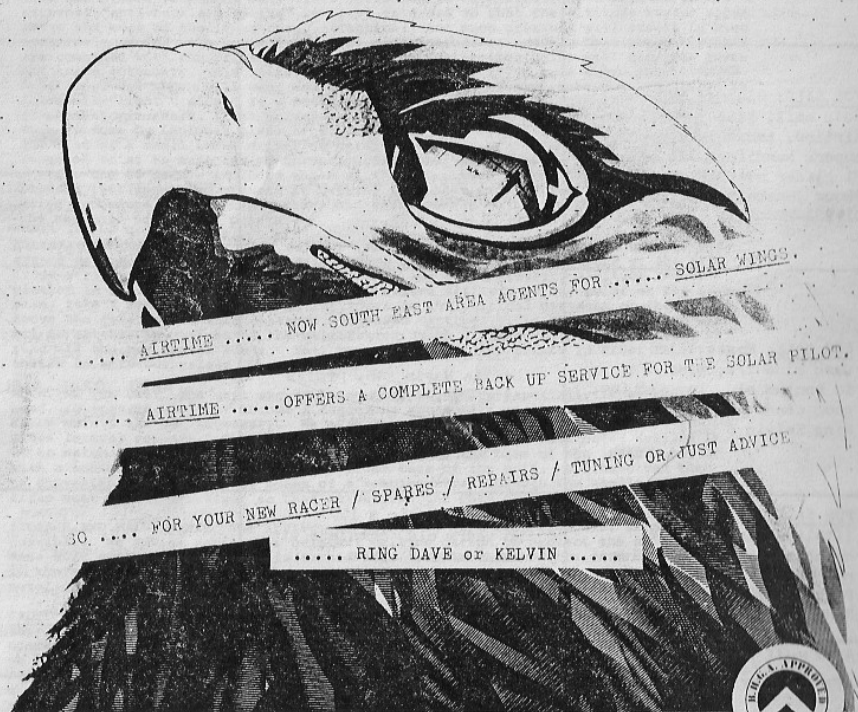


AIRTIME
hang gliding

S4 Racer

REFLECT ON THE BEST



..... AIRTIME NOW SOUTH EAST AREA AGENTS FOR SOLAR WINGS

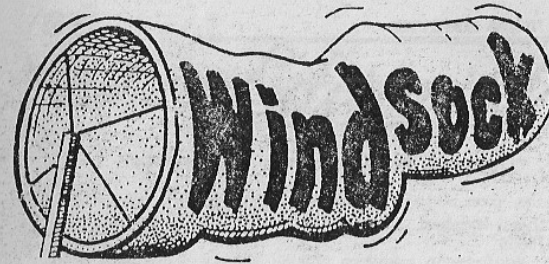
..... AIRTIME OFFERS A COMPLETE BACK UP SERVICE FOR THE SOLAR PILOT

SO FOR YOUR NEW RACER / SPARES / REPAIRS / TUNING OR JUST ADVICE

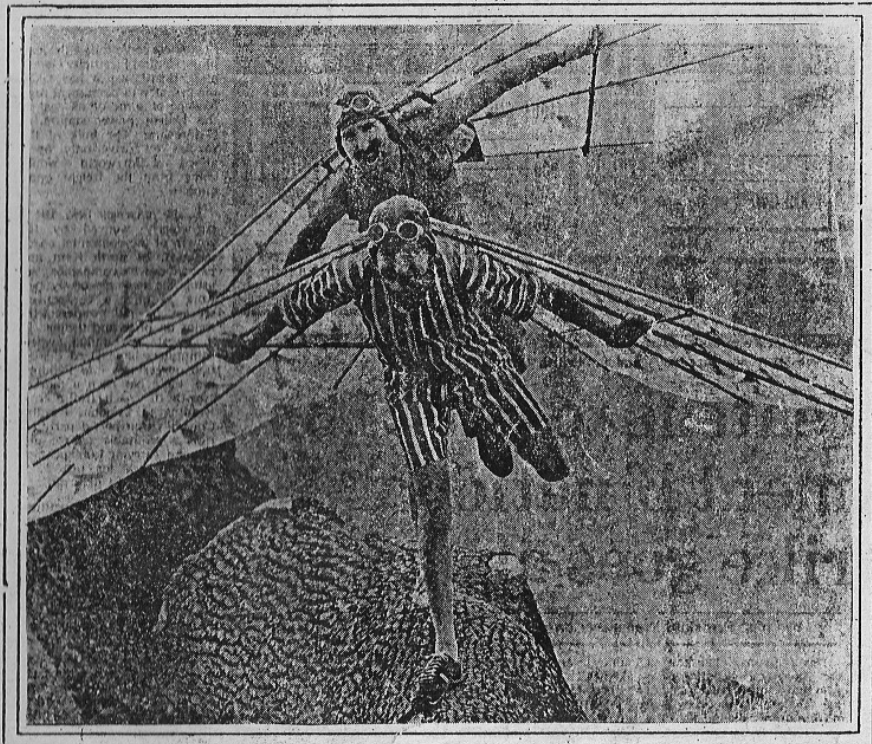
..... RING DAVE or KELVIN



Airtime Hang Gliding, 15 Hyde Street, Upper Beeding, Steyning, West Sussex, BN4
Telephone: Steyning (0903) 814173 or Brighton (0273) 416871.



JULY 85



RECENT ADVANCES IN DESIGN TECHNOLOGY MADE AT THE PYTHON SCHOOL OF AERODYNAMICS HAVE LED TO THIS EXCITING NEW BREAKTHROUGH IN DUAL FLYING TECHNIQUE. TEST FLYING OF THE AIRCRAFT WAS CARRIED OUT AT THE FACONS TEST SITE AT BOGNOR REGIS. A SPOKESMAN FOR THE SCHOOL SAID THE RESULTS WERE "INCONCLUSIVE".

SFGC '84/85 COMMITTEE



CHAIRMAN

✓ Johnny Carr, Tanglewood, 54 Ferndale Road, Burgess Hill, Sussex.
H - (04446)42324.

TREASURER

Peter Day, 112 Cotswold Way, Tilehurst, Reading, Berks. H-(0734)21481

MEMBERSHIP/SECRETARY

Adrian Whitmarsh, 1 Maple Close, Horsham, Sussex.
H - (0403)55761 W - (0825)5055

MEMBERSHIP ASSISTANT

Richard Halpin, 19 Second Avenue, Newhaven, Sussex.
H - (0273)516150 W - (0273)513434

SITES OFFICER

Chris Bartram, 80 Trafalgar Street, Brighton, Sx. H & W - (0273)682499

SAFETY OFFICER/ACCIDENT INVESTIGATIONS

Kelvin Wilson, 15 Hyde Street, Upper Beeding, Sx. (0903)814173

CLUB COACH

✓ Dave Rusbridge, 9 Allington Rd, Worthing, Sx. (0903)31204

COMPETITIONS

Joe Hayler, 75 Deakin Leas, Tonbridge, Kent (0732) 357413

✓ Pepe Martello, 73 St Andrew's Rd, Worthing, Sussex (0903) 68780.

PUBLIC RELATIONS

✓ Jan Martello, 73 St Andrew's Rd, Worthing, Sussex (0903) 68780

WINDSOCK EDITORS

✓ Chris Bartram, 80 Trafalgar St., Brighton, Sussex (0273) 682499
Ian Carrington-Smith, 36 Furze Croft, Hove, Sussex. (0273) 775114

B.H.G.A. COUNCIL REP.

Dave Clayton, 9 Hawthorn Court, 148 St James Road, Sutton, Surrey
01-642-0630.

CLUB SOLICITOR

Tony McLaren, Thomas Eggar & Son, 5 East Pallant, Chichester,
Sussex. H - (0243)786111 W - (0243)773457

PAUL RAY 116 ROYAL GEORGE RD. B. Hill
ANDY WOOD 116 ROYAL GEORGE RD. B. Hill
RAY SWINFOLD 56 EWART ST. B.T.N. 699097

CONTRIBUTIONS

If you have an interesting story to tell or accident to report just write it down clearly and send or give with any photos to either of the editors. Please send a S.A.E. if material is to be returned. All items must be in by the 25th of each month, for the following months' magazine.

ADVERTISING

Private advertisements for members (to sell gliders, lost and found etc.,) are free.

All commercial advertisements are charged at the following rates:
1/6 of a page: £12 per year (in advance); 1/3 page: £22 per year (in advance); full page £5 per month, or £45 per year (in advance).

Editorial

People are starting to say how poor this summer has been but from a gliding point of view it has been very good. This year we have had 3 XC flights over 100 miles in the UK and numerous other long distance flights over 80 miles by a growing number of pilots. In our own Club the 1984 Devil's Dyke XC record has been broken no less than 5 times already this season. So what's the cause of all this good flying? Well, of course, the weather is half the story but the other half must lie with the pilots themselves since glider performances have not increased significantly over the past three years or so. It all boils down to experience and the gaining of it. Slowly but surely that 'go for it' attitude is sweeping more and more pilots off the ridge and into thermal soaring. I would say that in ten years time very few if any hang glider pilots (if that's what we're still called) will be interested in ridge soaring. Towing activity is on the increase and the hill will become less and less important except as a thermal trigger point or in desperation when low on cross country flights. Sailplanes, albeit with their superior performance, made this transition in their formative years in the 1930s and 1940s, and I think we are just entering that phase now. Towing will not only free us from the hills but will make our type of flying far more sociable. Adrian Whitmarsh has a word or two to say about towing in this issue, as far as the Club is concerned.

The Barograph: as mentioned briefly in the last Windssock this is for hire on a daily basis to any Club pilot. It can be used for record attempts, Delta Silver qualifying flights, or for your own interest and analysis. A short article on analysis of the traces is to be found in this issue. The point is, you don't have to be a hotshot pilot to want to use the barograph; every pilot can learn something about his/her flying from using this instrument. Phone Dave Rusbridge to book on 0903-31204.

HELP!! If anyone has seen a yellow Labrador in a white Renault 12 recently in the vicinity, would they please contact Johnny Carr on 04446-42324, as this dog has been stolen from one of our local friendly farmers. Any information will be treated in confidence.

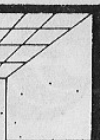
Bye for now,

Ian CS.

KENT CEILINGS and Partitions Ltd

88 PRIORY STREET TONBRIDGE
KENT TN9 2AH (0732) 359128

suspended ceilings
dry linings
internal partitions



reply to:

75 Deakin Leas,
Tonbridge,
Kent.

Tel. 357413

Dear Club pilot,

As a Club we are always going to other places to fly, so this is your chance to repay hospitality to other Clubs or individuals and invite them to come to see you and enter our Competition on August Bank Holiday.

We have invited Avon, Thames Valley and South Devon to come and see us and enter the Inter-Club of Great Britain Competition sponsored by D. Evans (our great Chairman and beloved father of B.H.G.A.).

We intend to have our own Inter-Club Competition, a barbecue, games, booze-ups and other attractions for your delicate tastes and obviously we will have room for your friends so be a sport and come yourself with your family to the Festival of S.H.G.C. only you can make it as good as it will be.

On Saturday 24 August 1985 at 10.00 a.m. we will meet at Devils Dyke Pub from there depending upon the weather we will decide the next move, be prompt. We will have a Competition even if it is in the Pub. The Competition will be for the whole of the August Bank Holiday.

See you then.

Yours sincerely,

Joe Hayler

p.s. If you can help in running the Competition please telephone me on 0732 357413.

We belong to the



SUSPENDED CEILINGS ASSOCIATION

BRITISH HANG GLIDING ASSOCIATION

The Governing Body of Hang Gliding within the United Kingdom - founded 1974



Member of the
Royal Aero Club
of the UK



Fédération
Internationale
Aéronautique

CRANFIELD AIRFIELD, CRANFIELD, BEDS. MK43 0YR
0234 751688

please reply to:

24th July, 1985

Dear Club/school/manufacturer,

Mere 1985

August 31st and Sept 1st

This year Clubman's Mere will be held on August 31st and September 1st (practice day August 30th).

Mere 85 will see the first British tow-launch (winching) competition, along with the usual types of simple flying tasks that made Mere suitable for all levels of hang glider pilots - and, of course, the only Bog-Rog held world wide.

Mere this year co-incides with the town Carnival, so it should be fun for all the family.

The towing competition will, for safety reasons, only be open to those pilots who can produce evidence of having acquired the correct training to be winch launched.

Due to a mis-timing for the copy to go to Wings!, the above information was not printed in the July copy. I therefore particularly request clubs to pass on the above details to their members so that they will be able to organise teams for the great event.

Make this year's Mere one to remember.

Fly well, fly safe,

Percy Moss

S.H.G.C. CALENDAR

ALL CLUB NIGHTS TAKE PLACE AT DEVIL'S DYKE PUB.

Here's a couple of dates for your diary:

SATURDAY OCTOBER 5th.

" Lecture on Basic Meteorology for Pilots " by Flying Officer David Bilcliffe, from RAF Kenley. He is an A2 Gliding Instructor and has been flying for 14 years. David has a knack for making difficult and sometimes boring subjects easy to understand with the aid of slides, films and various visual aids.

The lecture will be on 'Basic Meteorology' which will be of great benefit to pilots new to hang gliding or P1's studying for their P2 exams.

If required, he will also talk about more advanced subjects such as flying conditions to expect in mountainous regions, or any other gliding related subjects.

So here's an opportunity for pilots of all levels to pick the bones of a pilot of one of those 'plastic thingies' we see wizzing around the Dyke at Warp Factor 6.

Starts 8.00 pm prompt, Devils Dyke Hotel.

NOVEMBER 2nd (note: NOT Sept. 14th as previously advertised)

David Clayton, B.H.G.A. Training Chairman, will give a short talk on "Flying Experience and Techniques". The talk is, basically, for early P1 pilots desperate for knowledge on all aspects of hang gliding cross country flying. It will be a good chance for all pilots to fire questions at an experienced competition pilot.

8.00 pm at the Devils Dyke Hotel. A light buffet will be available at both venues.

Kevin Pickering

Soc. Sec.

IS THERE A SABOTEUR IN THE SHGC?

Over the weekend of 15/16 June, I came with two friends to Brighton to pick up a glider and some equipment. I flew my Typhoon on the Saturday morning, in light conditions at Devil's Dyke (went down, alas!). Then I packed it away, and it stayed on the car for the rest of the weekend, until we went back to Belgium, where it lives securely in my garage.

The next time I had the glider out was three weeks later, on holiday at Samöens in the French Alps. At the top of the mountain, with the prospect of a 3000' drop before me, I rigged up. When I stood the glider on its control frame to attach the nose catch, I found that both the bolt which serves as a location point for the swan-neck, and the push-pin which secures it, were missing.

I very carefully searched the bag, and the rigging area, but they were not to be seen. Naturally, the glider couldn't be flown - it was only my good luck that the excellent facilities of Michel Jardin's workshop were nearby, and I was back in the air the next day.

Now I know that the glider was OK when I preflighted it, and when I de-rigged it after my flight. I could accept that the wire which holds the push-pin might have broken, and the pin could be lost. But what about the bolt? This is retained with a Nylock nut, and while it's supposed to be theoretically possible, I've never heard of one of these vibrating loose while a glider's in transit, and even if it did, the assembly should have been in the bag.

The only conclusion I can come to is that the bolt and the push-pin were DELIBERATELY removed by somebody who knew what they were doing (which implies a hang glider pilot) to make the glider unflyable but in a fairly obvious sort of way. It would've taken long to do, although tools would have been necessary. It's this aspect that makes it so bad - we all face the possibility of "street" vandalism to our wings, but this was obviously more deliberate. The only times it could have been done were while the car was at the Dyke, or when it was left overnight in Bedford Square in Brighton on the Saturday.

We were travelling in a blue BMW with Belgian registration plates, carrying two Clubman gliders as well as my Typhoon, which was in a green bag with orange ends. I don't know whether whoever did this doesn't like Belgians, doesn't like BMW drivers, doesn't like Tony Fuell, or just needed a push-pin for his own glider. He certainly spoiled a flying day for me, and raises some questions that we all need to think about. British h.g. pilots fly all over the world, and are welcomed wherever they go. I ask you all to consider how long this will last if attacks on the cars or equipment of pilots visiting Sussex are allowed to pass without comment. Let me just say that I was a founder member of the SHGC, and despite the fact that I can't fly there very often, I've maintained current flying membership there for over 10 years now. The guys with me - one British, one American - both paid the "temporary" SHGC membership for the weekend, even though neither of them flew.

Naturally, if anyone finds out the identity of the bastard monk who did this to me, I'd be DELIGHTED to know....

TONY FUELL

Ave Théodore Roosevelt 12
B-1320, GENVAL, Belgium

Aerial Arts present

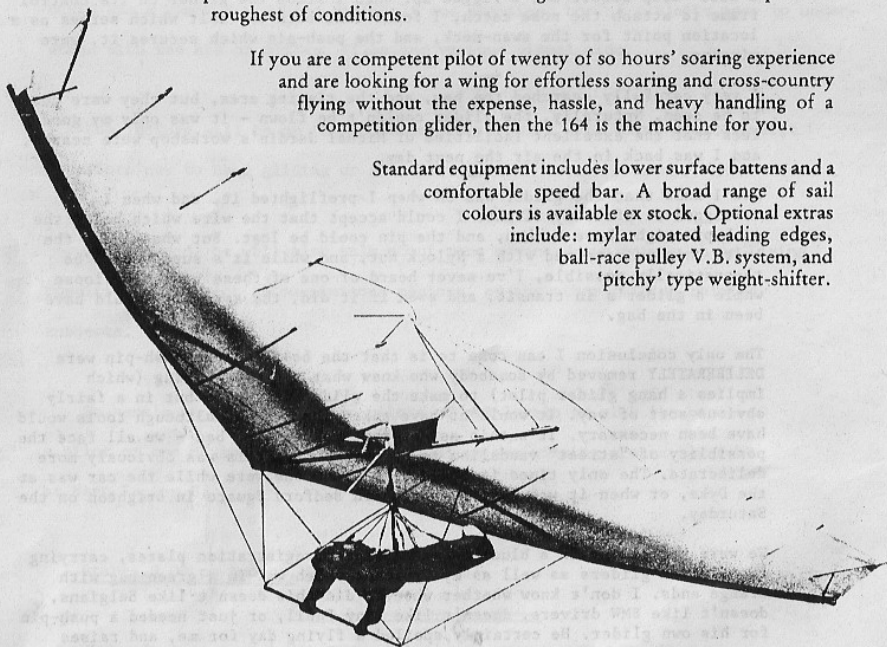
the Clubman 164

In response to demand by relatively experienced club pilots for a low cost high performance wing with reliable and predictable handling characteristics, Aerial Arts has produced the Clubman 164.

Using the same advanced design techniques which lead to the ultra-lightweight Clubman CFX on a glider of higher span, has resulted in a machine with a very impressive sink rate and the sort of handling that will iron out the bumps in the roughest of conditions.

If you are a competent pilot of twenty of so hours' soaring experience and are looking for a wing for effortless soaring and cross-country flying without the expense, hassle, and heavy handling of a competition glider, then the 164 is the machine for you.

Standard equipment includes lower surface battens and a comfortable speed bar. A broad range of sail colours is available ex stock. Optional extras include: mylar coated leading edges, ball-race pulley V.B. system, and 'pitchy' type weight-shifter.



Contact Aerial Arts today to arrange a demonstration.

Specifications:-

Wing area	164 sq. ft.
Wing span	32.5 ft.
Max L/D	10.5:1
Minimum sink rate	180 ft./min.
Optimum pilot weight	145-185 lbs.
Empty weight	56 lbs.

Aerial Arts, 30 Sillwood Street, Brighton BN1 2PS. Tel: (0273) 727033

SECRETARY'S SCRIBBLINGS

by Adrian Whitmarsh

Well, we now have 186 paid-up members and the Committee have been overwhelmed by the response from all of you. Following the plea for help in running the Club in the last Windsock no-less-than 1 person volunteered! Thanks **Ray Swinfield**. It's good to know someone is reading Windsock! Anyway, I've managed to press-gang a couple of other likely lads so hopefully in addition to **Ray Andy Wood** and **Paul Ray** will also be helping out on the Committee soon. But don't let that stop anybody else from volunteering. Just give me a call and we'll rope you in.

We primarily need help in putting Windsock together. As we compile, type, print, collate, staple, label, stuff & stick envelopes ourselves an almost 200-copy run is a bit much for the 3 or 4 people who handle it at present to be able to cope with every month. **So if you don't get it regularly every month and you're not prepared/able to help, don't moan!**

The more people that we have helping to run the Club the more things we can do/the more facilities we can have/the more secure our sites can be. For example, developments are moving fast on the towing front and the possibility exists for us to have a permanent tow-launch set-up within the next year. **But**, it will only happen if there are people to organise and run it.

Despite all the above I'd like to thank Richard Halpin for the splendid job he continues to do in ensuring people flying our sites are either SHGC members or pay their visiting fees. The size of our membership owes a great deal to his efforts.

Elsewhere in this mag. you'll see a copy of the Club's accounts for the year ended 30 April '85. We publish them here because following a resolution at the Nov '84 AGM there won't be another AGM until April '86.

The Club B.B.Q. held on Sat. 10 August was a financial failure, mainly due to the weather not being exactly enticing. A great pity though, as last year this was really successful (as was the last Christmas do). What happened to all those people who keep complaining to me about holding more events that wives/girlfriends can get involved in? Unfortunately the towing demonstration also billed for the same day had to be postponed until September because Mike Mc Millan, of the Isle of Wight H.G. Centre, was unable to make August due to pressure of business. He is going to bring his German-built static winch over to give a demonstration both for our own benefit and that of the farmers whose field we have initial permission to use. Hopefully those Club pilots sufficiently experienced will be able to get a launch. Contact Johnny Carr for further details. As you will see from the BHGA letter printed in this mag. there will be towing involvement at Mere this year, so anyone interested should try to get along.

SITES

I have had a letter from Mount Caburn landowners, Glynde Estates, asking me to reiterate to all SHGC members that the Club no longer has permission to fly there. However, they reconfirm that the Sussex College of Hang Gliding does, so their Vince Hallam should be contacted on Brighton (0273) 609925/733914/24151 ext. 171 for flying information. The problems here stem from inconsiderate parking, access and reported abuse to the farmer in the past - not all necessarily by SHGC members.

Secretary's Scribbles (continued)

There have been quite a few crop landings at the Dyke recently. Other than in exceptional circumstances (and safety must come first) there should be no reason for anyone not being able to land in one of the fields over the road. Especially as farmers have had a bad time with the weather this year, we must be considerate in this matter and therefore ANYBODY WHO LANDS IN THE CROP WILL HAVE TO PAY THE £10 FINE. If the farmer doesn't catch you, we will!

Hastings H.G.C. are organising a Charity Sponsored Fly-in set for the last 2 weekends in September and 1st weekend in October. Their Secretary, Jim Turner is arranging competitions involving the Dover & Folkestone HGC and ourselves. Anybody interested in knowing more/helping please contact Joe Hayler, who is co-ordinating from our side.

We now have an introductory "punter" leaflet published by the Club. If anyone would like supplies please contact me!

P.S.

Someone left 2 hang-straps on the Dyke Tuesday 6th August. Anyone claiming them please contact me.

Found: 1 blue stirrup harness + 1 white helmet. Contact Sky Systems Ltd.

DALES H.G.C.

There have been changes in our site rules regarding Wether Fell.

At the landowners request, we have had to restrict flying to full Dales Hang Gliding Club members only, and a combination lock has been fitted to the access gate.

This means that Associated Members and Members of clubs who have a reciprocal arrangement with the Dales Club will not be able to fly this site unless they join as full Dales Hang Gliding Club members.

Can we also remind flyers that they won't be able to join on the hill, so they must contact the Club well in advance to get an up-to-date site guide.

THE COMMITTEE D.H.G.C.

SMALL ADS

FOR SALE: Lindsey Ruddock Digital vario Mk V. white case £30 update. Just checked in perfect condition throughout £110. Ring Eddie 01-684-7427 (Croydon).

FOR SALE: GYR 188. Good condition, with harness, vario and several books on hang gliding. £650 ono. Phone Chris 01-778-0796 (South London).

FOR SALE: Magic 3 155 Mylar 1/e, light blue u/s, faired balltips, speedbar, good cond., goes as well as any 166, £775. Ring Dave, Brighton 416871.

FOR SALE: s/h Parachute, 24' Mainair Lifepak. Good condition, £175. Ring Dave, Brighton 416871.

FOR SALE: Cocoon Harness American, fully faired chute/ballast containers, very nice harness, £70. Ring Dave, Brighton 416871.

FOR SALE: Gyr 188 Purple with mylar inserts in 1/e. Very good condition £595 ono. David Wilson, 36 Milner Flats, Brighton, Sussex BN2 2QG.

Vince Kallam

Federation of British H.G. Schools
British Hang Gliding Association Observer
Hang Gliding Instructors Association
Federation of Aeronautes International
Air Line Transport Pilot

Sussex College of Hang Gliding

18 Queens Road
Brighton, Sussex, U.K.

Tel. 0273 609925
0273 24151 Ext 171

Dear Editor,

0700 Forecast 'Wind NW F3 with showers bubbling up'
Devil's Dyke (A N/W ridge 600 ft AMSL)

Am Wind NNW to WNW 10 Kts half cover, thermally

Noon Over-developed to full cover

Pm Cover breaking up. Signs of possible sea breeze to the discerning.
Wind 290° 12 Kts.

1500 I observed that I had 3 minutes left to fly in' and clipped in for the 4th flight of the day.

Longish take-off run with noticeable yaw left and right due to wind variations; off and 'bump' up 50 ft. Took a right turn away from what I presume to be seabreeze (SBZ) front into north bowl of the Dyke. There were several others flying. One or two on the ridge and others climbing in thermal to the east towards Newtimber etc. One turn low in the northbowl and feeling bumps, I moved further north away from the bowl and away from SBZ front. Wind socks turned SW on ridge and gliders having difficulty there. Some wider turns out in front brought 2-4 up and I climbed to about 1000' ATO drifting east to Newtimber. For the first time ever I could see my way to easy return to the Dyke. As others were well above me at Newtimber and there was a pilot waiting to take the glider I started back to the Dyke, still well to north of the ridge. A line of SBZ cloud formed thickly east and west a mile or so off the hills. As I came abeam the Dyke still climbing, I decided to go! Passed over the bottom field where late failures were landing or packing up, I yelled for their attention! (Later they said they watched me 'vanish into cloud'. Not so.)

Keeping to the right, i.e. North of the SBZ cloud, I climbed steadily, heading 290° and quacking at average 2 up. The Downs were hidden now by the cloud as I passed 800 ft above cloud base up its north face - listening for aircraft - watching a swift - and reaching the base of Air ways.

Pulling on a little and easily maintaining this height and an indicated 34-40 kph with a small but positive ground speed. Passing Truleigh Sands farm I thought of Small Dole, which I'd reached and turned back from once before.

cont'd

Cross Country by Vince Hallam (continued)

To the left a break in the SBZ cloud gave me sight of Goldings Barn motor cycle track, and Shoreham airport, and Steyning. Try for Henfield perhaps, or Mill Hill, or Steyning bowl? No, I opted for either Parham glider strip or Midhurst (the in-laws' place).

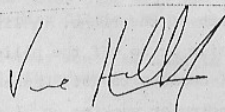
I found a sort of dark street half a mile to the right still tracking West, as the SBZ seemed to be broken off. Visibility was good, 8-10 miles. Near Storrington smoke swept down the hill from the south-west. Ahead smoke was visible from 280° straight towards me. A bit hazy and converged at my altitude, which slowly dropped at -1, -2.

Turning in lift would be of little use. I wanted distance into wind. I crossed the A24 at about 1200' and at lower altitude seemed to run into more headwind and made little progress. At 1000' I decided the trees ahead offered little scope for landing. I turned towards a nice little field and farm, whistled round the circuit and landed in a south-west at 10 mph amongst some goats and a Jersey cow.

Why didn't I 'out and return'? I wanted max distance into wind and I didn't have a camera.

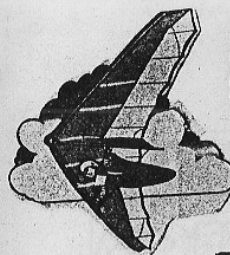
So, until someone else proves otherwise, I claim a SHGC record distance into wind. Newtimber to Ashington - 10 miles.

Glider	: Clubman DSFX 164 square feet	Airspeed indicator: Wasmar
Pilot	: 100 kg	Take off 3pm at 500 ft'
Vario	: Lindsay Ruddock	Landing 4pm at zero ft'
Altimeter:	Thomman	



P.S. I think that the max downwind distance was 35 miles that day.

Mark Woodhams is the Hiway representative in the south-east, living at 60 Compton Road, Brighton. Telephone Brighton (0273) 501 043. Excalibur 177 for sale. Rainbow undersurface and stinger, £900. Fantastic Vision demonstrator available for demo flights.



SKY SYSTEMS

FLY THE BEST COMBINATION

SUPP: IS STILL £199.00 BUT THIS INCLUDES STANDARD FEATURES SUCH AS RUCKSACK, TWISTLOCK KARABINER CAMERA STRAP, ENCLOSED LARGE STORAGE POCKET. DELIVERY 2 WEEKS

PITCHY : £32.50

1700 SOLD WORLD WIDE DELIVERY : IN STOCK

MAGIC IV : AIRWAVE ARE BOOKED UNTIL OCTOBER TAKE ADVANTAGE OF OUR SEPTEMBER SLOTS.

SKY SYSTEMS LTD.
Knoll Business Centre,
Old Shoreham Road,
Hove, Brighton BN3 7GS
Tel: (0273) 423650



**AIRWAVE
GLIDERS**



ACCOUNTS FOR THE PERIOD
1 MAY 1984 - 30 APRIL 1985.

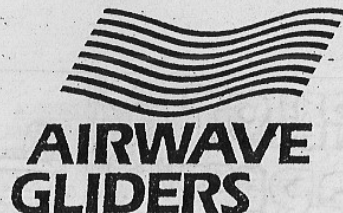
RECEIPTS	£
Membership Subs.	3584.44
Disco at D. Dyke	216.00
Adverts	132.00
Temp. M/ship.	77.00
Food at A.G.N.	30.00
Fines at D. Dyke	20.00
Raffle Tickets	14.50
Site Guide	1.00
	<hr/>
	£ 4074.94

EXPENDITURE	£
Payment to Farmers	1330.00
Windssock	644.20
Postage	413.41
Badges	341.55
Sweat Shirts	323.15
Stationery	285.18
Food at Club Night/B.B.Q.	255.38
Trophy/Club prizes	125.50
Santa Presents	99.53
Typewriter	99.00
Site Guides	94.90
Commettee Expences	63.00
First Aid Kits	41.50
Stapler & Staples	33.20
M/Ship Refunds	30.00
Lock & Chain	13.90
Hire of Film	13.36
Funeral Flowers	13.00
Air Map	6.00
Hire of Santa Outfit	5.29
Gloves	2.30
	<hr/>
	£ 4233.35

Expenditure up to 30 April 1985	4233.35	
Receipts up to 30 April 1985	4074.94	
	<hr/>	
	DEFICIT	158.41 (-ve).
In Hand @ 1 May 1984	2017.75	
In Hand @ 1 May 1985	£ 1859.34	



PRESS RELEASE



AIRWAVE GLIDERS

Airwave Gliders Limited, Elm Lane, Shalfleet
Newport, Isle of Wight PO30 4JY
Telephone Calbourne (0983 78) 611 (3 lines)
Telex 869188 Glider G

AIRWAVE CARES

Airwave are offering a free update to all owners of Magic IV's to cure a potential hazard.

Airwave Gliders Limited would like to draw the attention of owners of Magic IV's built before August 85 to a potential problem with the stainless steel pins that hold the upright to the fork fittings. It seems that occasionally this stainless steel pin is binding with the aluminium fork and in a few cases unscrewing. This problem has been tackled by drilling a larger hole in the fork fitting and inserting a Delrin plastic bush. There have been NO accidents because of this, but to be absolutely sure ALL 4 fork end fittings will be exchanged, free of charge. This will be done either by the dealer from whom the glider was purchased or directly by Airwave.

The Magic series of gliders have a worldwide reputation for quality, they last well and maintain their second hand value. The latest in the series, the Magic IV, has broken new ground in hang glider engineering and design. The directors, dealers and workforce with Airwave are proud of their product and are conscious of being the best and intend to remain so.

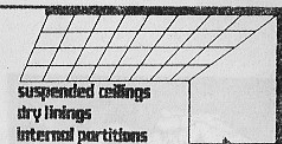
For further information please contact

SKY SYSTEMS LTD.
Knoll Business Centre,
Old Shoreham Road,
Hove, Brighton BN3 1GS
Tel: (0273) 423850

Directors R. A. C. Carter Dr. F. P. Carter G. D. Deegan
Reg. Office 73 Union Street, Ryde, Isle of Wight.
Reg. No. 1481 346
V.A.T. Reg. No. 411 4328 95

RENT CEILINGS and Partitions Ltd

88 PRIORY STREET TONBRIDGE
KENT TN9 2AH (0732) 359128



suspended ceilings
dry linings
internal partitions

reply to:

75 Deakin Leas,
Tonbridge,
Kent.

Ton. 357413

BEST OF FOUR FLIGHTS AT/TO 1/8/85

1)	J. Pendry	247.91	miles
2)	M. Robertson	167.05	
3)	D. Rusbridge	164.05	
4)	T. Bardon	149.54	
5)	M. Carnet	99.15	
6)	J. Young	68.04	
7)	I. Carrington	59.66	
8)	T. Payne	58.06	
9)	K. Pickering	52.00	
10)	J. Carr	42.05	
11)	B.J. Harrison	36.00	
12)	D. Perrin	28.00	
13)	J. Hewitt-	18.00	
14)	L. Chapman	15.06	
15)	T. Butler	13.00	

This is a list of all the pilots that entered the X-Country Competition. While we are doing very well in the National and International Competitions 15 pilots only represent us in the X-Country, a very small amount from our Club. I am sure there are very good pilots that only need to try to win and beat these old pilots so come lads have a try before the season finishes or are you just talk with the big if: if I was there, if I got high, if etc etc.

Yours sincerely,

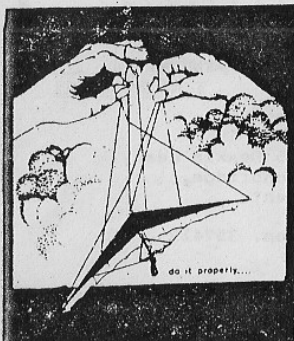
Joe Hayler

Reg. Office: 28 Culverden Down, Tunbridge Wells, Kent. Reg. Number 1448653 England
Directors: J. Hayler, D. R. Menzies, S. J. Hayler, J. E. Menzies

We belong to the



SUSPENDED CEILING ASSOCIATION



Why buy Duracells for your vario?

At £1.75 each!

NOW THE WELL PROVEN
LINDSAY RUDDOCK

"MICROVARIO MK VA"

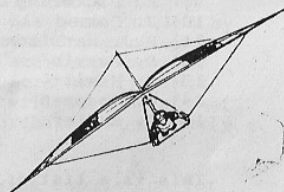
RUNS 50 HOURS ON A SINGLE CHEAP PP3

L.R.L. FAIRHAVEN COTTAGE, RIGEMEAD RD
ENGLEFIELD GREEN, SURRY T.W.2. O.Y.G.
EGHAM (0784) 34740 (ALL HOURS)

VINCE HALLAMS, SUSSEX COLLEGE OF HANG GLIDING .

HAS THE SITES & THE TIME FOR BASIC, INTERMEDIATE &
SOARING INSTRUCTION. SELLS GYR, SHADOW & NEW
INTERMEDIATE CLUBMAN AND THE NEW AERIAL ARTS
HOTSHIP, EATS MAGICS.
TRADES.. SSCORPION ETC ALSO SPARES REPAIRS
HARNESSES ETC.

INTERESTED!!! PHONE Bth 24151 EXT 171, 733914
& 609925 EARLY OR LATE AS YOU LIKE.
18 , QUEENS RD (LETTERS)
16 , CIRCUS ST (WORKSHOP)



DEC 85

BRITISH HANG GLIDING SCHOOLS

LONDON & WALES

WANTED

Fully qualified BHGA
Instructor for part-
time weekend work.
£40 per day.

DEC 84

New Gyrs and Shadows
New Phantoms
Part exchange on good
Super Scorpions



15 St. Mary's Green, Biggin Hill, Kent.
Telephone: Biggin Hill (09594) 73996

Walking on Sunshine

(Flying the Sea Breeze Front)

Slipping out of my Supp I looked at my watch. It was 3.30 pm exactly, on Saturday 8th June, and I was almost 60 miles from Devil's Dyke. I should have been attending a wedding but somehow I just got carried away.

Two and three-quarter hours earlier the swifts and swallows had arrived en masse in the sea breeze convergence at the Dyke. The wind all morning was a very light NW. Launching into their midst I rose 300' ato before nosing over into colder sinking air - the sea breeze itself. Time to forget about the hill, so I pulled in and dived inland over the village where straight away I ran into consistent 8 up lift, although I was by then 200' below take off. Before long I was passing 3000' asl over Newtimber with only a slight eastward drift, whilst to the west the sea breeze was pushing in fast towards Henfield. Over Newtimber Hill, convergence cloud formed beneath and behind me so that I was flying in an enormous amphitheatre of cloud off which sunlight blazed enough to dazzle me even through polaroids.

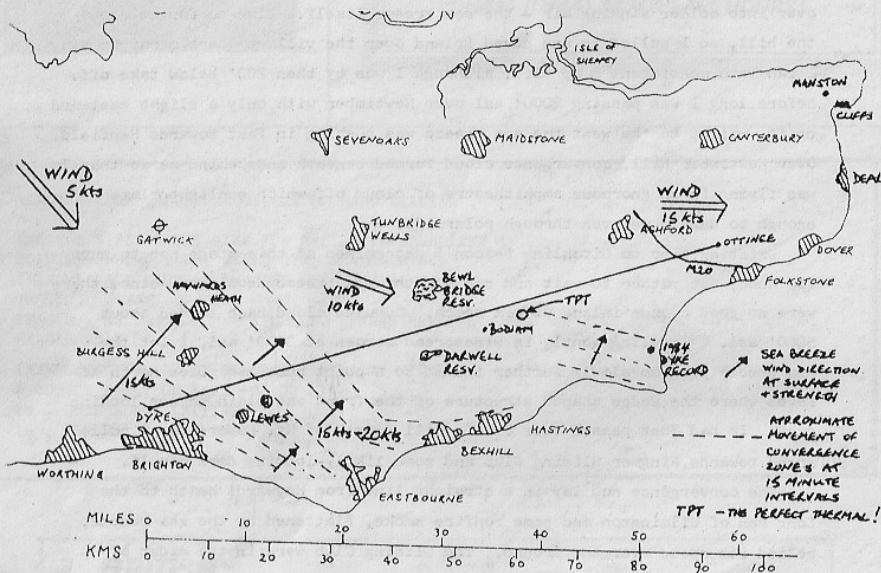
Drifting over to Ditchling Beacon I determined at this stage not to hurry too much, but rather to wait and see how the sea breeze developed, since there were no good clouds inland within reach. Cumulus cloud base looked about 5000' asl. Circling gently in widespread zeroes at 3000' asl, I let the sea breeze push me slowly further inland to a point some two miles north of Lewes where the wedge shaped structure of the front was plain to see looking east. It had just passed over Cliffe Hill (north of Mt. Caburn) so I pulled speed towards Ringmer Gliding Club and some likely-looking dark cumuli.

The convergence now lay in a straight line from Haywards Heath to the Long Man of Wilmington and some bonfire smoke, flattened by the sea breeze, belied its speed over the ground. The Gliding Club were in the midst of changing runways as I flew over, comfortably maintaining 3500' asl in the convergence. I kept on spotting patches of wispy cloud forming half a mile or so further inland about 1000' - 1500' below me. I had no hesitation in pulling the bar and speeding towards the forming cloud, arriving some 500' above it. Each time I found strong but smooth lift, between 6 and 10 up, enabling me to climb fast before speeding inland again. Such was its rapid advance at this point that I thought I would not be able to outrun the sea breeze.

cont'd

Eventually however, I was three or four miles ahead of the front going for the darkest looking clouds and able to relax a little. Barwell reservoir went shimmering by 4000' below with Bowl Bridge visible directly north. That was certainly the fastest moving sea breeze front I had ever flown along and I felt I had only just escaped being overtaken.

The extent of the convergence cloud now cast a large amount of cloud shadow on the ground ahead, except for a thin strip of bright sunshine two miles wide, running NW - SE, beyond which all was once again in cloud shadow.



I had to reach the far side of the sunlit strip to have any chance of finding another thermal. Being at cloudbase, now reaching 4800' asl on the altimeter, I felt I could get there even on a straight glide, so off I set, best glide all the way until I passed just north of Bodiam Castle where I was down to around 800' agl. Time to slow up and start hunting: I spotted a dry ploughed field at the bottom of a small 100' high westerly facing slope which seemed a good bet. Loitering about 1/2 mile downwind I found a scrappy little zero but not knowing where any better lift might be I stuck with what I'd got.

cont'd

The zero became a 1-2 up while I drifted on down the Rother Valley and then it died away at 2000' asl. However, although I had not gained much height, that thermal had given me time because by then the widespread overdevelopment had broken up a little. Again I sank down to about 600' agl before picking up The Perfect Thermal off three brown corn fields. This little beauty hoisted me skywards at the reassuring rate of 7 - 900 feet per minute until I was enveloped in its cloud forming at 5200' asl, drifting only 1/2 mile east during the climb out. Needless to say, I was now shouting for joy!

I set course for Ashford and flew the first few miles in zero or one down, so buoyant was the air. To the south I could see Rye and the sea breeze pushing in over the marshes; north east, near to Ashford were some good looking clouds, but by the time I reached them I found only a weak thermal near the M20 motorway. Over Ashford meanwhile, a large black cloud had brewed up but I knew that if I went for it and didn't connect, I would only be 50 miles, not enough for the record!

The rest of the sky was completely overdeveloped again but smoke was drifting up beyond the motorway, looking like a thermal trigger point, so I went for that but found nothing when I arrived except a freshening westerly breeze.

From 1500' asl then it was straight glide down to Ottinge on fairly high ground 500' asl, where Mrs. Reynolds provided me with cups of tea and some very tasty cheese and tomato sandwiches (some of the other rewards of XC flying).

Before landing I had time to see clearly the white cliffs at Manston to the northeast, Dover harbour due east, and that far away place in our imaginations - Deal. One day a pilot from our Club will fly there; could that pilot be you?.

Ian CS.

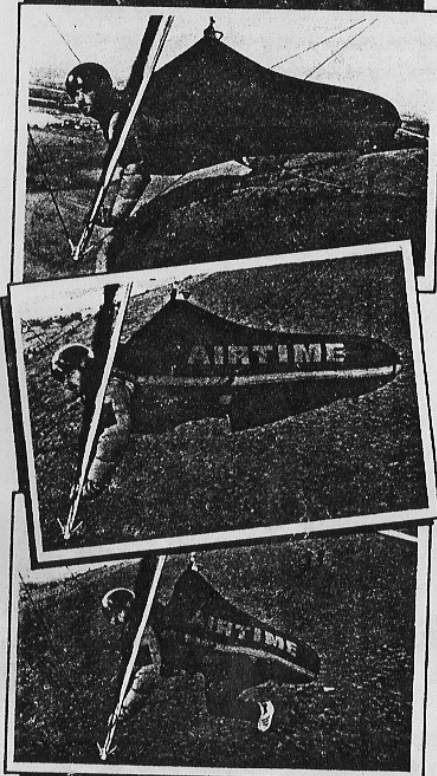
Distance : 59.65 miles

Glider: Magic 3 166.

Average speed: 21.7 mph

Supp harness & 10 UP 500 Vario

**When you're flying
to faraway places**



**Don't get chilly in
the nether regions**

Winter flying needn't mean getting cold in certain places. You can keep warm and comfortable everywhere when you slide into a Pod harness.

With its aerodynamic shape, reduced drag and improved comfort are not the only advantages. It's simple to get into. There's no knack, just put your feet up. It's a breeze.

Beautifully built in a choice of sizes and colours, the price is £187. Delivery is usually just a few days. Phone now to hear where you can test fly a Pod.

**AIRTIME
Software**

15 Hyde Street, Upper Beeding, W. Sussex.
Tel: Steyning (0903) 814173.

CLUB SWEATSHIRTS



AVAILABLE NOW FROM ALL COMMITTEE MEMBERS. THE NEW CLUB SWEATSHIRTS SEEN HERE ON DENIS'S GIRLFRIEND. ARE £7.50 EACH TO CLUB MEMBERS. THEY CAN BE MAIL ORDERED FROM JOHNNY CARR, PLEASE RING JOHNNY SHOULD YOU WISH TO ORDER OR SEE ANY COMMITTEE MEMBER ON THE HILL. SIZES ARE SMALL, MEDIUM, LARGE AND EXTRA LARGE. THE COLOUR IS LIGHT GREY AND THE CLUB BADGE IS IN THE CLUBS BLACK AND YELLOW STANDARD.

Analysis of Barograph Traces.

compiled by ICS.

(Source: Cross Country Soaring by Bill Scull.)

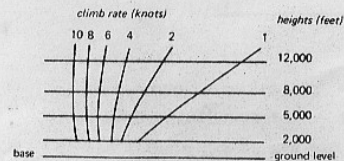
To improve your performance in terms of soaring the motivation has to come from within. However, performance is not easily gauged except in competition. Outside competition, one way in which performance comparison can be gained is to look at barograph traces - comparing yours against that of a more experienced pilot. It is not difficult to spot your mistakes after a little practice. Too often your impressions of your latest flight are too subjective: " I spent hours scratching at eight hundred feet " (probably twenty minutes), or " ...then there was this fantastic 6 up thermal " (the barograph shows 3 up), or, " I only used ten thermals for the whole task " (the barograph shows 15). And so, and so....

A barograph is a simple instrument which plots height, as a function of atmospheric pressure, against time on a trace. The trace is made of carbon paper wrapped on a drum and can be sealed into its container for verification of the recorded data, if necessary, after the flight. A barograph must be carried for all official FAI record attempts or qualifying flights. It must be inspected and sealed by an official Observer before take-off and presented to an Observer (not necessarily the same one) with the seal unbroken after the flight. The Observer should know that the barograph was carried on the flight in question; the barograph must be marked up with:

- 1) Pilot's name
- 2) Date of flight
- 3) A base line
- 4) The official Observer's signature and number.

All of the above can be forgotten about if you want to fly with the barograph purely for your own interest.

The figure below gives calibrated rates of climb for a standard barograph (Winter 10km/10hr rotation rate) and this can be used to determine the actual climb rates.



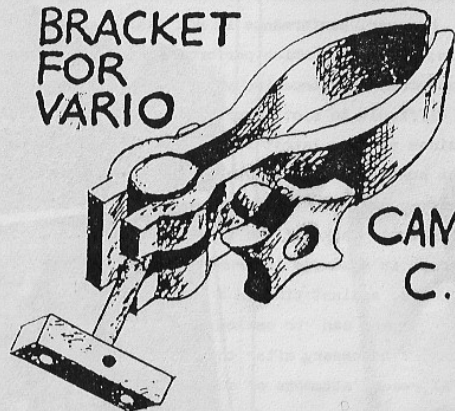
Each of the climbs is through the height range from 2000' to 12000'. Using this calibration reproduced on transparent film, it can be laid over the barograph trace to be analysed.

Note: This is an example only; the Club barograph is a Replogle model, not a Winter one.

(cont.)

AEROFIX

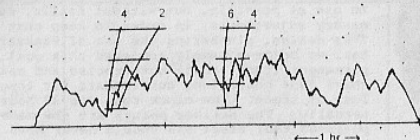
BRACKET
FOR
VARIO



CAMERA
C.B.

SEND £15 PLUS 75^p.p.p.
TO J. YOUNG
39 OLD TYE AVE.
BIGGIN HILL,
KENT, TN16 3NA
Tel. 0959-71706

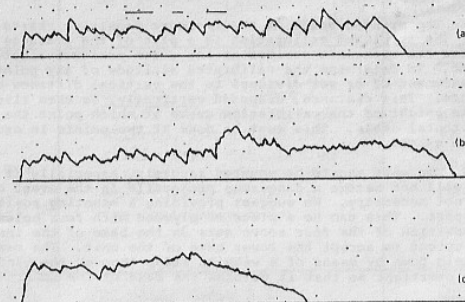
Barograph Analysis (continued)



The above diagram is the result of putting the film over an example trace. This trace shows a number of interesting features:

- 1) Frequently the climb rate reduces towards the top of the thermals; it is not all that obvious, but careful scrutiny and a comparison with the calibration chart shows this point.
- 2) The height used was 9000 to 13500 feet (and terrain height 4000 to 5000 feet) in the middle phase of the flight, apart from a low point (near the pilot's second turn point). However, there is a marked tendency to stop and use lift after very little height has been lost. Rarely was the rate of climb as good as the longer climb started lower down.
- 3) The time taken to get centred was often considerable (the sub-scale on the diagram below the base line shows the time-scale); contrast the sharp transitions from descent to climb with the others.

More examples of traces are:



- a) This trace is reminiscent of the 'saw-tooth' variety but shows a certain amount of 'dolphin-flying' - that is, slowing up in lift but not stopping to circle - these phases are marked.
- b) A marked increase in dolphin-flying is apparent in this trace - the higher section in the middle of the flight was in wave.
- c) This trace looks more like a duration flight on a ridge with the lift getting weaker towards the end of the flight.

THE REPROGLOE BAROGRAPH



Our barograph is unusually small and light. It weighs less than two pounds and is about one half the size of its competitors. The design philosophy was to make it as convenient to use as possible, but without frills, super finish, unnecessary adjustments, in order to keep cost at a minimum. This design, pioneering the use of Pressure Sensitive charts has, we believe, amply achieved this goal. It produces a permanent trace, small but precise and easy to read. The chart is 4 hours long but repeats for longer flights with no loss of trace. The clock runs for 30 hours and is wound externally. The scriber points are now made of hardened and polished tool steel and should never need sharpening. This unit features 5 minute flight-line loading.

LOAD CHARTS by first removing thumb nut and drum. Apply a new strip of "Double Stick" tape vertically on the drum surface. Do not overlap the edges. Apply chart in counterclockwise direction (Viewing drum from above) with its leading edge starting at the center of the tape, flush with the bottom drum edge, and wrapped tightly with the trailing edge sealed to the tape and slightly overlapping the leading edge. Do not reuse the tape! Remove the recorded barogram with a slow steady peeling action. The barograph is sealed through the hole in the latch striker by means of a wire-lead type of meter seal.

THE TRACE should be a fine line (slightly thinner than the printed 1,000 ft. lines) with good resolution and continuous texture. The scriber should not cut the paper; if the trace is not easily readable, it is because the stylus pressure is too light. With the drum and lifter removed, the point of the altitude scriber should be from 1.00 to 1.02 inches away from the near face of the drum shaft. The proper distance for the reference point is from 1.06 to 1.09 inches. If these points are too far away, they should be corrected by progressively flexing the arms further until they take the proper permanent set. This operation is more easily accomplished if the external "anti-backlash spring" is first released so that the altitude stylus rises above the edge of the lower case. (Caution: too much pressure will result in high hysteresis or lag with a resulting loss of "altitude gained".) This correct pressure combined with the proper .0035" radius on the scriber point will give the correct trace intensity. Old units, manufactured before 1974, have brass points which experience has shown will wear and become dull after considerable use, resulting in abnormally light traces. If a satisfactory trace does not result from the above adjustment procedure, it is necessary to resharpen these old type brass points. This is done by taping a piece of crocus cloth (the finest type of emery cloth) to the flat of a small screw driver or metal scale. With the "anti-backlash spring" released so as to make the point more accessible, it is gently dressed so as to restore the 60 degree included angle at the tip. When sharp, the tip can be lightly blunted just enough to prevent it cutting the paper excessively. Note: the sharpening procedure is both unnecessary and undesirable to try on the new units with the hardened tool steel points!

CALIBRATION CHART The printed scale on the Pressure Sensitive charts are for reference use only. The furnished calibration is a plot of the distance of the altitude scriber above the reference scriber at any given pressure altitude and is plotted in a climb. To determine the calibrated altitude of any point on the barogram, take a measurement of or set dividers to the vertical distance of this point above the reference. This distance, disposed vertically, is then slide along until it matches the height of the calibration curve at which point the altitude is read off the horizontal scale. This must be done at two points in order to establish an altitude gained.

MOUNTING THE UNIT. The unit should be mounted securely, especially if behind the head, so that it will not become a dangerous projectile in the event of a crash. Shock mounts are not necessary. We suggest providing a mounting position that gives lateral support. This can be a piece of plywood with four holes drilled in it to match the position of the four acorn nuts on the base of the instrument, or with a contoured outcut to accept the lower case of the unit. The case can then be conveniently held down by means of a webbing strap through the handle. The strap must not be overtight so that it deforms the case of the instrument.

STORAGE AND MAINTENANCE The instrument should be kept away from dust as much as possible. We advise saving the original mailing carton to protect the unit. Make sure that the instrument is turned off. Keep a chart on the drum so that if the point is accidentally left on, it will not bounce and scribe on the bare metal drum surface.

CAUTION All barographs are notoriously subject to "operator errors" because they are the type of device that requires some training for proper and reliable operation. Avoid these errors by using the instrument on routine practice flights so as to perfect your technique and confidence. You will not only eliminate the failures on important flights, but you will find that the barogram will furnish a wonderful remembrance of the flight and that study of it will improve your soaring technique. In extremely hot or cold weather, use two strips of "Double Stick" tape as insurance. Extreme changes in temperature and humidity tend to vary the size of the chart and possibly put it under high tension.

SMALL ADS.

FREE TO ALL FULLY PAID UP MEMBERS BUT FOR NON MEMBERS A FEE OF \$1 PER ADVERT WILL BE REQUIRED

FOR SALE: Medium Storm Recent factory inspection. £270 ono. Phone Richard on 0372-374242(home) or 0372-379050(daytime).

FOR SALE: Atlas 1/16 as new, all lights blue packable into 7 ft. Very good condition, 10 months old, £200 ono. Call Sky Systems on 0273-360882.

FOR SALE: Cocoon harness Southern Airsports deluxe cocoon 2 (list £144), 'faire camera/crate/ballast cont. Blue + yellow/orange flash. Very comfortable. Very good cond. £70 ono. Mark Fisher on 01-392-6780.

FOR SALE: Gyr 188 red 1/e, blue main-sail with yellow tips, speed bar & nylon 1/e insert. Excellent condition, ideal P1/intermediate. £550. Call Sean on 01-852-5399.

AIRTIME SALE

24 ft Parachute Winhaven (rainair) secondhand £175. 3/4 stirrup harness £50. Cocoon harness, suit pilot 2ft or over, only £25. Selection of secondhand variors from £31.

FOR SALE: Gyr 188 Sky blue. £525 ono. Winhaven parachute £150. Lindsay Ruddock vario £75. Contact me on Seaford 890377

FOR SALE: Glubman CFX 100 Gold sail, blue 1/e. 25 hrs airtime, immaculate cond., superb handling. The best P1 glider available! £700. Phone Jonathan Cattlin on 01-683-2906(h), 01-247-5901(w)

FOR SALE: Typhoon S4 Racer, nylon 1/e, rainbow u/s, speed bar, 8 under-surface patterns, 12 months old. Excellent condition throughout, £895. Eddie on 01-684-7427.

FOR SALE: Magic 3 160 Good condition, £650 ono. Phone Phil Kent 0424 716111.

FOR SALE: s/n Parachute, Advanced Air 24". Good condition £165. Phone Brighton 416371.

FOR SALE: Magic 3 166 dark blue 1/e, blue u/s, 18 months old, low airtime, good condition £795. Ring Kelvin (0903) 814173.

SELLING UP!! - Comet 165 V.G.C. £390 ono. Skyhook stirrup, immaculate £45. Willis Vario £45. Diplex alti £18. Venti, helmet, etc. £570 or offers for the lot! Phone Andy; 01-651-3501.

WANTED, SECONDHAND "MAKIKI" PELLET VARIO, DAVE ASHLEY EP50" 40255

FOR SALE: Polarix Gamma 177 (Italian Magic 3 copy) Brand new; unwanted prize, now only £750. Phone John Fendry 0273-600450, for a BARGAIN!

FOR SALE: Magic 3 177 Two years old, complete with nose cone and spare upright. Must go. £650 ono. Phone Kevin on 0293-885757.

FOR SALE: Typhoon 130 blue 1/e, yellow u/s, red tips, speed bar. Excellent condition + pitchy (if required) spare uprights. £580 ono. Phone John Salmon 0689-54334.

PARACHUTE FLIGHT DESIGN
24ft CANOPY "NEVER USED"
£165 PLUS BALL J/WRIND
NO AUDIO, VERY RELIABLE
£35 phone 0273 684774

FOR SALE: Thommen altimeter £55. Voice activated Talkman two way speakers (size of cig packet) P13 batteries £40. Ideal for hang gliding, hiking. 01-684-7427.

FOR SALE: Typhoon S4 Special All nylon sail. Looks good, flies good. £705 ovno. Telephone Spanish Joe on 0732-357413.