Arising

2.1 Visiting Flyers

M.Carnet is preparing statements in French and German for Vol Libre and Drachenflieger magazines and for display at club sites.

2.2 Club's Insurance Cover Under The General BHGA Policy

M.Brady reported that a letter had been sent to Reggie Spooner. A reply is awaited.

2.3 Site Rent For Farmer Williams

A.Turner is waiting for a cheque from Peter Day.

2.4 Lock and Chain at Firle Car Park

A new lock and chain are in place. The 4-digit combination is '0360'.
A note will be placed in Windsock.

2.5 Payments Due For Xmas Bush

All outstanding Payments have now been received.

2.6 SHGC Membership of the BAPC

Angela Morris had replied to the Club's letter on 1st July.
The annual cost to the Club of membership is £132. The BAPC are not at present prepared to waive this fee. In return for the payment the Club is entitled to one vote (out of a total of approximately 100) and will receive club circulars, safety bulletins etc. It was pointed out that any important information would be forwarded to the Club by the local paragliding schools which are BAPC members.

3. Sites Guide

M.Woodhams reported that he is still waiting for details for Ditchling, Mount Caburn and the Dyke. J.Carr had brought the information on Ditchling to the meeting. Further progress with the Guide is dependant upon M.Woodhams receiving the remainder.

M.Woodhams presented that part of the Guide completed so far. J.Carr complimented him on its superb quality. This was supported by the rest of the Committee.

A quote of £820 plus VAT has been received for 500 copies (including collation and binding). An alternative quote will be obtained.

M.Woodhams was authorised to get PMTs (photo-mechanical transfers) of site maps at £4 each.

A.Turner had passed some amendments to M.Woodhams re. car parking arrangements at Firle.

4. Sites

4.1 Beachy Head

A letter had been received from Eastbourne Council complaining about D.Maynard flying low over the road whilst top landing.

A.Turner said this was the second such incident this year involving this particular pilot.

M.Brady will write a letter to Mr. Maynard with copies to the Council and Tom Handle of the BHGA.

4.2 Dyke

M.Johns had received a letter from Fulking Parish Council expressing concern at hang gliders bottom landing near the village. The letter had been copied for comment to Brighton Corporation, W.Sussex County Council, Horsham District Council and the police.

Having spoken to the Chairman of the Council who is a landowner, M.Johns said the complaint appeared to have originated when a pilot became offensive to him after a crop landing had occurred in one of his fields. He had expressed the view that pilots should fly with £10 in their possession so they can pay their fines on the spot (some pilots have not been paying). M.Johns agreed to raise the subject at the next Club Committee meeting.

The general feeling was that the Club would stand to gain very little from the membership. Before reaching a final decision it was agreed that N.Gibson would investigate to ensure that members would not be disadvantaged if the Club were not to join.

2.7 Bottom Landings At Ditchling

J.Carr has spoken to the owner of the 'L'-shaped field currently in use and has obtained permission for the Club to use the adjacent (larger, squarer and flatter) field when there are no crops, in return for the additional payment received in respect of the schools' use of the site.

Permission was also given to clear bushes and trees from the launch area. This should be performed in the autumn when birds are not nesting.

J.Carr will obtain a cheque for £200 from Peter Day for payment to the farmer.

2.8 Sale of Beachy Head

M.Brady had drafted a letter to Eastbourne Council requesting a copy of the tender document. Following a conversation with A.Turner, this was not sent since it does not appear that there are now any plans to proceed with a sale.

2.9 Sussex Downs Conservation Board

Letters have been sent to both the East and West Sussex County Councils requesting representation for the Club. Replies are currently awaited.

2.10 Blackboard For Use On-Site

K.Pickering reported that this is in hand.

2.11 Low Flying In Small Bowls At Dyke

N.Gibson has produced upto date site rules which have been published in Windsock. A separate note will be placed in Windsock specifically to remind members of the arrangements with the modelists.

2.12 Club Coaches

K.Pickering will provide D.Williamson with an upto date list for publication in Windsock.

Details will be published in Windsock and the Sites Guide.

M.Brady will draft a reply to the Council requesting confirmation that the action taken by the Club has rectified the situation. J.Carr will take it personally to the Council Chairman together with the Dyke portion of the Sites Guide and the notice published in Windsock.

5. Officers Reports

5.1 School's Liaison (M.Woodhams)

The following schools have been registered for training on Club sites :-
Sky Systems, Sailwings Hayling, Free Flight Paragliding, Russ Crowley,
Free Flight Hang Gliding, Green Dragons, Sussex College.

To date, fees for using Club sites had been received from Russ, Tim Cox and Sky Systems.

The issue of Club sites being used by non-members for training was raised. According to the constitution, people who train on Club sites must be Club members.

It was reported that two ex-paraglider instructors had been seen training at Beachy Head. They are not currently associated with any of the registered schools. M.Johns will contact Alan Mortimer to obtain further details and report back to J.Carr. It also needs to be established whether the individuals in question are Club members.

5.2 Competitions

A competition is being arranged with the Dunstable, Sky Surfer and Isle of Wight Clubs, provisionally on 27/28 July. This is open to all pilots.

An Airwave semi-final is also being arranged for 31st Aug/1st Sep. Date to be confirmed. This is open to non-league pilots only.

Both competitions will be held on home sites.

It was commented that, as yet, there are no Southern Club entries in the national XC League.

5.3 Windsock (D.Williamson)

All Club officers were invited to submit contributions to the magazine. It was stated that Eddie Bilous had submitted an article which had not been published. D.Williamson had not, in fact, received it and will contact Eddie.

5.4 Safety (M.Johns)

No response had been received to the request for marshalling volunteers placed in Windsock. Approaching members on the hill had been more productive with 10/12 people agreeing to participate. M.Johns is confident this number can be doubled. Once this has been achieved he will organise a roia. Because of the significant cost in telephone calls, M.Johns will need to claim expenses.

5.5 Sites Liaison (A. Turner)

Alison Buller of the Sports Council will support the Club's application to join the Sussex Downs Conservation Board. M.Brady will provide her with copies of the constitution the letter sent to the East and West Sussex County Councils.

Should the Dyke purchase go ahead with Sports Council financial backing, the acquisition may be on behalf of a number of interested bodies and jointly managed by them (some other users of the land are concerned that exclusive ownership by the Club would be detrimental to their interests).

Although the current situation is that Farmer Williams is not selling the land, he has promised the Club first right of refusal.

5.6 Membership Secretary (N.Ward)

260 members have renewed for the current year and 15 new members have joined the Club.

A list of non-renewals will be published in Windsock.

K.Pickering will put a note in Windsock stating that flyers must carry proof of membership or the daily fee will be payable.

5.7 Secretary (M.Brady)

A letter has been received from Percy Moss asking for volunteers for a BHGA think tank to discuss where the sport should be heading. M.Brady will pass a copy of the letter to D.Williamson for publication in Windsock.

5.8 Towing (M.Carnet)

The first aid lecture given by St. John's Ambulance at Sky Systems was extremely worthwhile for those present. Unfortunately, it was not well attended.

D.Williamson will be asked to publish details in Windsock of subsequent lectures on air law and competitions.

J.Curr will obtain a cheque from Peter Day for payment to St. John's Ambulance of £30.

Following a request from Whitbread, M.Carnet has provided the Dyke Hotel with a number of photographs which are now on display in the cafeteria upstairs. Hotel management has agreed to the Club putting up a notice board upstairs.

M.Carnet is starting a towing syndicate. Members of the syndicate will pay less for winch launches. Winners can earn credits for free launches themselves. This arrangement extends to hang glider pilots who have towing endorsements (which can be obtained from Dave Whymark).

M.Carnet suggested that the Club take over responsibility for the coaching of Club pilots once they have been through the normal school training program along the lines of conventional gliding. This could be charged for by the Club.

The initial feeling of the rest of the committee (or those who were still there at 11.30!) was that this would take the club beyond what it is qualified or able to do, and would create obligations which the Club may not be able to meet

The whole towing issue required much more time to discuss than was left and will be included as a separate agenda item at the next meeting.

6. Date of Next Meeting

31st July 1991, 8.00 p.m at the Dyke.

COMPETITION NEWS.

Although, as predicted, the weather during the Alexander Rose Day competition was not really up to it, a few people managed to fly some good distances and most got away from the hill at some time during the six weeks.

Now is the time to collect the money and either send cheques only, made out to Alexander Rose Day, to me, together with your sponser form, or give them to me on the hill.

The prize giving will be on Weds. 2nd Oct. at 8.00 p.m. at the committee meeting at Devil's Dyke Inn and the people from the charity will be there to do the presentation. Could all competitors please make the effort to come along and any other pilots wishing to attend for drinks etc. are welcome.

I am also organizing a hang/para comp between ourselves and the Thames Valley club which should happen in the next few weeks. For any updates on this see me on the hill.

TONY LUCCHESI.

XC LEAGUES:

	MARTINI LEAGUE.	Total Miles
1. A.Lucchesi	45,24,13,10,8	100
2. D.Mattews	28,25	53
3. D.Perrin	13	13
4. P.Rankin	13	13
5. S.Cook	12	12
SUSSEX LEAGUE.		
1. S.Cook	12	12
2. A.Lucchesi	10	10
WEEKEND LEAGUE.		
1. S.Cook	12	12
2. A.Lucchesi	10	10

Free Flight Hang Gliding School is moving to their new tow site in Essex, 1 mile from South Ockenden railwar station. They will offer tow training to all levels. This will be handy for London. More details in next months 'Windsock' or contact Dave Whymark.

QUALIFIED ELECTRICIAN NEEDED

The weather station is currently(no pun intended) being run from an extension lead to the pub kitchen as Whitbread's will only allow a 13 amp socket to be fitted in the loft space by a qualified electrician. This would only take a few minutes as there is plenty of wiring to tap into so if anyone would be willing to take proof of qualifications to the Dyke pub and do it please contact John Charlton on 0342 716006.

S.H.G.C. MEMBERSHIP

To avoid having to pay high membership fees in the future, the £2 daily membership fee must be collected from anyone flying without membership. Pass all monies collected on to a committee member or the treasurer.

***** MUCKRAKER *****

Revisited
(again)

Well, here it is again! This list of members who have not yet paid their subscription for 1991/92 has only shortened by four since it appeared in last month's Windsock.

Please, if you see any of the people listed below flying our sites, demand from them the £2 daily site fee (hopefully you will remember to pass this on to a committee member). Encourage them to renew their annual membership - we will not be able to meet our annual site fees to the land owners if we do not collect a lot more annual subscriptions from these freeloaders.

Allwright R	Elliston Mark *	Neilson Alan
Amnan Monique *	Eyre Michael	Nikitits Andy
Anderson Tony	Finney Keith	Oestel Mark
Ashley David	Fisher Mark	Overs Paul
Attfield Martin	Fletcher J	O'Donovan P
Auld Alistair	Fotheringham Ian	Partridge Calvin
Baker Chris	French Steve	Pearson Max
Baldwin R	Gausden AJ	Powell Darrin
Bale Derek	Greaves Richard	Ractliffe Stefan
Ball Roger	Hall Nick	Reyes Patricio *
Bastin Rob	Harding F Paul	Robertson Mike *
Batten Laurence	Hart Nick	Rogers Mark
Bingham Mervyn	Henderson Ellice	Roman Stefan
Boreham Richard	Hewitt John	Rothwell Timothy *
Bourne Laurence	Higham Mark	Sedgwick Ray *
Bramhill Kevin	Horsfield Eddie *	Seeley Philip
Brierre Philippe	Hughes Roland	Sharma Pradeep
Burden Peter	Humphries Anna-Zoe	Siddle Jerry
Callow Tony *	Hutchinson John	Slough Steve
Carstairs James	Janes Clintyn *	Smith Leonard
Carter Stuart	Jehu Irwyn *	Smith Graham
Chapman Mark	Johnson Peter	Smyth Aidan
Chick Mark *	Johnston Ken *	Southgate Miles
Coates Samantha	Jones Nick	Steadman Jane
Collin Jean	Jones Dave	Steven Marion
Conroy Liam	Jones Chris	Sturmer Corinna *
Cook Steven *	Jones Ian	Swallow Nick
Cook PDT	Kent Phil	Taylor Paul Stan
Cooper Tammy	Lambert Brian	Thompson Duncan
Cowling Steve	Lane Tony	Tingey Mark
Crocombe Alfred	Lawson Jonathan	Travers Howard
Currell James	Leach Christopher	Turner Neil *
de Barros J.O.	Leatham Ed	Vickers Dave *
Dearden Andy	Leavis Peter	Westbury Stephen
Dent Bill	Liddard Don	Whittington Tony
Dix Ian	Lovell Chris	Williams Bledbyn
Drewery Cliff	Mackay C	Willis Steve
Edwards John	Maledy Dave	Wilton Brian
	Maynard Doug *	Woodhams Mark R
	McDonald Colin	Wynn Jones David
	McKinstry Nola	Young John *
	Miles Sharon	
	Mortimer Alan *	
	Mulford Robert	
	Nancarrow Tony	

Names marked with a * have been seen flying Southern Club sites and we hope that they all paid their £2 daily site fee!

B.H.G.A. MEMBERSHIP.

To fly S.H.G.C. sites you MUST have current third party insurance cover for flying activities up to a minimum of £1 million. You can get this by being a current member of the B.H.G.A. or B.A.P.C. This rule is to be strictly enforced due to the dangers to the public and the implications of an uninsured claim. Every member can help by checking that others hold current membership of the B.H.G.A. or B.A.P.C. before they fly.

NEW AIRSPACE OFFICER NEEDED!

We need a new airspace officer as Jo Cattlin has had to resign due to moving away from the area. If anyone will stand for the post please contact any committee member as soon as possible.

SKY SYSTEMS

SKY SYSTEMS LTD, EDBURTON, NEAR HENFIELD, WEST SUSSEX BN5 9LL
Telephone: Brighton (0273) 857700. Fax: Brighton (0273) 857722

Sky Systems Paragliding Trip to Madrid '91:

Sky Systems are pleased to announce details of their coaching trip to the Madrid/Segovia area of Spain. The trip will run from 30th September to 6th October 1991, and is designed to allow pilots to refine their skills in these beautiful surroundings. The dates of the trip immediately follow the final of the British National Championships which run from 24th to 29th September on the same sites. Come and see the UK's top pilots battle it out along with international foreign guests, and then stay on for a week's flying on the same sites!

The trip is specifically aimed at fliers who are perfecting their technique and exploring new areas of flying. If possible, specific emphasis will be placed on thermalling techniques.

The sites, to the north west of Madrid (about 50 km drive), are perfect for paragliding: large (3000ft), grassy, rounded hills with flatlands in front and behind. This terrain makes it just right for starting off thermalling, using big gentle lift rather than more severe alpine summer thermals. We have just heard (16th July) that the Spanish Open Hang Gliding Competition which has just been held on the same sites had superb weather every day, a 13,000 ft cloudbase, and Britons taking the top 2 places! However, if the weather does prove unsuitable, the area should offer plenty of alternatives...

The package includes expert tuition from the Sky Systems Team, bed and breakfast accommodation, and transport to and from sites (including lift passes if appropriate). Also included will be retrieve driving for the lucky ones who go XC! We are currently looking at the possibility of using a payout winch to take advantage of the superb "plateau" landscapes. The cost does not include your transport between the UK and Spain.

There are many methods of transport to get to the area - some of our suggestions are: Car Ferry Plymouth/Santander and then drive, Plane from Gatwick/Madrid, Car Ferry South Coast/France and then drive all the way down. We will be pleased to put you in touch with other participants on the trip if you wish to car pool or travel together.

The price of the trip is £350 for fliers, and £299 for non-fliers.

All participants (except non-fliers) must be current members of the BAPC and be rated to at least SP level.

Sky Systems Trip to Morzine Winter '91/'92

Following our winter trips to this superb flying and skiing area of France for the past 3 years, we are currently planning 3 or 4 week-long trips for this Christmas/ New Year.

We will again be based in chalets in the beautiful town of Morzine. This lovely town gives easy access to many superb local flying sites and - as a non-flying alternative - some of the best skiing in this picturesque area starts literally on the doorstep.

Over the past years, we have found this area to offer the ideal introduction to alpine flying - most of the sites are fairly easy to fly, and provide spectacular high flights whether you are a seasoned veteran or a raw beginner. Accommodation, Breakfast, tea, and full evening meal (including unlimited wine!) is included in your package, plus transport from Geneva airport if you opt to fly out. Of course, members of Sky Systems team will guide you around the sites.

If you're very lucky you might also get the chance to laugh at your instructors trying to ski, or take advantage of the superb ski school which is based just 5 minutes from the chalets. We expect the price to be in the region of £300-£350 - little more than the price of hiring the chalet itself! Please call to be put on the mailing list for MORZINE.

flash - neo - apex mr - phantom - ninja - taboo - jedai

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South Downs WINCHING

Sky Systems' Koch Winch is now in regular action in S/W winds on our tow field behind Devil's Dyke. Paraglider pilots - call 0273 857700 for details of our winch syndicate and tow endorsements. Hang Glider pilots call Dave Perrin or Michel Carnet on the above no for details of H/G winching.

SMALL ADS

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MAGIC KISS 154

Green shiny mylar with "Kent Ceilings" logo. Very good glider, never damaged. Sale due to buying a new glider. £1000 - ring J Hayler (Spanish Joe) :-

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Phone Tony 04024 54913

MEDIUM BLACK MAGIC paraglider.

Pink & yellow, with harness. Low airtime (15 hours). Class 1 ACFPULS & Gutesiegel. £950 o.n.o.

Ring Steve 0622 36219.

(owner needs cash for hanglider!)

LARGE TYPHOON S4. Good condition. Rainbow U/S, speed bar, V/B. Possible dual glider. £450
Phone Simon Phipps 0932 341912

CONTRAIL PARAGLIDER

Good (immaculate) condition. £650 o.n.o.

Phone Bjorn or Grahame on 0273 844586

SMALL RUMOUR. Aug. '90, clean condition, low airtime, 3 spare uprights. £1650 o.v.n.o.

Phone Colin on:

0273 430167

DAVRON 105 VARIO & DIPLEX ALTI. £95. Ideal low airtime CPC starter vario.

Phone Steve on 0622 36219

MYLAR RUMOUR

£1095.

Phone Johnny Carr on:

0444 84217

GET THE MOST FROM THIS SUMMER!

Buy my ACE 160 (V/B, wheels, green U/S, etc.) - a bargain at £590. Sweetly tuned, will do the thermalling for you!

Ring Paul 0293 775021 (eves.)

AIRWAVE BLACK MAGIC paraglider (small). Yellow/Pink, including harness. Used twice. £1050 o.v.n.o.

Also,

ICOM IC-A2 and ICOM IC-A20 airband radios. Both only one year old. Bargain at £630 for the two.

Phone Richard on:

071 241 1508

WANTED; MAGIC IV FR 166.

Possible part exchange, with additional cash, for MAGIC KISS. Phone John Charlton 0342 716006.

DEFINITION OF "WELL UNHAPPY"!

I've got a LARGE BLACK MAGIC in yellow/black that I can't fly due to a CYCLING injury!

Max. 1 hour airtime from new (pukka condition). Worth £1050 ish?

Then give me a bell:

Simon 081 650 3657

VISION ECLIPSE (go faster Vision, no keel pocket). Ideal first glider. 40 hrs. use. Stored indoors, pneumatic wheels, never pranged!! plus,

Airtime Pod harness. Red, suit 5 ft. 7 in. - 6 ft. 2 in. Good, comfortable, hardwearing harness. £1000 o.n.o. the lot

Phone Steve on:

0444 416832

CALYPSO. Immaculate condition, as new only 20 hrs. airtime, pink/grey. Ideal CPC glider. £1000. C of A. T. And,

MAGIC IV FR 166. Nice glider, flies lovely, high performance with sweet handling. £650. CofA. T. And,

RUMOUR 13-5. Choice of two, both pink, both fly superbly. One in as new cond. 1 year old. £1650. One two years old but still very good £1275 C of A. T.

And, *APCO SANTANA SRC. Beauty, pink/blue, new metalised sail, very high performance but sweet handling (ask Steve Cook why he's selling his Rumour to buy one!) New £1950, ex-demo as new £1850. C of A. T. Phone Tony on: 0903 745277

* THE ONLY AIRCRAFT TO GET UP INTO THE SEA-BREEZE FRONT 12/8/91 FROM THE DYKE. PILOT: S. COOK, DIST: 20 MILES