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SAILPLANE & GLIDING

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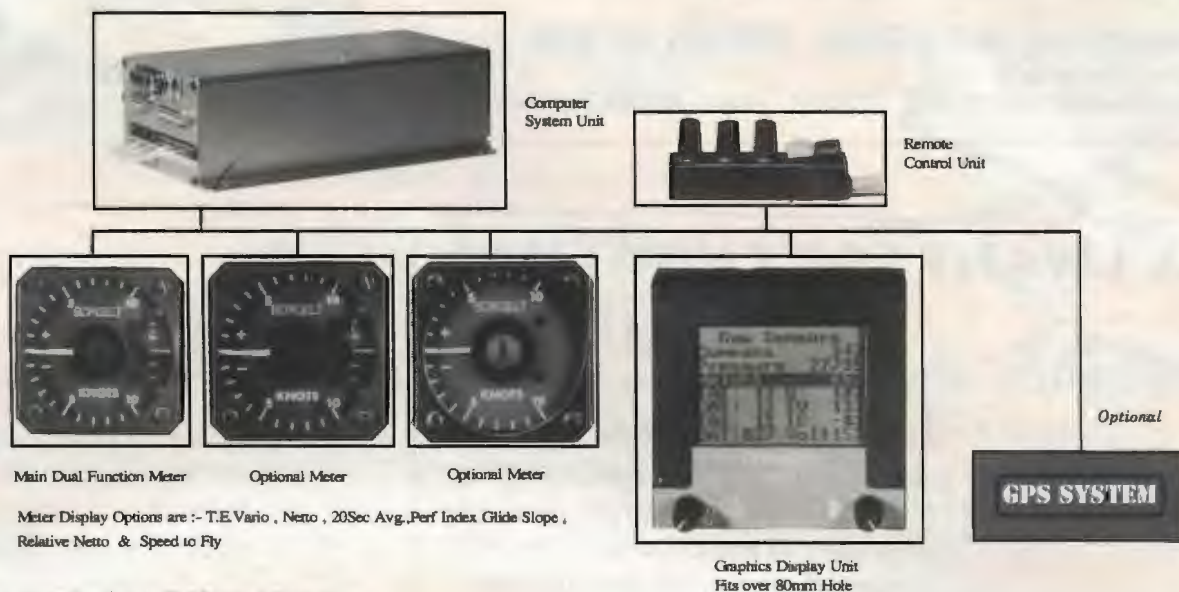
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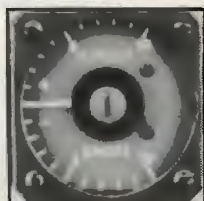
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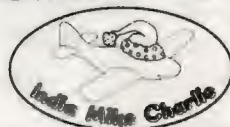
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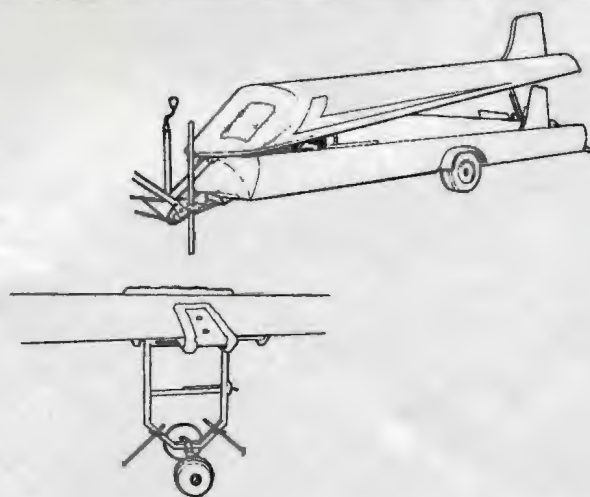
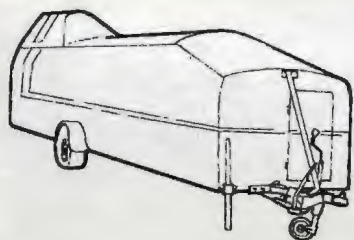
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A RIDGE TOO FAR

Dear Editor,

I am an instructor with the Bath, Wilts and Dorset GC which has recently moved from Keevil Airfield to a hill top site at Kingston Deverill and I believe that the following incident highlights a number of issues which need to be addressed by many clubs and possibly more fully by the BGA.

During a recent instructor duty turn when I was giving a check flight to an experienced pupil, I suggested we should explore a bowl on the next ridge which appeared to be facing into wind. We flew over the crest of the bowl with some 300ft to spare and promptly entered an area of monumental sink in excess of 6kt, and although I took over control immediately we were forced to make an emergency landing in a stubble field at the bottom of the hill.

The glider (Bocian) was undamaged nor was the field damaged but within a few minutes of our arrival the farmer appeared and demanded £50 "compensation" before he would allow us to remove the glider. He was not interested in the explanation that this was an emergency landing.

The issues that need to be addressed are surely:

1. Can farmers legally demand whatever fee they like from glider folk?
2. Is it reasonable to expect the pilot to pay such a fee when his first consideration must be the safety of the glider and himself?
3. Is it reasonable to expect an instructor to pay for the recovery of a two-seater in these circumstances?

If the answer to these questions is yes then gliding safety will be compromised.

TIMOTHY DEWS, Bath, Wilts & Dorset GC

HELP FOR JANE

Dear Editor,

As a lover of flight in its many forms I feel real sorrow for Jane Lawrence's problem (see the last issue, 245). I suspect she may be hyperventilating and an aeromedically qualified practitioner should be consulted who would confirm this.

On rare occasions (before my coronary artery by-pass on the best soaring day in 1989 and, particularly, during an intense aircraft type study course a year or two earlier) I had occasionally hyperventilated, usually for a short period in the evening and while revising the day's studies, and once you are aware it is happening it is difficult to control.

It is far from pleasant, indeed alarming, but as it subsided when the pressure came off it didn't bother me overmuch.

A book I am reviewing and can recommend as a good read for glider pilots, **Human Factors for Pilots** by Roger G. Green, tells all. I quote (abbreviated):

Hyperventilation is over-breathing. That is breathing in excess of the ventilation required to remove carbon dioxide. This over-breathing induces changes in the acid-base balance of the body that results in widespread symptoms. Although hypoxia causes hyperventilation it is far from the only cause. Anxiety, motion

sickness, vibration, heat, high g, pressure breathing, and more, can all cause the individual to suffer the symptoms of hyperventilation.

Those symptoms are:-

1. Dizziness.
2. Tingling – especially in the hands, feet and around the lips.
3. Visual disturbances – particularly tunnelling or clouding.
4. Hot or cold feelings – which may alternate in time or site on the body.
5. Anxiety – establishing a vicious circle of cause and effect.
6. Impaired performance – pilot performance can be dramatically reduced by hyperventilation.
7. Loss of consciousness – hyperventilation can lead to collapse but thereafter respiration returns to normal and the individual recovers, unless he/she has hit the ground in the meantime.

From this I feel Jane's symptoms are primarily 5, possibly 1 to 4 and if flying 6 and 7.

So I asked my wife Pat, a specialist in behavioural problems, what Jane should do. Her reply was that Jane obviously loves the sport at which she can clearly succeed, and probably only needs to build up confidence to dispel the anxiety that I confess I felt once or twice in my early days of flying.

Pat suggests:

1. Take the heat out of the situation – don't fly solo for at least six months and don't worry about not doing so.
2. Go to a relaxation class – (yoga is excellent) and get a good instructor to help with breathing exercises.
3. Fly in the front of two-seaters meanwhile – and relax and thoroughly enjoy your flying.
4. Refer yourself to a clinical psychologist qualified to work out a return to solo flying at a rate acceptable to you.

Curiously, I have suffered a slightly similar situation in recent years. A highly successful airline career and much else besides has reduced a 1950 Silver badge to only 530 gliding hours ever since (and just 90 in the last 20 years!) to a level of caution (but not fear) which really was inhibiting things.

After thinking the problem through, I decided on a BGA course and came under Graham McAndrews's expert care at our lovely new Gransden Lodge site in late July, followed by a task week there, giving me 18hrs, nine flights and a total of 1001km later in my ASW-20. Confidence was restored.

So for you Jane, we think it is also really not a lot more than a matter of confidence for you've already demonstrated you can do it.

MIKE RUSSELL, Henham, Herts

Dear Editor,

Jane Lawrence's frustrating psychological problem refers me back to the wise instructions and counsels that came from AVM, C. P. Symonds, consultant neuropsychiatrist to the RAF during World War II. All of us young medical officers had to take decisions at squadron level based on Air Council Instructions and one golden thread that ran through Symond's views was that men who were unfit for aircrew could and would go on

and earn medals for gallantry in the other services.

The man in charge of the launch point excitedly waved his arms about and said "Let's get this act together, we're not just here for the fun of it". He, certainly in regards to himself, was quite right, he was not there for the fun of it, although other people might have been. He demonstrated that by taking charge of something during his free time, he was satisfying a mental need. There are many reasons, some superficial, some deep, why people want to fly gliders, and self analysis as to what motivates us is a very difficult problem.

Long experience in many kinds of medicine have shown me that the ability for the "Leopard to change his spots", is quite limited. No doubt there are some forms of psychotherapy that can modify or cover up "Incapacity through nerves" but how long term would it be?

Homo Habilis took millions of years to evolve as he did, but has only been flying since December 1903 and it is still an alien medium for most of us.

Then there is the question of sudden unforeseen stress when a person is flying solo. There is no point in giving examples, they spring to mind automatically. Sudden stress takes people in many ways; it seldom makes for greater competence.

Jane Lawrence's letter is of great interest and we ought to draw lessons from what she has told us.

DAVID FOSTER, Surbiton, Surrey

Dear Editor,

Jane's letter reminded me of another case in the Netherlands. I am not a psychologist or shrink, only a simple white-haired instructor from Terlet, the central flying school in Holland.

I admire Jane's courage in writing the letter. The majority of people seem to be ashamed to admit they think there is something wrong with them! Everybody will have told her she is hyperventilating. In fact quite a few glider pilots are hyperventilating during at least part of their flight. The heart rate of a very experienced professional instructor in a single-seater goes up to more than 150 at the all out signal. She will probably have tried the method with a plastic bag. If not, she should ask around – or me.

I think she thinks her fear of flying is abnormal and that alone made it grow out of proportion. It isn't abnormal at all. A little bit of fear in flying is quite healthy and I'm somewhat scared of people who don't have it.

Like Jane I love flying and don't think I could live without it. I started gliding 25 years ago but almost every flying day a small worry creeps in. Suppose I have a cable break at 20ft/a wing breaks/the tug engine fails/the motor glider engine fails at 50ft etc, etc? I am, however, able to shrug off these thoughts very quickly.

Some years ago a girl from another club told me that despite almost 100 flights she hadn't gone solo and felt she was scared of flying. Other pilots denied they were ever afraid which made her feel pretty unique, unsuitable for flying, miserable and about to give up completely, so she took a chance to talk to me as

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an instructor from another club.

I told her she was quite normal and that those macho boys were simply lying because they were afraid to admit they were frightened sometimes. The following weekend she went solo and her whole attitude to flying had changed because she wasn't feeling tense anymore. In fact she is now a highly competent CFI.

I also wonder whether pilots around Jane are of such a high standard she feels obliged to be just as good or preferably better, thus adding another strain and building up a bit of aeronautical inferiority complex, which is another addition to hyperventilation.

This is only long-distance guesswork but if correct I don't think it will all be changed over the next weekend. She must give it time and I wouldn't worry too much over flying in two-seaters.

BRUNO ZIJP, *Holland*

Dear Editor,

I sympathise with Jane Lawrence. Breaking a psychological barrier can be quite a problem but it is sometimes achieved quite simply.

When, as a 16 year-old, I started gliding at the London GC it was solo training with ground slides, low hops, high hops and then a bungee launch from the top of the Downs. This training was carried out mainly with the Dagling (good view) and sometimes with the Cadet (MK1 to some).

When it came to my turn to be catapulted by auto bungee I was very apprehensive and, in the event, stopped any further training that day. I plunged headlong into a large bush inside which I met a courting couple. With the manners of the time we exchanged pleasantries, the young man raising his hat when responding to my "good morning". The young lady uttered not a word, and quite correctly because we hadn't been introduced.

For about a year thereafter I could not proceed beyond high hops even though the bungee exercise had been abandoned in favour of winch launching. I was impervious to all exhortations to take a full launch and fly a circuit.

One day the late Jack Hanks took me by surprise saying he would signal for a full launch but I could, by releasing early, carry out yet another high hop if I so desired. I took the full launch and never looked back. Thanks Jack. DOUGLAS BRIDSON, *Andorra*

THE VALUE OF TRIAL FLIGHTS

Dear Editor,

Readers of S&G could easily come to the conclusion that it is only competition pilots and pilots of high performance gliders who truly represent gliding in this country. I have just received a letter from someone I have never met which puts things into proper perspective.

It was from a wife thanking us for giving her husband a trial flight. He hoped to return but died a few weeks later at the age of 46 from a heart attack.

"It must have been one of the happiest days

of his short life. I am so pleased he was able to make one of his ambitions," she wrote.

I believe that involvement with the local community by way of trial flights and short courses is the cheapest and most effective way of promoting our wonderful sport. It is a pity these activities are "taxed" by our governing body which seems to want to make this movement seem more elitist and unaffordable by most. If you have any opinions about this, please write to me through S&G. RON ARMITAGE, *Deal, Kent*

TRAILER BEHAVIOUR

Dear Editor,

Trailing my glider home from Abingdon to Northumberland after the Open Class Nationals I noticed something which I had not previously come across.

It was quite a warm day with a slight cross-wind. I was towing at speeds of up to 60mph and the trailer constantly weaved slightly; not enough to cause any concern but it did so every so often especially when disturbed by the bow wave of trucks and buses.

Having recently had a spectacular and expensive jackknife in France, I was quite happy to adhere to the speed limit and made quite good time on a longish journey, keeping a good eye on the mirror all the time for the slightest oscillation.

As I neared home in the early evening, I noticed first that the trailer had entirely stopped weaving and then that my speed had crept up to over 70. I experimented with higher speeds and even at 85mph the trailer was perfectly steady.

The temperature had dropped by this time from the low twenties to 13°C and there was still a slight breeze. Was there a connection between the behaviour of the trailer and the temperature/stability of the air? Any ideas anybody?

PHIL LEVER, *Corbridge, Northumb*

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GLIDING COULD GO "GREEN"

Dear Editor,

In the June issue, *Twitterings From Sparrow*, p155, anticipated concern and perhaps restrictions arising from the ecological ill-effects of internal combustion engines used in winch, car and aerotow launches. However "green" fuels are becoming available.

Spark ignition engines can operate on alcohols and compression ignition engines on vegetable oils. Such fuels derived from agricultural products merely recirculate carbon and can make good use of land which would otherwise be set-aside.

Diesel winch engines and towcars could operate very well on bio-diesel obtained from rape seed oil which has the added advantages of almost eliminating sulphur dioxide emissions and reducing carbon particle emissions by half.

More spectacularly, but also more expensively capital wise, electric winches could be powered from batteries charged by aerogenerators and solar cells.

OWEN JONES, *Oxford*

"QUICK GLIDING" DEBATE

Dear Editor,

I would like to contribute to the debate begun by Ken Stewart in the August issue, p185, regarding Mike Cuming's "Learn to Glide In a Week ..." training course.

After contemplating for a year the best way to learn to glide with only a student's income, I read Mike's article in the April issue, p88 and, having been impressed, I decided to try Mike's course.

But it did not live up to the high ideals set out in Mike's article. First, in reply to Ken Stewart, Mike stated that his aim is 2½hrs or ten launches/day. This may be his aim but during the week of the course I was in the air for no more than 1½hrs in any day and had no more than nine launches in a day. Throughout the week I was in the air for only 3½hrs and (counting aerotows as three launches as Mike does) had only 32 launches, this was despite four days of soaring weather, only one day being rained off.

The pupil to instructor ratio was indeed two to one, however, with the customers for air experience flights and visiting pilots it felt more like five to one. Furthermore, the fact that the



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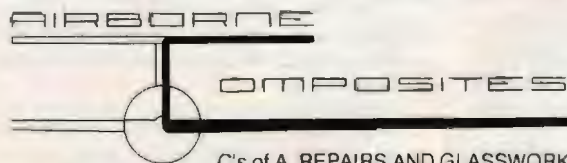
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outfit has more instructors than two-seaters seems to be reducing the efficiency of the operation.

Finally, I should say that the breakdown of the winch for the last two days of the course was a contributory factor in the failure of the course to live up to its expectations. From four aerotows and a winch launch on those last two days, I flew for only an hour.

In summary, Mike's ideas are sound but without more gliders, reality is falling short of the ideal.

ANDREW WARBRICK, *Darwen, Lancs*

Mike Cuming replies: The bald figures say it all. Andrew did 20 winch launches and four aerotows in four days. He was on the student standby scheme and so it cost him just £137 (since we refunded him for three launches for the shortfall in guaranteed flying). The main winch did break down so we used the back-up which doesn't perform quite so well. Sorry Andrew. We will try harder next year.

Dear Editor,

Having just completed a week's beginners' course at Hinton in the Hedges, I feel I must respond to Ken Stewart's letter.

Over seven years ago I spent 18 months clocking up 40 flights and making only very slow progress – not because of the lack of good quality teaching, but because of the inevitable time lags between flights. This was one of the reasons I eventually allowed my gliding to lapse.

This September I decided to start gliding again and signed up for a week at Hinton. Fifty-eight flights and 8hrs flying later, I have flown solo and am extremely happy with my choice of course. I can reassure Ken Stewart that the quality of instruction was not at all compromised by the quantity of flying done, and that students were not pressured into flying more than they found comfortable. On the contrary, we were all keen to fly whenever possible, being encouraged by our steady progress. The student to instructor ratio was 2:1, turnaround of gliders was swift (aided by enthusiastic student involvement in ground handling, logging, etc) and we still had time to have thorough briefings and to enjoy the flying!

Obviously each person has to learn at his or her own pace but it is possible to achieve a great deal in one week when the time is used so effectively.

I, for one, consider the beginners' course to be a great success and will be returning to Hinton to improve my gliding skills.
TESSA WILSON, *Birmingham*
(As we have given this a lot of space, and Mike Cuming will be reporting on his venture in a future issue, we have closed the subject for the time being.)

CAN ANYONE EXPLAIN?

Dear Editor,

I have been gliding for a little longer than Bill Scull has earned his living from it, and have been an instructor for the longer proportion of that time, so you will appreciate that it comes as

We welcome your letters but please keep them as concise as possible and include your full name and address. We reserve the right to edit and select.

a shock to learn that I have been wrong for most of that time. I refer to the tailpiece, "Hightspeed flight," to Bill's article in the 1992 Yearbook, "Be a Safer Pilot", p36.

I have always understood that all the characteristic and placarded speeds of a glider as indicated on the ASI remained the same whatever the height, even though the true airspeed increases with height. Nothing to the contrary was said on my instructors' course, and I have not seen anything in print before.

However, in the **New Soaring Pilot** by Ann and Lorne Welch and Frank Irving, p314, and in **Cross-Country Soaring** by Helmut Reichmann p141, it is stated without any room for misunderstanding that the placarded and other characteristic speeds as indicated, do not vary with height.

I have heard it said that flutter is sensitive to TAS not EAS, but my literature does not appear to confirm this.

Perhaps one of our technical pundits will explain to me why the authorities cited above are wrong, and why the laws of aerodynamics have apparently changed.

DAVID A. SALMON, *Chesterfield, Derbyshire*

THE CASE FOR/AGAINST ENGINES

Dear Editor,

John Jeffries has stimulated discussion about pure flight favouring no engine on his aircraft. (See the April issue, p69.)

Each to his own. However, I suspect the ultimate answer lies further on in the August issue in the BGA Accident Summary (No. 7), p219.

Even with an otherwise flawless field landing, it takes only a single tractor rut to snap a fuselage in two with the resulting cost, inconvenience and possible injury.

Personally, I would rather treat a cross-country flight seriously, yet still get home to fly the next day, and keep my insurance and personal accident premiums low.

ALAN MURRAY, *London*

Sailplane & Gliding

The magazine can be obtained from most Gliding Clubs in Gt. Britain, alternatively send **£19.00** (to include the 1992 Yearbook) or **£15.00** postage included for an annual-subscription to the British Gliding Association, Kimberley House, Vaughan Way, Leicester.

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TAIL FEATHERS

Careless rupture or Big is not always Beautiful

One of life's many ironies is that the only people who can afford to fly huge gliders are those who are least capable of dealing with the damn things on the ground. It is only after three decades of clawing your way up the career ladder and nursing your capital from wood to metal to glass to carbon and Kevlar, that you might just



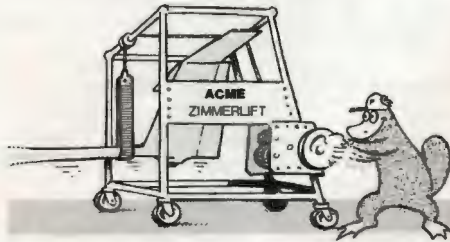
Children into the world.

be able to buy a slice of a supership. Most supership syndicates consist of empty-nesters who have paid off their mortgages and launched their children into the world – *You mean old farts?*

Well, yes. At this advanced age, however, the old far-, er, senior pilot is beginning to find his discs slipping and his dorsals, metatarsals and abdominals not up to the job. The puffing and groaning around the big two-seaters at rigging time is so distressing to any sensitive person's ear that younger members tend to stay out of the way until it's all over, unless there is a serious prospect of getting a flight and being allowed to play with the GPS.

Someone will eventually make a pot of money selling a device for lifting the back end of an ASH-25. So far I have only seen crude diagrams and played with prototype levers and ramps that would have been despised by the chaps who thousands of years ago put up the great pillars of Stonehenge – a near approximation to the rear end of an ASH-25, by the way.

If those brilliant young men from the German Akaflieds need a project for winter 1992-93, I suggest that instead of designing fancy wingtips



Combined rigging-aid.

for the 25, they should invent, for this great market of people with more money than muscle, a three-in-one combined rigging-aid, tail-lifter and Zimmer-frame.

And please hurry, before we all do ourselves permanent injury.

On a clear day . . .

One of the blessings of 1992 (were there any? Ed) was that in the absence of anti-cyclones there were many days of superb visibility. I obviously lack the true racing pilot's mentality, for I much prefer a day of modest thermals and good visibility to strong thermals and poor visibility. My reasons are entirely aesthetic, and have nothing to do with navigation, especially now that technology prevents us getting lost. There were so many days when one could get a dazzling view of the sea (all good competition pilots now give a horrified, involuntary shudder) whether looking down the Bristol Channel, or across the Wash or the Thames Estuary, and best of all on a trip from Sutton Bank during Competition Enterprise, seeing Holy Island off the Northumberland coast near the Scottish border, lying only half way to the horizon.

Please picnic in the rain



Cooking al fresco.

There was, I think, one solitary weekend when it was possible for the great British public to enjoy cooking al fresco, causing quite a lot of haze in the Midlands. This prompted one bureaucrat to exhort householders "Please don't use your barbecues on sunny, windless days." I hope this fellow was led gently away before his disease had a chance to infect his fellow officials and the media: "Great day for an open air char-broiled steak, folks" says Michael Fish, "Force eight with hailstorms or I'm a Dutchman, Mijnheer."

Next thing, the government will urge glider pilots not to fly on those days when the clouds

are cauliflower shaped or lens shaped. Any other time, fine, go ahead, be our guest.

Positively the last straw

Talking about atmospheric haze, how do you feel about the recent and permanent ban on stubble-burning? A traditional feature of the late summer months has now been erased from the glider pilot's repertoire. Those billowing flames will slide into folk memory, in which the rates of



In two minds.

climb and the dangers of being roasted alive will both be monstrously exaggerated to impress our grandchildren. I am in two minds about this deprivation, if that is what it is, so each of these minds has been allowed equal time to express in heroic couplets (*ie doggerel*. Ed) the emotions to which it gives rise:

To a departed friend

Farewell, O blazing fields of stubble!
You often rescued me from trouble;
we loved the scent of burning straw
as fifteen gliders – or a score –
swooped up in searing plumes of smoke
(no matter if we cough and choke.)
Lament! We've lost our heart's desire –
the English countryside on fire.

To a polluting pestilence

Good riddance to the man-made pall
that over hill and vale did fall!
I deplored the element of luck
that racers gained from acrid muck,
bursting through a low inversion
to make a contest a perversion.
Rejoice! Without the farmers' gift
we'll use our wits to find our lift.

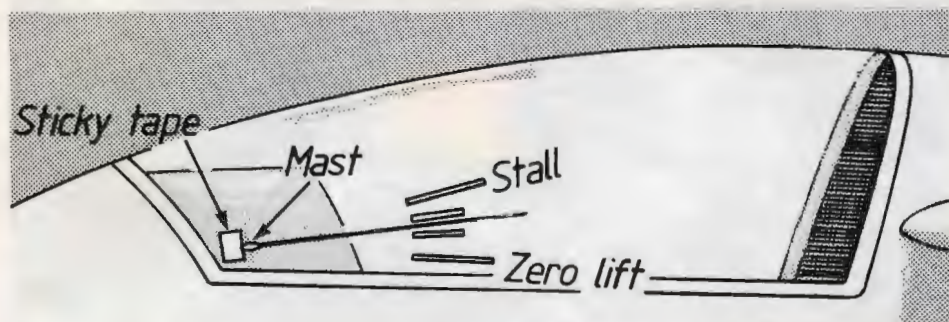
Eat ya heart out, Will of Stratford. There's lots more where those gems came from. (To be published over the dead bodies of the S&G subscription renewals department.)



Eat ya heart out.

ANGLE OF INCIDENCE METER

This is vital information for the pilot, the basis for safe and efficient flying. Here is a simple way to measure it, using woollen streamers. Keith Emslie spent his working life as a wind tunnel engineer, so visualising airflows comes naturally



Woollen streamers on the canopy.

The OSTIV attempt to encourage stall warning devices and angle of incidence meters has not reached our club; no one has made a copy of the Dallas device (tripped by boundary layer separation) and the last we heard of the meters was inconclusive. What we still have is the spin accident.

Stall warning is insufficient to satisfy me. It is preferable to monitor the angle of incidence continually, since we need to fly at large angles for gliding efficiency, often on the brink of stall. Some years ago I made a meter based on a sensitive yawmeter head, rotated 90°; a rudimentary mechanical instrument that worked. The face was marked to read angle of incidence and units of wing load (nW) thus catering for the winch launch as well as the steep turn.

However, along the way woollen streamers were used to inspect the airflow at various possible locations for sensors. After a few flights I realised that I was using them as a primary reference for my flying, and so I happily adopted them as a coarse gliding solution; laughably crude but very effective. They frequently warn me of danger in the back seat of the K-13.

Woollen streamers follow the local airflow on the side of the canopy which varies according to the angle of incidence at which the wing is working. (Pilots often call it "angle of attack", but I was taught to use the aero engineering term.) Unfortunately the streamers also respond to sideslip, so must be fitted to both sides of the canopy. As the sideslip string moves sideways, one streamer rises and the other droops (demonstrating how dihedral works).

The streamers need to be 200mm long to give a clear indication, and placed where they are

easily visible. They are buffeted by the boundary layer, so should be lifted out of it. A short mast can be made by using glue to stiffen the first 5mm of emerging wool.

Flight calibration is done by settling at trimmed airspeeds and marking or noting the positions of the streamers. Minimum sink and maximum glide occur at set values of incidence, which are regularly required. The stall is vital, of course, and at the other end of the scale I like to mark zero lift, even though I rarely indulge in aerobatics. At twice stalling speed your angle of incidence will be reduced to one quarter of its value above zero lift. At $\sqrt{2}$ times stalling speed it will be halved. From full, half and quarter the stalling angle you can extrapolate to zero lift, and mark the entry to inverted flight.

You might be startled by the angle indicated, but you will be charmed by the ease of holding attitude and hence airspeed. It's magic. Even cloud flying would lose its terror. You will be surprised how the upgust on entry to a strong thermal can take you to the brink of stall. And horrified how often pupils verge on the stall during the steep, slow winch launch, or when floating along below hill top height when their far horizon reference is hidden.

Go on, hang the expense. Fit some.

Sadly the upright windscreens of the K-6, Skylark 3 and the nose of the K-13 are unhelpful. The air spills around the windscreen and inhibits the local upflow. Useful locations for sensors will still be present, but on the portions of fuselage covered by fabric or plywood. A remote readout system would be needed, based on wind vanes or pressure sensors, bringing complications, expense and the head-down display. ■

THE PRICE OF RISING

Blame the recession, Harry. Blame the government, the gnomes of Zurich, the dollar and the deutschemark, or our old enemy, the French, but whatever the cause I now have to think very carefully before I part with the £12.50 you demand for a five minute aerotow. There are too many other ways of spending that money. Think about it, Harry.

A bottle of Pernod, for example. Drinking it with economy and plenty of ice even I can make that bottle last for several weeks, and each pungent sip brings back evenings in a cafe in Algiers – all the dust, the heat and the latent menace of that beautiful but dangerous city, with the dry fronds of the palms rustling in the breeze coming in off the sea, the thin high call of the muezzin, the veiled women, their slippers flapping on the cobbles, their heels painted with henna for beauty, and the graffiti – OAS... FLN... Victoire... Liberté – all the bitter history condensed into a few fading slogans, as true for one side as the other. I can rediscover a past more colourful than the present, with the intoxication of successful revolution in every glass I drink. That has to be good value, Harry.

Hard to find a more pleasant companion for a ramble round the lanes

For the same price I could have two hours on horseback. Not mounted on a particularly fiery steed, I admit, because when I show up in my riding-boots the girl inevitably leads out old Bruno – seventeen hands of invincible ignorance and self-will covered in a badly fitting tobacco coloured hide with strands of straw poking out at each end. Bruno eats anything, including blackberries in season. He has learned to acquire these without injury by puckering his blubbery lips into a funnel and sucking the dark fruit cleanly off the thorn like a hairy vacuum cleaner. He also steals apples. But despite his criminal tendencies it would be hard to find a more pleasant companion for a ramble round the lanes.

£12.50 rents a boat at Pitsford for a long peaceful evening of trout fishing. With luck you can persuade your wife to do the rowing while you sit in the stern having all the fun. And you can eat the trout afterwards. I'd recommend them fried in butter with a dash of lemon juice and chopped parsley, or drenched in Moselle. ■

sealed in foil and baked in a moderate oven.

If you wife complains about the damage all that rowing has done to her manicure you could treat her to a meal at one of the village pubs. The "Fitz" will feed two people simply but substantially from a menu free of copywriters' adjectives – home-made game pie, a mixed grill, even a locally caught trout – and all for about the price of an aerotow. Booze is extra of course.

Booze? £12.50 equals four bottles of cheap Rioja and the opportunity to invite a couple of good friends for dinner, or a bottle of Chablis, dry, gravelly, and superb with lobster, if you know anyone who might make you a present of a lobster. My wife's big brother, the Navy diver, catches them occasionally. He's never given me one, though, but I live in hope.

**Store up credit for _____
when you're awarded _____
the other set of wings _____**

For £12.50 you'd get two seats in the stalls at the local rep; enough Derv to take a turbo-diesel from HusBos to Brussels and back; five modest but exciting wagers on the Tote (once upon a time I won thirteen quid on an unknown gee named Desert Orchid – I backed it because it was a nice name); or a night at the dogs with a fish and chip supper to follow while you rub shoulders with the finest congregation of villains that the county can muster outside an identity parade; or an early Victorian shield back chair which you've bid for with precisely timed cunning in the local auction rooms and cleaned down with a mixture of linseed oil and meths to discover that there's not a flaw on its surface nor a nail in its construction; or you could even give the money to Oxfam and store up a little credit against the day when you hope to be awarded that other set of wings.

But £12.50 for an aerotow? Blame the recession, Harry, and put me on the list for a three quid winch launch.

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TWO-SEATER COMPETITION

Wolds GC – August 16-22



Not a single-seater in sight!

As you all bought a copy of the 1992 S&G Yearbook you will know what the Two-Seater Competition (TSC) is about – for experienced cross-country pilots to pass on their skills and knowledge whilst giving hands-on tuition to *ab-initio* pilots in a competitive but friendly atmosphere.

This year's Comp was the best yet with 19 two-seaters entered, five out of seven competition days and over 7000km flown. The six glass gliders weren't enough for us to have two Classes but if a wooden ship didn't come into the top two placings each day then a best Wood prize was also given and there were some courageous and commendable flights.

Each day at least two tasks were set and in true TSC spirit the better performed gliders chose the longer routes.

The Comp got off to a relatively poor start on Sunday, August 16, with the weather only allowing two short tasks, a 77km and a 117km. Only three glass gliders managed to complete, all flying 117km.

The wind made the going tough on Day 2 but there was good lift and one glass glider completed the 118km task and another the 87km. Much to everyone's surprise Derby & Lancs GC's K-13 managed to complete the 87km despite the strong wind, Ken Blake putting in a marvellous effort.

On Day 3 things were starting to improve with four finishing the 203km task; five the 125km and four the 87km, all dog legs. The most notable flight was Trent Valley GC's K-7 with Bob and Carol Kmita completing their first ever TSC

task. Wolds GC's Mike Munday (K-7/13) flew 203km and Newark & Notts GC's Bergfalke, was unlucky not to finish the medium task, landing 10km short. Bernard Wilson, flying Burn GC's K-13, was even more unlucky when he got a smelly reception after landing in a freshly slurred field.

On Day 4 most people thought Simon Parker, the director, was still under the influence of the night before as he set the tasks with the rain beating down hard against the briefing room window. However, he stood his ground and we had a good day, two flying the 284km task, seven the 163km and two the 110km. Trent Valley's K-7 saw action again when it landed in a field near Knottingley. They were promptly surrounded by hundreds of children, one of which kindly set fire to the stubble. Fortunately there was no damage to the glider but it was too late for the fire to be of any use!

The next day was scrubbed but on Day 6, Friday, August 21, conditions were worse than expected. However two completed the 156km and one the 205km. The last day was also scrubbed.

The final results were 1 M. Armstrong (K-21), Derby & Lancs GC, 2 D.Aknai (Janus), Bicester, 3 and best Wood M. Munday (K7/13), Wolds GC

Again a good time was had by all and all credit to Simon Parker and his hard working crew who helped to make the week so enjoyable. The Comp is also open to single-seaters who are launched after the two-seaters. Remember TSC is not just about winning, it's about taking part. So next year why not bring your two-seater. ✕

Dave, my husband, signalled to me to raise the wingtip higher and lean on it, and it slotted into position. Now at last the two of us could put it together. Since Dave had persuaded me that we could spend all our savings on a somewhat aged Astir, I had spent many hours helping to lift bits of glider, while he developed a rigging device based on the "Geriatric Rigging Device" described in the December 1990 issue, p300. I had also repainted the trailer.

The fuselage spent some time in our barn and our daughter, Isobel, and I had an exciting time trying out the pilot's seat. Maybe we could learn to fly a glider too. Isobel was 12 years-old now, old enough to learn and to tolerate hanging



Joan with instructor Roger Emms.

around the airfield. But what about me? I had a problem – although hard of hearing for many years, over the last few years I had become almost totally deaf. How could I be taught?

We had read about Matthew Brown in the August 1990 issue, p219, who worked out a tactile code of prods and pokes in a side-by-side seater glider. This was not possible in a K-7 as the instructor sits behind.

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OVERCOMING A DISABILITY

Joan Hartley is almost totally deaf but her husband has designed a “black box” so that she can be taught to glide



The "black boxes".


I had a couple of air experience flights and the satisfaction of seeing our isolated house from the air. I liked being in the air, but could I learn to control the glider? "It's only like learning to drive a car" was one helpful comment. I remember this and thought "Yes, I can drive a car, I will fly a glider."

Dave had a think; he's a clever chap – an electronics engineer. After a week or two he produced the "black box" device. This consists of two black boxes: one for the student, which has a 16 character message display for instructions; and one for the instructor with 16 commands to choose from. The instructor selects the command to be conveyed by pressing a button. A change in the display message is indicated by a

flashing display or by a vibrating alarm. The 16 instructions can be altered to suit the progress of the student.

Very soon it's my first flight with the "black box". The message display prints "You have control". "Help" I think "How do I keep straight?" It's all a bit confusing. We go on to turns and I get my right and left mixed up! Then it's time to land. After another flight both instructor and I seem to get used to the boxes. Roger suggests how the instructions could be modified to correct my faults.

The Nene GC at Upwood is small, having less than 40 members. Winch launching over the fen means most flights are of fairly short duration. I tried the "black boxes" with three instructors. They all seemed to like the idea.

And so we begin the journey towards solo pilot status. Four years to Isobel's 16th birthday; how long for me? Not quite that long I hope. 

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? ↑ ↓ ✓ ✕

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Pundit 3 is a soaring aid. Approved instruments must be used for primary flight information.
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SOMETHING SPECIAL

"Chalky" White has 1000 gliding hours, including a spell in Egypt, and 700hrs on microlights.



I had come to gliding via the RAFGSA while an air liaison officer in BAOR in 1946, solo training with the SG-38 Primary and Grunau Baby. In 1946, having taken up schoolmastering, we came up on Ernie and I bought the first Blanik in the UK, G-ASKX.

I had it on long loan for two years to Lasham and flew it myself at weekends and holidays, getting Silver height and 5hrs with hopes of the distance.

It was June and it looked a good day but I couldn't get much above 1500ft after launch and I wasn't watching the wind. When I tried to get back from the Basingstoke area I found that every time I climbed I drifted further back. My first field landing was at hand.

I continued the practice in hope of a reasonable climb but to no avail – 1500ft was all I was going to get and I was now well on the way to the London Control Zone. We were not encouraged to try for airfields except Shoreham (which is where I did go for my Silver distance later in a downwind dash), so I started looking for somewhere to land.

I passed a farm with a paddock and good undershoot fields but tried a little further on only to find the Duke of Wellington's estate almost entirely given over to crops, so I turned back to the farm.

On the circuit I spotted the electric fences in the paddock so I chose the centre of the three undershoot fields as it looked more like grass of the two and the third had cows in it – and they eat gliders.

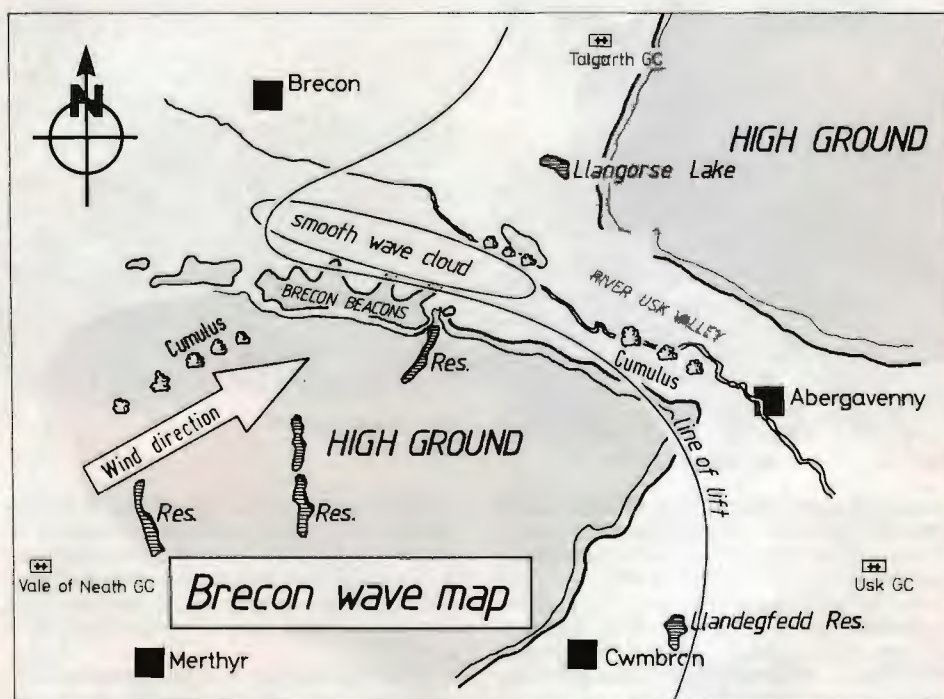
On finals at 100ft and 100 yards from the hedge I spotted a telephone pole to my left and then I saw the wires in front. I dived at the foot of the hedge to "jump" it and pulled the nose as I went over to lower the very tall tail on the Blanik, stopping in the field 50 yards from the beautiful 16th century farmhouse.

I called on the farm to make my number and phone for my retrieve crew and as I was enjoying tea and cake I admitted I had landed under the telephone wires. They were not telephone wires, I was informed. They carried 11 000 volts.

Well, I went back later to measure up and invite the farmer to Lasham for a flight. The gap between a tree in the hedge and the pole was 100ft. The hedge was 4ft high and the wires 16ft. That left 12ft for the 10ft Blanik tail in level flight! I could easily fly through a hangar or Tower Bridge. No sweat.

BRECON WAVE

Ivor Shattock, the Welsh wave wizard who now shares his expertise by switching to a two-seater (IS-32), writes about a spectacular flight from Talgarth



The two-seater has been my fun for a long time and on August 15 Keith Richard and I towed in not very rough air to 3000ft, at a point just south of Llangorse lake in the lee of the Brecon Beacons. Easing just forward of some rotor-type cumulus, we located 2-4kt of smooth lift. At 5000ft we could hear Les (K-6E) relaying his position to the following gliders. He was just forward of the Beacons, ie to the south, where we could just see his lennie which was lifting him to 7 or 8000ft, sometimes off the clock.

It was too far forward for us initially and we settled for our slower rate of climb until we could jump well clear of the cumulus. Feeling happy about the increasing altitude, we began to experiment and it wasn't long before one of our slides to the east and west joined up with the Brecon wave. Actually it was the same wave but angles are deceiving when flying so that one can be easily led astray and fall out. Some did, I might add, as we could hear on the radio.

Reaching the south side of the Brecons we could see the most spectacular waves I have ever seen. They were enormous and at times in three layers, one rough and two very very smooth. We couldn't get more than 9400ft asl initially, so we went for a ride to the Vale of Neath GC where we sat in wave for half an hour, studying the intricate web of valley towns and roads.

There was not much lift (2kt at most) and only 6500ft, but it was lovely to see so much new ground. The lower cumulus was about 3/8ths and streeting very well – like flying over France in a jet on a summer's day. Well it was August!

Returning to our Brecon wave, we sat in very weak lift (it must have been the amplitude because the wave length wasn't unduly long – about 12 miles I'd say) and worked hard to out-fly the various gliders launching steadily from Talgarth.

Tiring of this, we decided to take a ride to Abergavenny. Again we found wave. This time

KEY TO IVOR'S PHOTOS

- A. At 7000ft looking NW with Brecon town in the bottom right hand corner.
- B. Passing Crickhowell and heading for the huge "pile of plates" at Brecon.
- C. The Brecon Beacons looking west.

along the Usk valley which took us right out to the South Wales GC at Usk and to Cwmbrian, near Newport on the coast.

As there was no upper cloud marking this wave system we were at a loss to explain the logic of the system at right angles to the first. We decided to return and as we rounded the corner at Abergavenny over the Bloreng, the lift came on again and we headed towards Brecon.

We had gained 500ft in a return glide of 14 miles. It's the sheer leisure of it all that entrances me. Passing Crickhowell at around 7000ft and heading for the huge "pile of plates" at Brecon, we slide over a vast area of very thin cloud which I can only describe as like a diaphanous veil laid over the air below and shaken gently by an unseen hand to give a corrugated sheet effect. Marvellous! And then even more extraordinary, two absolutely straight lines drawn in it and parallel to our flight but way below. Just like two long woolly strands drawn taut and dead straight. Creepy, it was so strange. Other people saw it too.

No it wasn't contrails. There was no sign of any rotory action. Nor was it the shadows of two higher contrails; we'd seen that previously on clouds above us and these lines were lighter than the thin cloud they seemed to be in. Any clues?

And so we went back to our Brecon wave which had settled down into a regular 4kt up to 9000ft or so. Some gliders went to 12 000ft. As we felt it was time to go home – we'd been up over 4hrs – we decided to return to the north of the site. To do so we needed to climb to the top of the lennie so that we could see if there were slots on the way home.

This we did, but decided to go west until we could peer over the lower part of the cloud and get more of a panorama sighting. There was a large area of relatively clear air from Brecon to Hay-on-Way stretching westwards. We took that flight line along the edge – which was very ragged – and kept an eye on the ground for familiar features.

As we progressed northwards, we wondered why the edge was there at all. The wind was almost due south at ground level, so we slowed down and went to neutral flap. As we did so, the vario went to 1-2kt up. There was another wave system running NS along the Llangorse ridge at right angles to the main lennie over the Beacons. The map will confirm this.

We were now ready for any surprises but feeling we were asking too much to go to Shobdon and back, we descended in clear air over the site. On landing, the sky looked absolutely appalling. No wonder gliders were on the ground. I wouldn't have given 3p for a launch at that time. But I'd give 3000p for another flight like that! ☒



A.↑ B.↓



C.↓



The very first Inter-Club League final was in September 1981 at Dunstable. The host club came a close 2nd behind Lasham, who have competed in several subsequent finals. We were very pleased to accept Lasham's offer to host the 1992 final over the August Bank Holiday and thank them for their extremely warm welcome and hospitality.

Peter Healey, Lasham's team captain in the Southern League, was the contest director and co-ordinator of what proved to be a most efficient team. They were supported by Tim Newport-Peace who was faster than ever on the scoring. We must also thank T.L.Clowes, the insurance brokers, who again kindly paid for the expenses and prizes.

Southdown had obligingly won the Southern League to compete in the final, leaving Lasham free to focus on running the weekend! The other six finalists were Oxford (Midland League), Anglia (East Anglian), Derby & Lancs (Northern), Bath & Wilts (South Western); Buckminster (Eastern League winners for the second year despite scoring system changes initiated by Coventry to prevent such anomalies!) and Bristol & Gloucestershire (Rockpolishers League), the latter going for the hat trick having won the previous two finals.

Competitors and organisation remained optimistic, ready to take advantage of any opportunity

The Bank Holiday weekend showed little sign of significant improvement over August's poor weather, but it was soon clear that competitors and organisation alike remained optimistic, ready to take advantage of any opportunity. Saturday was slow to start, but then all 21 competitors were quickly marshalled away by Phil Phillips into a sky which threatened rain from the west by late afternoon. Only eight failed to complete their tasks – it would have been only three if Lasham had extended two fields to the north.

The Novice Class were sent on a 146km triangle, Membury, Oxford south, which was won by Tim Milner (G102) for Bristol & Gloucestershire at 82.3km/h. Helen Cheetham

INTER-CLUB LEAGUE FINAL

(DG-300) of Buckminster was 2nd at 79.5km/h and Paul Salter (Astric CS) of Bath & Wilts was 3rd at 64.8km/h.

The Intermediate Class, who were set a 182km triangle, Membury, Westcott, was also won by Bristol & Gloucester with Simon Roberts (Discus) flying at 78.3km/h. Geoff Roberts (Mosquito) at 75.4km/h gave Buckminster another 2nd place and Paul Fritche (LS-4) of Southdown was 3rd at 68.9km/h.

The 209km triangle Pundit task (Membury, Buckingham) gave Bristol & Gloucestershire their third win with Andy Davis (Discus) completing at 98.7km/h. Mike Armstrong (ASW-20) gave Derby & Lancs 2nd place at 79km/h and Stuart North (Pegasus) took 3rd place at 78.5km/h for Bath & Wilts.

Had there been no more contest flying this would have been a walk-over for Bristol & Gloucestershire.

Sunday was more of a wash-over. Heavy rain and wind overnight, then strong wind and showers dictated the day's task – dry out the sodden camping equipment. Again we were grateful for the Lasham hospitality. By the evening the weather and most competitors had dried out and we had an excellent barbecue followed by a disco.

Monday's promise of showers was soon fulfilled. Those of us flying under power were able to dodge the rain and look back as the grid got soaked. Paul Davies of Lasham had analysed the Met and set the tasks. His persistence despite the rain appeared almost obstinacy while people around him were thinking of packing for the journey home. How right he was – a great afternoon with only three landouts.

The Novices flew a 101km Didcot O/R with Andrew Barnes (K-6E) of Oxford 1st at 82.3km/h, Helen Cheetham 2nd at 81.9km/h and David

Pengilley (K-6E) of Bath & Wilts 3rd at 66km/h. Helen's 2nd place on both days put Buckminster into the overall lead in this Class and David Zarb (Std Cirrus) at 61.5km/h for 5th place did enough to put Bristol & Gloucestershire 2nd overall.

Geoff Roberts won the Intermediate, a 122km Oxford south O/R, at 87.3km/h, Steve Robertshaw (ASW-20L) of Derby & Lancs came 2nd with 82.9km/h and Nick Wall (G102) 3rd for Bristol & Gloucestershire at 63.8km/h. Geoff's win, plus his 2nd place on Day 1, put Buckminster in the lead in this Class. Could they break the Bristol & Gloucestershire hat trick?

The Pundit winner at 94.9km/h over the 163km O/R via Calvert junction was Stuart North putting Bath & Wilts into overall 2nd place in this Class behind Nympsfield who retained the overall Pundit lead with their Philip Walker (LS-7) 2nd at 83.6km/h. Buckminster's Russell Cheetham (LS-7) was 3rd at 80.5km/h.

The results were as follows:-

	Pundit	Inter'	Novice	Pts
1. Bristol & Glos	1	2	2	19
2. Buckminster	5	1	1	17
3. Southdown	3	3	4	14
4. Bath & Wilts	2	7	3	12

Congratulations to the Bristol & Gloucestershire team for their hat trick, to Helen Cheetham and Geoff Roberts of Buckminster for winning their Classes and to all contestants for making such enthusiastic and useful use of the conditions. And our thanks to Lasham for such an enjoyable contest.

News for 1993. Aquila (Hinton-in-the-Hedges) would like to join in. Would everyone with thoughts of possible League re-groupings (or any other queries or suggestions please send them to me at Tanglewood, Fingrith Hall Road, Blackmore, Nr Ingatstone, Essex CM4 0RU. Tel/fax 0277 823066.

LATEST CHART UPDATES

1:250 000 - SHEET 16 'SOUTHERN ENGLAND', PUBLISHED NOVEMBER 1992

1:250 000 - SHEET 18 'NORTHERN IRELAND', AVAILABLE DECEMBER 1992

1:250 000 - SHEET 6 'FIRTH OF CLYDE', AVAILABLE JANUARY 1993

1:500 000 - 'NORTHERN ENGLAND & NORTHERN IRELAND'

- EDITION 15 AVAILABLE EARLY DECEMBER 1992

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While testing the DG-500 at Dunstable a few months ago, I was given the opportunity to fly a syndicate LAK-12, thanks to Brian Middleton.

Certainly before the break up of the Soviet Union I, and I suspect most other gliding people on this side of the Iron Curtain, had little or no knowledge of any of the glass-fibre machines being produced there apart from the Polish ones. I was surprised by the news that almost 200 had been built and were flown in those countries.

The LAK was brought over by Frank Pozerskis, together with a few factory reconditioned Blaniks. It is a 20.5 metre span, glass and carbon fibre machine, fitted with flaps and normal Schemp-Hirth type airbrakes. One distinguishing feature is the normally positioned tailplane, rather than the now more usual T-tail.

It comes complete with a glass-fibre trailer, a good set of wing covers, wing stands, tail dolly and basic instruments, and the price for all this is unusually low – £18 000 including freight and VAT.

The construction and finish are of a good standard and it is designed to meet the JAR22 requirements. At first sight it looks a very ordinary machine and it is only in the air that the true characteristics stand out. It is really very nice to fly with excellent handling and stalling characteristics.

The trailer is rather solidly built, apparently a necessity to stand up to the Lithuanian roads.

For a machine of over 20m span, the claimed performance of 48:1 is believable, making it in the same performance range as the Jantar 1 and earlier Nimbus, but the handling seemed to me much better than either of these. I was very impressed by it.

The cockpit is roomy, if somewhat Spartan in appearance, with a simple layout for the undercarriage lever, flap and airbrake controls. The stick is unusual in that the top is cranked over to the left to make the hand hold more comfortable. The main wheel is well sprung with an Oleo similar to the Blanik, and this gives a very good ride over any rough ground. Negative flap is recom-

SOME MORE TYPES FOR THE LOGBOOK

Derek gives his assessment of the LAK-12, Ventus C and Super Dimona

mended for the most effective aileron control at low speeds on take-off.

In spite of the large wing span, the aileron response and feel is excellent and it is difficult not to fly it accurately, even with the thermalling flap setting. There is a very adequate warning buffet as the stall is approached and depending on any yawing, either a straight stall or gentle wing drop occurs. Flying too slowly in thermalling turns, there is plenty of warning buffet and if it is stalled even a slight relaxation of the backward pressure results in an instantaneous recovery. At my flying weight of about 195lb cockpit load, even when provoked with full rudder and the stick held right back, it would only spin and rotate for about one full turn before unstalling itself and spiralling, much like a K-13.

The good side slipping characteristics made it easy to spot land

Perhaps the only slightly disappointing feature was the effectiveness of the airbrakes, which like the early Nimbus, might be unsuitable for inexperienced pilots. Using the full flap, they seemed only just adequate, but the good side slipping characteristics made it easy to spot land. I understand that the later production aircraft have double brake blades like the Pirat, Discus and later Ventus. With these, the approach control should be greatly improved and be as good or better than most other modern machines.

So what are the snags to owning a LAK-12? At first sight only the rigging. With the 20m two-piece wing, even with the carbon spar, the wing root is bound to be very heavy although the actual rigging is simple enough. The solution to this is easy. Just add in the price of a "geriatric" rigging aid to do that heavy work for you. This makes a one man rig possible and I understand that Tony Pozerskis can rig or derig it single handed in only ten minutes. Alternatively, you could leave it rigged and tied down with the covers on during the soaring season.

I have always held that when considering buying a machine or joining a syndicate, you should go for the best performance that you can afford. Particularly if you are not very skilled, a good gliding angle gives you a far better chance of

finding each thermal, and greatly increases your chances of staying up in weak conditions. The LAK offers a very high performance with good handling and is a remarkably inexpensive machine. Think of it, a brand new high performance machine complete with trailer and equipment for less than £20 000! I can strongly recommend a trial flight to form your own opinion. For the competitive pilot, it has a capacity for 42 gallons (over 400lb) of waterballast, making it a potent competitor in both weak and good conditions.

Now having seen what the factory is capable of producing, I am looking forward to trying the LAK-17 when it finally arrives. This is a 15/17m flapped machine which is under development and due to arrive soon after Christmas.

The Ventus C

I first tried this machine almost a year ago as I was hoping to fly it in the Open Nationals at Enstone. This was not to be, but I did manage to fly the Surrey & Hants' club machine this year at Abingdon and could not resist writing about it. Even after only one practice flight I felt fully at home with the glider and happy to compete and take it cross-country. However, it was to take me several more hours to become really familiar with



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Above: The Ventus CT with winglets. Below: A close up of the Ventus winglets.



the particular Borgelt and Winter variometer systems to get the best out of the conditions.

The Ventus C has many modifications and improvements over original A & B models. Most obvious are the wingtip extensions increasing the span up to 17.6m and the flaperons giving greatly improved lateral control.

The cockpit is the standard Schemp-Hirth Cirrus/Nimbus size and layout with the airbrakes and flaps on the left, and the undercarriage retraction lever on the right. The rudder pedals and seat back are adjustable.

The rigging is simple and with two wing stands it is easy for two people. All the controls hook up automatically as the glider is put together. The wing root and wingtip joints are designed to be easily taped, making the complete rigging and preparation very quick.

It is fitted with the distinctive upturned, swept wingtips, as used in the newer Nimbus 3, which makes it easily identified on the ground and in the air. Certainly the increased span improves

the low speed performance, but whether the upturn of the tips is of special aerodynamic value or is only there to reduce the risk of damage on landing is debatable.

Alternative wingtip fairings are provided to enable the glider to be flown as a 15 metre machine. A recent development are the vertical winglets. After some years of research and testing, these have been shown to be a distinct advantage over the most important speed range from thermalling speeds up to about 80kt, with little if any loss in performance above that speed.

They effect this improvement by producing a "lifting" force which is acting slightly forwards, so producing some thrust, and not just by acting as a wingtip fence. The trick is to tune the angle for the optimum results. In every configuration the Ventus C is very competitive and it can be flown in both the Open or 15 Metre Class. (It took 1st, 2nd and 3rd in the German Nationals so there was really no excuse for my low placing in the Open Nationals this year!)

Because the waterballast brings the C of G forward, a waterballast tank is fitted in the tail to compensate. This is arranged to drain more quickly than the main tanks so ensuring a safe position of the C of G for lighter pilots when the

waterballast is jettisoned. Calculations showed that with my 195lb I could fly with 4 litres of tail ballast with no water in the wings, so that the outflow from the tail tank could be safely reduced to keep some in at all times. During the competition I always used about 100lb of ballast out of the total capacity for almost 370lb. This seemed about right for the rather average conditions during the competition but I did not have time to experiment.

Whereas the earlier model has rather a reputation for stalling and spinning if flown carelessly, the C model seemed a model of docility. I frequently pulled into steep thermalling turns getting down to well below 40kt with only an obvious buffeting and sinking feeling clearly indicating that this was far too slow. It did not once drop a wing requiring any proper stall recovery. In spite of the extra wing span, the rate of roll is excellent at all speeds and it is easy to fly accurately rolling into and out of turns.

The performance? On the long straight glides following the ASH-25s and Nimbus's, it seemed to be very close to them at 75-80kt; close enough I felt to be competitive on a good day. I envied the bigger two-seaters their navigator and GPS systems and wasted time and effort keeping track of where I was whenever the visibility was poor.

I avoided using the landing position for the flaps because I was told that many club pilots seem to have dropped a wing and groundlooped using the full flap. The thermalling flap plus the powerful two tier brakes make any more flap unnecessary for most landings. With the full landing flap position the touchdown speed would be further reduced, but the ailerons become far less effective making it desirable to raise the flap after touchdown. Raising the flaps while holding the airbrakes open is just possible but takes practice and agility. Using the +1 or +2 flap positions, raising the flaps seemed unnecessary and the powerful airbrakes make it an easy aircraft to land accurately.

All in all, this, like the Discus, is a truly classic glider and with the turbo version, what could be better than having both the Open Class performance and the "get you home" quality on such a small glider.

The LAK-12 demonstrator at Husbans Bosworth.



The HK-36R "Super Dimona"

This is a recent arrival in this country and has just been granted a full C of A as a self launching motor glider. The original Dimona had a rather chequered history and the manufacturer went into liquidation with a number of unfulfilled orders. The manufacture was then taken over by HOAK and a Mark 2 version produced with many improvements. Several hundred were made by them with various alternative Limbach engines. The final production version, the Super Dimona, is powered by the Rotax 912A 80hp four stroke. This is an exceptionally quiet and smooth running engine driving the large diameter propeller through a reduction gear. This improves the propeller efficiency and reduces its noise. This engine has liquid cooled cylinder heads enabling a very neat, close cowling to be used. It also reduces the probability of rapid cooling causing distorted or cracked cylinder heads when the engine is switched on and off for soaring.



The Super Dimona cockpit.

Major changes incorporated in the Super Dimona are the remodelling of the fuselage and wing root junction to improve the aerodynamics and reduce the drag losses in that area which spoilt the performance of the early model. The wing folding is now standardised and it is possible to fold and unfold the wings with two people without additional aids in only a few minutes. This greatly reduces hangarage space.

The canopy arrangement has also been improved and now lifts up and back making the access very easy. The cockpit is well upholstered and very comfortable. There is ample panel space for an elaborate set of avionics and the only serious criticism I could make is the positioning of the right hand pilot's airbrakes which are on the right. The original Dimona, together with the Falke series, have been the only side-by-side motor gliders that I have flown to have both airbrake levers positioned on the left as they would be in a normal glider. History shows that even experienced glider pilots can have problems using the airbrakes with their right hand if a bounce or bad landing occurs. It is very easy to correct instinctively by pushing forward with the left hand (intending to close the airbrake but in fact diving the aircraft towards the ground) while



The Super Dimona in flight. Photo: Heinz Zeggli.

attempting to hold off by pulling on the right hand and so opening full airbrake. This has resulted in the destruction or damage to many similar motor gliders all over the world. Flying from the right side it is important to freeze that hand during a landing to avoid this expensive problem.

The early aircraft had a glass-fibre undercarriage and this has now been redesigned and has easily removed spats and powerful disc brakes. The effective tail wheel steering does away with the need for individually controlled wheel brakes and the directional control on the ground is very positive. The wheel brakes are applied by opening the airbrakes fully and there is a parking brake knob on the centre quadrant behind the throttle and other engine controls.

Like the original aircraft the handling in the air is excellent, allowing a circling speed for thermalling lower than most of the other production glass-fibre motor gliders in this class.

The power performance is impressive, with a short take-off and good rate of climb (claimed at 800ft/min). It will cruise very quietly at about 80kt with a claimed maximum of well over 100kt at 75% power. The noise and vibration level in the cockpit is remarkably low making it a real pleasure to fly.

The demonstrator has an electric, constant speed, variable pitch, feathering propeller which although ideal for climbing and cruising has the disadvantage of taking some 50sec or more to unfeather. As you can imagine, waiting for it to unfeather when gliding in strong sink could be very traumatic. However, it would be possible to restart the engine with the propeller only half feathered, and although it would not be very efficient it would prevent a landing. I understand this is now being replaced with a simple hydraulically operated one with almost instantaneous unfeathering; an essential if the engine is going to be stopped for soaring.

Because of the stable conditions at the time, I did not have the opportunity of soaring the Super Dimona or of measuring the rate of sink in the glide. The manufacturers claim 28:1 and a min sink speed of 220ft/min which should make it quite a useful soaring machine, particularly for wave flying.

Normal Schemp-Hirth type, top surface airbrakes are fitted giving good approach control.

They cause a small nose down trim change making it easy to maintain a sensible approach speed. Although the Dimona is a tail wheel machine, it is easy to three point and very easy to keep straight using the positive tail wheel steering. The forward position of the main wheels should make it difficult if not impossible to tip forward on to the nose running into soft ground or with harsh braking.

Of course nice things like this don't come cheaply and the price of nearly £54 000 plus VAT puts it outside the pocket for most gliding enthusiasts. However, it is a very beautiful design and I envy any owner who buys one. ✱

NEW PRODUCT



Our photograph is of a ground anchor designed by Arden Trading Co for motor cycles but found to be very useful for many other purposes such as securing gliders, trailers and tugs. It is quick, simple and easy to use and when screwed up to the hilt it gives a very firm fixing.

It is made from 12.5mm spring steel coil to BS5216-HS3 and heavy gauge loops. The unit has been double heat treated, chrome passivated and de-embrittled to give a lifetime's use.

It is £25 plus £4.50 p&p from ATC, High Street, Little Humby, Grantham, Lincs NG33 4HW, tel 0476 85318. ✱

S & G CLASSIC

CHOSEN BY PLATYPUS

This 504km triangle by Steve Longland, (who incidentally, has just retired as CFI of the Cambridge University GC) was one of the great flights of the plastic era, but carried out in a wooden glider. One wonders what the reaction would have been if it had been performed by any pilot – even one of our most famous record breakers or National Champions – in the ten years after the introduction of the Skylark 3 (1955 to 1965). We would have had to import the ticker tape parade from New York expressly to celebrate such an achievement, especially as by 1965 nobody had yet done a 500km triangle' or out and return in Britain.

There is no doubt that we are strongly influenced by what is going on around us, and the standards set by our peers. In the era of downwindery we nearly all went downwind like a lot of lemmings, and the few pilots who butted their heads into the breeze were regarded as eccentrics. In the age of closed circuits those who go downwind are now the eccentrics. The closed circuit flights that have been done in the last 20 years in 1930s gliders, by pilots who have no pretensions to be superstars, are quite astonishing by the standards of the age in which those aircraft were built. The general standard has risen and is rising, whatever we fly.

Steve's howlunit also merits inclusion in the ranks of S&G Classics because it is interestingly written, though he says now that he would take the knife to it and cut it. That is only because television has destroyed our attention span, Steve.

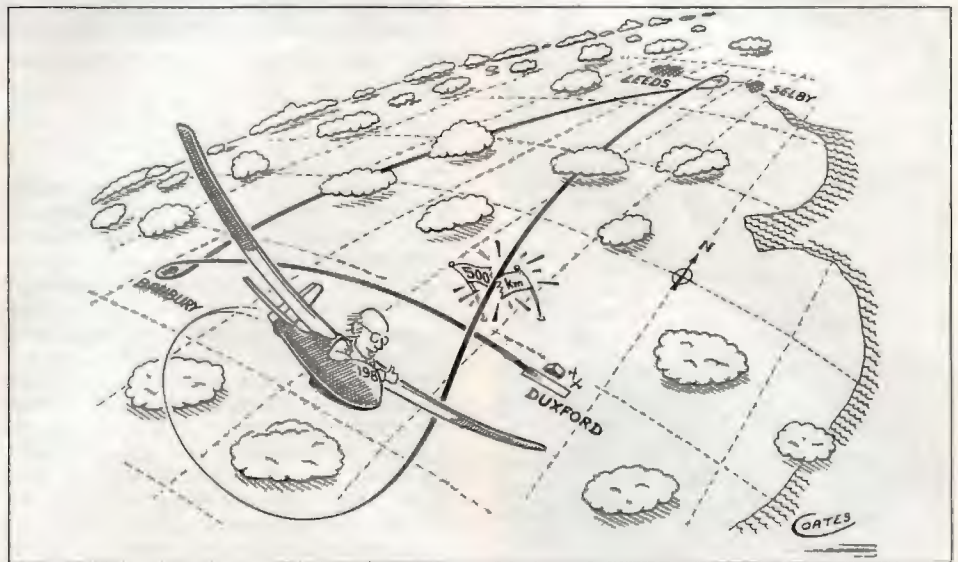
The sobering thought *post coitum omnis animal tristis est* (with which I personally disagree, but never mind) must have leapt instantly to all our minds when we read Steve's philosophical reflections after his great performance. He drew a fair amount of flak in subsequent S&G letters pages as a result. I think he was just plain tired. When Freddy Trueman came off the field after taking all ten wickets in a historic Test Match, a newspaper reporter asked him in the customary inane way how he felt after his triumph.

"Knackered" came the pithy reply.

The psychoanalysts can put away their notepads. Steve was knackered, that's all.

AROUND AND INSIDE A 500KM TRIANGLE

Steve Longland, who took a Skylark 3G on a 500km triangle from Duxford on May 29, 1974, gives two appraisals of the flight – the basic facts and then the basic emotions



The original drawing by Andrew Coates.

The facts: a 504km triangle in 8hrs 53min at 57km/h, via Banbury railway station and the north junction of the A63/A1.

I'm somewhat diffident about explaining what I did, why I did it, how I did it and so on, because the flight was rather uneventful, just long, and most of the assumptions I made during the planning season of winter proved to be irrelevant to the actual flight. However, I was at least mentally prepared for the task when the time came, and that's quite important.

The choice of a NS triangle in preference to an EW depended largely on the assumption that the kind of day a Skylark 3 could be flown round a 500km would also give rise to sea breezes. Due to the Birmingham TCA and the Luton SRZ (and others), an EW triangle from either Cambridge or Duxford is either long and thin, so that there is a good chance of the flight being wiped out – whichever way round one goes – by a sea breeze front, or it would surround the Birmingham TCA and spend a good deal of time under low airways over quite high ground.

If there had to be sea breezes, then it seemed a good idea to make use of them, unpredictable as their positions might be. This, and the fact that it seemed a good idea to run two of the legs roughly parallel with the M1 and A1 respectively (making navigation much easier, for on a 500km

in a 3 you really can't afford to be lost for any length of time), convinced me the NS triangle was the best. Also, as I assumed I would be starting in weak conditions. I didn't want to be threading my way round the numerous active airfields NW of Cambridge and Duxford. Therefore, going to Banbury first seemed the only way.

Stronger than anticipated

As it happened there were no sea breeze effects anywhere near me and the wind was a good deal stronger than I had allowed for, though this didn't matter too much. Conditions at 1030hrs were far from weak and I went directly off after an aerotow to 2500ft into 4-5kt. Cloudbase was then at 3500ft and for the first three or four hours I rarely climbed higher than this, although cloudbase was rising slowly all the time.

Everything went well to Banbury except the speed. I had marked the course in 55km intervals (giving about 9hrs for the flight) since I reckoned this was probably about the best speed I could do. That assumption, at least, was pretty accurate, although this wasn't apparent until I was nearly home. Certainly during the first two legs I gradually dropped further and further behind schedule.

As I flew towards Rugby the visibility, hitherto

¹ That was done by Brenning James in a Diamant in 1967.

excellent, began to deteriorate, so did the thermals, and there was some suspicion of overconvection. In a short space of time I was at 800ft and picking a nice field. The barograph trace is very explicit over what happened next. It shows several minutes circling in zero sink and then a very slow climb away. But it was too slow and I was rapidly going downwind, so I pressed forward and almost immediately hit an off-the-clocker that was probably there all the time.

Falling behind schedule

However, it wasn't until I reached Bruntingthorpe that visibility and lift really improved. Although I was climbing exceptionally fast, not always needing to circle either, and flying between the thermals as fast as I dared – not as fast as the ring demanded, so phenomenal was the sink – I didn't seem able to catch up with the schedule. The wind seemed a good deal stronger than further south and smoke hardly climbed above the stacks but simply bent over the chimney lips and went off parallel to the ground.

I seriously contemplated giving up at this point

From Chesterfield I could see Ferrybridge, a distance of 35 miles. Although it was only about 1500hrs, the day was beginning to show signs of slowing up. The distances between the clouds were gradually widening and I seriously contemplated giving up at this point and trying to get back. Since I was so near, though, it seemed a pity not to round the TP which I did in heavy sink, once more finding myself low.

Scuttling back to the Ferrybridge cooling towers produced a feeble thermal and remembering what had happened at Rugby, I moved off and almost immediately found another off-the-clocker.

It is a depressing sight to see the clouds slowly edging away from each other and the sky taking on that curious shade of blue so characteristic of late spring, early summer, afternoons. This was now happening and my only thought was to stay up.

The lift was perceptibly weaker. Gradually, as I went from cloud to cloud, I began to turn the ring back and get slower between thermals. The wind that had hindered me earlier now helped me along very nicely and to my surprise I found I was beginning to catch up on my schedule. At Peterborough I climbed to 6200ft, the highest I had been all day. I shrieked slowly along, as Skylarks do, to Huntingdon, climbed slowly up to 4500, and continued on my way.

Thermal activity was obviously about to die out completely and only a few isolated haze caps showed where there might be lift. At Bourne I had enough height for a well judged final glide. However, at this late stage in the game it seemed that it would be utterly absurd for me to land short because of impatience (after all, it wasn't going to make a penceworth of difference to my average speed whether I arrived back in five or 15min), so when a thermal of about 1½kt appeared, I religiously climbed as high as I could and then trundle back to Duxford, arriving at 1929hrs with 2000ft – 15min ahead of schedule. I didn't do a spot landing; shame on me!

THE EMOTIONS

Most, if not all of us, strive and compete in the obscure belief that once our goal has been reached we shall be rewarded with something nice, like a warm feeling of superiority! We treat strife and competition in almost every aspect of life as if they were rites of Initiation, and we undergo privation and terror to prove ourselves worthy of that inner secret which will change the dreary pattern of our rather unremarkable lives. Tomorrow we shall be special; we'll *really* be somebody! Today, however, it is roaring ambition and a puritan determination to be perfect (*ie* superior).

But ambition only creates appetite for more appetite. In other words, the more you eat the hungrier you get. As for perfection, well one could say that the only imperfect things in this world are men's ideas of perfection.

The truth seems to be that if we set ourselves a goal it will pay us handsomely not to attain it! Nothing is more satisfactory to the moralist in men than perpetual failure, and as long as we are always "going there/almost there/on the way", ambition remains satisfactory. If we reach our goal, however, it is as if we had run up a long flight of stairs in the dark and stepped off the top step into thin air. Everywhere people run up and down the staircases that go nowhere. If the 300km staircase was a bit of a let down, then try the 500 and after that, 600?

In a Skylark 3a? And then? (Etc, etc)... Better buy into glass.

Talk to the bank manager. His look is one of complete amazement. "How much?!" You repeat the unmentionable sum.

"Good grief," he replies, "Do you realise you could buy yourself a small improvable property in Dundee for that amount?!"

No money in gliding

He is a sensible man, not the least impressed by 500km triangles. Besides, gliding isn't making you any money. He points that out too. Nice chap! He does not realise that ambitious men are not quite right in the head, or heart, for that matter; dangerously unhinged by their obsessions they drag themselves to greater and greater heights of inanity always hoping that soon, in next to no time, eventually, the answer to the riddle of life will be their reward for relentless and often cruel effort.

The sad thing is that after the ballyhoo is over, after we have half frightened ourselves to death for "the answer" that sends our pundits smiling through life, we discover that there is actually no "answer" at all. Effort, like virtue, it seems, is its own reward. After some apparently astonishing feat we are what we were before, saddle-sore, perhaps, but immutably ourselves... Others may say, "How excellent! What great merit he displayed!" (or less complimentary things), but judge as they may and do, it is only we who realise that nothing has changed. The whole business of "doing and achieving" is a confidence trick.

I suppose there may well be some residue of real value in doing a 504km triangle in 8hrs 53min, flying an outdated Skylark 3a. But that is not what impressed the pilot. Apart from an end-

less series of upward spirals followed by precipitous plunges to the next cloud (as if there was never enough time left to complete the task), there was the realisation of the rootless and un-nourishing nature of the "achievement". The flight ended the moment I landed back at Duxford. Just about everything else ended too in the feeling of total anti-climax. It was exactly the same on the 300km.

Then came:

1. Disbelief. I have been dreaming! Any second now and reality will assert its chill force and find me wrapped around one of the Ferrybridge cooling towers.

2. Amazement. A complete inability to understand why a Skylark 3 hasn't gone round a 500km before. Is there some sort of psychological barrier? The answer that the weather has never been right is just too easy.

3. Relief. I'll never do it again, at least not for a week or two.

4. Over-revved. Super alert, bouncing around like a middle-aged firecracker, not tired at all. Not tired even at four in the flaming morning! Not tired the next day. Developed a bad cold instead.

5. A sense of profound irritation. I have been tricked, that is what I chiefly feel. Excellence, according to men's standards, is rewarded – indeed, our whole society is based upon this notion. But who is there to do the rewarding? Are there good marks in Heaven? Applause on Earth? Heaven does not reward anything since it cannot afford to, and the Earth's applause, much as we may seek it, is deeply ambiguous and wounds as it congratulates. Besides, the feat is not that spectacular.

The moment one realises these facts is one of real loneliness. I sat there in the cockpit and thought, "Well! What the hell was all that about?"

It is rather pompous, I suppose, to extract a sermon from a stone – even a Diamond – but the "how" of the flight was truly unremarkable. When Mr A. Vincent flew a 500km triangle in a K-6E two years ago, he was reputed to have said "I just kept on going". That, boringly, was the case here. The "why?" of the flight is another matter altogether, as I have tried to point out. Ambition expects a great deal, of course, and invests very heavily in the erection of rather arbitrary barriers that must be broken if X, Y or Z is to take place. But on the right day, in a mouldy old Skylark 3, the only real barrier is the voice in the head that mutters "Impossible, never been done before in a... etc". The voice is not our own, but that of accepted opinion.

So, I did it, but it wasn't quite what I expected – few things ever are, thank goodness! Like everyone else, of course, I realise I will have to change my competitive ways somewhat, and become more understanding of the peculiarly intolerant demands and needs of other people. I will not rush out to the aeroplane early before the rest of my syndicate, make arrogant declarations of intent, and be as irritable and disruptive as others who are exactly as competitive as myself (probably more so!).

I will mellow, I think, and live to a ripe and relaxed old age. But not quite yet! One more 500km triangle in a Skylark 3 just to prove there was no luck involved – it's always skill, you understand – and to rub in my *real* superiority! Then I'll change, like everybody else!

The weather was mixed but the club was most hospitable and the organisation as smooth as ever. Launching a lot of sailplanes in a very short time is an art there developed over many years by Henry Doktor, who came out of retirement to run the startline, and Michael Wood.

Nick Gaunt was the director and task setter with John Fielden to see fair play. Thirty-five pilots entered with 29 types of glider from K-6cs to an ASH-25 and a Nimbus 3.

We had a light international touch for the soaring lady from Nevada, Marian Barritt, was crewing for Michael Bird and his ASW-22.

Saturday was duff with low cloud and rain, but Met man Tony Kane pronounced that Sunday would be workable. Tony, a long time member and private owner at Sutton Bank, has developed his Met skills to a high order and has been a very successful forecaster for the Northern Regionals in recent years.

Tony's prognosis proved correct and Sunday's task was set to use the lee wave to the south of the site. Such conditions do not often give much scope for distance but with the wind 15 to 25kt from a heading of 040°, the wave can and did stretch from Northallerton in a crescent round to Kirkbymoorside and beyond. Seven TPs were designated with a 25pt bonus for landing back.

John took the day's honours

John Bally turned 18 TPs in his Nimbus 3, but Mike Brook (SHK) took the day's honours by rounding 19 TPs including the very difficult Pickering one that required an into wind leg to get there, Justin Wills (LS-6) flew the wave, turned downwind and landed at Netherthorpe, Sheffield.

Monday gave us convection that cycled so that many pilots found the conditions very frustrating. Justin flew the furthest with a 363km O/R to Husbands Bosworth. Tony Moulang (Puchacz), Jim Grainger (LS-6) and Ron Davidson (LS-4) all turned Netherthorpe and returned. But both Chris Simpson with Pete Osbourne in the ASH-25 and John Bally landed in the Leicester area. Tony Smallwood in the pre-war Gull 1 came 2nd with an O/R to York. John Cadman (Libelle 301), who turned Nottingham, was 3rd and Chris Nicholas (K-6E) 4th. A new pilot to Enterprise, Damian le Roux from North Hill, was 5th after 311km in his K-6CR.

Tuesday was wet so Justin enthralled us with his account of the coming of GPS to soaring. He reminded us that his father had won the 1952 World Championships in Spain with superior technology in the Slingsby Sky and the MacCready speed-to-fly pencil of his own invention. Chris Nicholas commented on the prospect of transponders in sailplanes. They are likely to come but not yet. Their value may be limited.

Wednesday and Thursday were no better but the three day rule triumphed yet again. Friday gave us rather watery convection which developed into strong soaring conditions in the afternoon. Nick Gaunt was nothing if not ambitious and selected Millfield as the most northerly TP with Ferrybridge power station to the south.

It was not an easy day. Those who succeeded

ENTERPRISE AD HOC

Competition Enterprise, Sutton Bank – July 4-11



John Cadman (Libelle) photographed by Chris Riddell at the launch point.

in getting north went to the better conditions over the hills. Nick Gaunt won the day by turning Millfield and Ferrybridge for 409km. John Bally went further to 433km but was cut back on handicap. Michael Bird flew the same distance but was slower. Damian le Roux came in with 173km in his wooden glider.

Peter Roberts and Douglas Holmes (K-21) were 5th with 255km to show what club two-seaters can do in the right hands. Chris Simpson and Pete Osbourne turned Millfield for 333km to earn 6th place and Tony Moulang came 7th with 149km.

It was a day of great achievement that required climbing in cloud to 8000ft and more. Conditions were not easy and many landed out on the first leg unaware of the treacherous nature of the Vale of York north of Thirsk. John Cadman was down at Catterick on the way back. The call went up for Mike Brook but no one had heard from him. Then long after the others had come in the SHK was seen to the south having rounded first Currock Hill and then Netherthorpe, a task that took him some 8hrs.

Saturday came and the rain returned. I elected to join a wedding party at the bottom of Sutton Bank and with glass in hand was able to witness

the desperate efforts of the Dart 17R to stay up in appalling clag. I felt for Peter Poole who little knew that a judicious landing in the adjoining field would at least have earned him a glass of champagne.

Justin Wills was declared the winner with Damian le Roux 2nd, Mike Brook 3rd, Peter Roberts and Douglas Holmes 4th, Nick Gaunt 5th and Michael Bird 6th, 1pt ahead of John Bally.

Enterprise was over for another year. John Cadman summed it up when he said that Enterprise was getting more enterprising. The credit must go to Nick Gaunt and John Fielden who set tasks that tested pilots to their limits and achieved some excellent results. Enterprise showed how the meeting's format encouraged the others. Mike Brook and Damian le Roux on their wooden wings turned in performances ahead of others in newer and more advanced sailplanes.

So it was time to go. Sunday was a cracker. Michael Bird flew the ASW-22 to Dunstable. Damian landed at Colchester, Gold distance away. But Justin Wills flew out into the Vale of Mowbray to turn at Aislaby by Northallerton, thence to Cambridge, at 12 000ft or so they said, and then north again to land at Morpeth in Northumberland. But that's another story. ☑

THE VISIT

A Christmas time reflection

Through the mid-afternoon darkness I look from my window at snowflakes falling softly from the dark, heavy clouds of winter. Forming a shroud over fields once ripe with wheat and barley, they hide away the past so that memories of last year's flights become still more unreal, as if they were all merely part of someone else's broken dream. And the season came and went in the wink of an eye, leaving behind a trail of unfulfilled possibilities, now all melted away to nothing like snowdrops in a flame. On the table in front of me, an open photograph album and a worn logbook are the only testaments to the flights I have made and as I turn the pages backwards I see images which evoke a growing confusion of ecstasy and sadness. There are people I knew who...

... but wait! There are footsteps outside, the snow crunching and cracking, getting louder with each step. A short pause, then a sharp knock on the door...

Oh, it's you! I was wondering who on earth it could be. You must be freezing, mate. Shake the snow from your coat, come in and sit down in front of the fire. I'll pour you a drink... Glenfiddich, isn't it? Of course it is, you haven't changed even though it's been a lifetime since I saw you last.

Let me show you some old photographs, from the time we both got hooked on gliding. Remember how it all began, a casual invitation to a small club operating an old, beat-up two-seater, with pilots so full of life that neither of us could remain untouched by their enthusiasm? I was full of apprehension while the cable was being attached for my first ever launch, yet I wouldn't have swapped places for anything in the world. The cable tightened and, as we leapt into the air, a demon was released which would haunt me and taunt me forever – this was something that I knew I had to master. Remember how eagerly we used to get out the old pink bus, the winch, the gliders? We'd beat the sunrise and have everything ready for launching, so we could be first on the list to fly and fly and fly. We'd eat sausage sandwiches in the bus as the rains came down and make grand plans for the future. Success came quickly, though it didn't feel like it at the time. Each setback was overcome, until eventually I was sent solo, dancing in the sky like a young starling, experiencing at last the freedom I had never realised I had wanted all along. There can be no photographs to record moments like that, only fading images of a failing memory.

Remember what we did next? We formed a syndicate, you and I, in an old wooden glider which had already passed through many hands, the sort of glider which in truth owned the pilots,

not the other way around. Unashamed badge hunters, we practised and practised until, through sheer exhaustion, fate gave in and we had our way. Still no looking back, we replaced our old wooden friend with a gleaming plastic one, as we rushed headlong in a frantic scramble for precious stones. Each flight became a test, pushing back the boundaries of our experience, trying to feel our way forward without the experience we were desperately trying to gain until, of course, the inevitable happened.

You were kind to me during those dark times. Each crash was my own fault – you knew that and you knew that I knew it too, so words were neither needed nor wasted. You told me how it wasn't important, that the glider would be fixed, that I was OK, that I shouldn't worry about it. But I knew – we both knew – that I had, through my own foolishness, taken from you something that could never be replaced, golden days left unused, gone forever. I began to realise how special our syndicate was and how much more there was to gliding than just gliding. You had opened a door to show me your vision that anything could be possible, that all you needed to do to make it come true was to know that it was going to happen. Everything else follows, like water tumbling down a mountain stream. And so we had turned another page.

Each flight became an opportunity to reach out for new levels of achievement, to attain a sort of excellence

Since then we went our separate ways as the need to work became almost as important as the need to fly. But we kept in touch and I looked forward to our telephone calls which helped me back to sanity whenever the trauma of city life threatened to overwhelm me. My flying progressed, as did yours, as would anyone's who flew as much as we did and yet we were becoming increasingly frustrated at our inability to achieve anything resembling a tangible success. After many years, we began to learn that statistics alone were not enough, that numbers of hours and kilometres, points and position were no real indication of achievement. We began to see a new truth, that what was really driving us was a search for something far more elusive than numbers, something which wasn't restricted to gliding, or flying, or sport, but something more profound. Each flight became an opportunity for us to reach out for new levels of achievement, to attain a sort of excellence which was not to be compared with qualities in others but which could only ever be recognised within ourselves. We seemed to be searching for a sort of perfection which, though channelled through gliding, nevertheless ultimately affects everything else we do. I think I know what a perfect thermal would feel like. I think I know what a perfect flight would feel like. I have experienced neither but I keep on trying – after all, what is the alternative?


I don't have the words... look at this album

and let me show you what I mean. These photos were taken on a day we both missed briefing and set off for the high mountains, not realising that it had been forecast to be unsoarable there. We found the conditions very difficult in wave-affected thermals, turbulent bastards which contemptuously spat us out at the first sign of any inattention. We struggled, but eventually the violence gave way to serenity and we had our reward in a magnificent wave flight, high above the peaks. The view was simply astonishing. The snow-capped mountains far below looked like a crumpled brown blanket sprinkled with white confetti and, as we looked towards the south, all we could see was an intense golden glow, stretching from the grey, misty valley below to the burning blue sky above. That evening, as we headed for home towards the sun, it was like final gliding into heaven. I will never forget it. This hadn't been the highest flight, nor the furthest, nor the fastest; it was simply the best, the closest to perfection we had ever experienced. We had beaten no-one else that day, had conquered nothing but our own fears, yet after we had landed our grins were as wide as the valley, no words needed, as we basked in the afterglow of another magic day. Life had been given a real, perhaps spiritual meaning, if only for a few hours.

And yet... have I got this all wrong? Is it only you and I and a few others who have this curious view of gliding as an expression of life, of life as an expression of excellence? We are all individuals, all flying for our own reasons, yet our needs appear to be satisfied in the same way, so surely that same, undefinable passion must exist for us all? Even the talking heads on the telly, who try to explain the attractions of soaring, who use words like freedom, challenge and achievement, even they ultimately fail to convey the essence of flying to anyone who is not already possessed by it. We know why we do it. We know what they mean. But outside our own minds these attempts to explain simply mystify.

Even so, I know you're right. It must be the same for others whose passions lie in other sports – we just happen to have been taken by this one. It's as if a fire burns within us, rekindled again and again by our own, small glimpses of heaven. And although some of us have tried to look for alternatives, for the rest there is simply no other way than to climb in, strap up and shut the lid, to continue our search for that glorious, elusive, perfect flight. Perhaps, because gliding can be so unforgiving, it teaches us caution, to think carefully about how we approach our lives when we perform acts of real value. Perhaps, because gliding is such an unnatural act for human beings, the lesson is how to overcome fear, fear of the unknown, maybe the fear of failure. Even now, after thousands of hours in the air, I am often apprehensive for those flights I have still to make. I consider all the things which could go wrong, all the what-ifs which have never happened and yet, and yet... I still need to fly. But perhaps most of all, because flying only ever lets us see the world we love by taking us away from it, it gives us a sense of perspective. Picture yourself in the mountains; nature is so grand and people are so small. Time and time again we find ourselves alone, cold and frightened, tiny, tiny specks in this vast sky, a huge invisible arrow ➡

pointing straight at us saying "This is all you are. Be careful..."

... he's gone ... I just looked around ... never saw him leave. With so much left unsaid, my album lies closed on the table, its contents fixed irrevocably in time, its future now unshareable. So it is that I now find myself standing in an open doorway, listening to the breeze whisper its messages through the branches. And still I feel hope, for as I look upwards I see a new ice-cold diamond, sparkling in the heavens with the others as they have done for ever. It has been a long, cold night and as I watch the darkness in the east begin to fade, I feel at last able to take one more sip to a new season, to my friendly ghost and to being given one more chance to get it right. 

BAROGRAPH ABUSE

Bill Longstaff has sent us this amusing tale of the abuse of his barograph. Twelve years ago his Winter barograph survived when the glider and trailer were blown over. The barograph was found dangling by its bungy from the fuselage with the river Feshie running through it. A £30 service put it right.

But recently worse was to happen with the replacement, an EW barograph, which had been borrowed by a syndicate partner. Wrapped carefully in a protective bag, it was posted back through Bill's letterbox straight into a cardboard box the cleaner had left behind. The next day the box was on its way to the tip.

When the loss was realised Bill's wife, Miriam, and son Jim raced off to the tip where Jim eventually discovered the box and the barograph at the bottom of a 5ft skip, covered with soil compacted by a bulldozer. And the only damage was to one or two components which were soon replaced.

Time is wasted and deadlines lost by contributors using the BGA address. Please note that S&G is based at Cambridge.

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MERRI'S PROGRESS

Flying the Inter-Services Regionals

Back in March I was told by my syndicate that I would be flying the Inter-Services. Right, I thought, that sounds good, I'll do it. Not that I had much to say about it, you understand. The decision was already taken when I was informed. Actually competitions had always seemed to me to be great fun with interesting cross-country flying and beers in the bar after. So I spent months looking forward to my first Comp with some degree of keenness, but without a lot of cross-country flying; almost every time Derek got some time off work to look after Izzy while I hit the sky, it rained! This left me with the somewhat disquieting feeling as the Comp approached that I was inadequately current. This was compounded by the fact that I had never flown in a competition before and didn't know what to expect.

We managed to get both the glider and the caravan down to Abingdon without too many tears on the way and readied ourselves for combat. Ken Hartley very kindly agreed to sit in the back for the first two days to provide me with guidance as to strategy, so the back seat was happily filled for the crucial *ab-initio* period. He actually had to walk me through procedures from the outset, as I was a complete innocent, but more about this later. Derek, as my crew, reckoned there would be people happy to help rig a Janus, and that combining this with looking after Izzy would be within the realms of feasibility. We soon learned that over-confidence was not only a hazard in the air!

I took my seat for the first briefing and soon found that I didn't understand. When I say this, I mean it - I didn't understand **anything**. I have never felt so completely lost in my life, even on the way to Boston. Oh, I did understand the Met, but found it hardly comforting. Honestly, Start zones? I was near tears when Ken clapped me on the shoulder and boy was I happy to see him! He explained what start zones (a sort of inaugural TP photo) were, why they were important (be-

cause you could fly the entire task perfectly, come in first, but if your start point photo wasn't right, you could lose all your points and wind up last) and generally provided reassurance.

The task was Newport Pagnell services, the railway fork at Great Shelford and Westcott. As we launched, Ken said "Take two deep breaths" - good advice; I actually managed to get us airborne. Then came **lesson number one**. I was all for getting going, but no. If you plan your start correctly, looking down track, then it sets up your entire first leg. This would not have occurred to me in my impatience, but waiting and planning was worthwhile.

The weather on track was pretty poor and looked much better out towards Bicester, so that was where we went. I must admit right now that I might have been tempted to track crawl a bit more closely, but we made excellent time to our first TP and photographed it without too much trouble. There were some cracking climbs to be had out in East Anglia, up to 6kt, which supported even my agricultural soaring technique, so Ken gave me a lesson in flying something the size of the Janus.

Lesson number two: go in a straight line. I soon realised that I was turning too often and putting too much emphasis on getting into a thermal quickly, when really the best thing to do was to follow lines of energy as much as possible. It's a lot less fatiguing for a start, so you can fly efficiently for longer and it works. This rang bells in my mind - it's just like flying a K-18 into wind. The only way to get the K-18 into a stiff breeze is to follow energy; if you take a strong thermal and climb in it, you get blown back so much in the process that it's hardly worth it. I felt like a bit of a wally having to re-learn a lesson I had first learned ages ago, but having now made the connection was chuffed.

"Joined by other big wings, we clung to what we had and watched them sniff. . ."

Having got around the second TP, we then had to push into wind. Down came the nose and off we went. Things were pretty smooth until we went past Milton Keynes and the gaps between lift grew. This was where I would have had trouble; if we had stayed with the weak thermals we would have been constantly pushed back, so we had to press on. We finally found something worth working by Westcott thanks to Ken's perseverance, took the photo and got to just north-east of Oxford where we were halted in our tracks by **big** gaps. Joined by other big wings, we clung to what we had and watched them sniff - leaving at that point and pressing on would have been do or die stuff, and it made no sense to sacrifice the tasks at this juncture. The other boys did pick up something and we joined them. This last thermal enabled us to romp home in a classic final glide.

What a learning curve - when to press on, and when not, when to turn and why not, how to start and when to transmit the starttime. All of this in one day!

Plagued by ill health and a very fractious baby (one retrieve too many provoked a sincere effort at hooting and roaring at 3am which was not conducive to responsible piloting on the part of Mum), I flew only one of the remaining three days. Micky Boik was my partner in this, an O/R to Mursley water tower. They launched the Open Class first, which was quite an education as most of them struggled to stay airborne. I couldn't help thinking we couldn't be launched as the big guys were all coming down, but eventually they all got away and off we were sent dodging showers. I later found out that Derek launched us and promptly hooked up the trailer. He's done this before.

Micky was very helpful on tow, getting me to relax by pretending to be terrified. Or, maybe he was terrified, but no, he's a hard-bitten full Cat... I watched the showers approach, felt how the lift petered out near cloudbase, and then off we went! It was a textbook street running to Mursley, and we only had to turn once on the way. Fantastic! Everyone landed out at Mursley; the lift just stopped. We got round the TP, and I do mean round, you should see our photo, landed in what I thought was a small field and were promptly joined by four other gliders! In that field were three full Cats and a CFI, so I felt a lot better about the flight. If I could just have found one more scrap of lift...

I couldn't have flown this task as I had without having learned what I did on the first day. Experience, well guided, is a good teacher. There were other things to learn as well which had nothing to do with flying technique. One was that *everyone gets nervous*. I was not being the neurotic female which I supposed I was. I was being a pilot flying in a competition. Having said that, it will not be so bad next time as I will have a better idea of what was going on – nothing produces as much apprehension as the unknown.

Also, if you are unfit, you are unfit, and it's better to recognise this and withdraw than to take unacceptable risks. I was spitting glass with taking this decision, but I **had no choice** and had to accept it. It was galling, though, all the more so because it was a competition.

We've also realised that we were hopelessly under organised for the competition. We really needed a four person crew (one of whom could be dedicated to child-minding); two in the air and two on the ground and will get this sorted for the next time around. That's the second time I mentioned "next time". I'd better buy Derek the tranquillisers now.

ITALY FROM TOP TO TOE

Leonardo Brigliadori, the 1985 Standard Class World Champion, and Casetti Davide became the first glider pilots to fly from the top to the toe of Italy on September 5. They were launched in an ASH-25 at Como and landed after more than 900km at Taranto as dusk was falling.

There was a strong northerly wind which generated wave from the southern Alps. They climbed to 21 300ft in wave which took them over the Padanian valley and reached the first good 6500ft thermal near Florence.

The rest of the flight was problem free along the Apennines with a maximum altitude of 9800ft.

OPEN CLASS NATIONALS

RAF Abingdon – August 8-16

Wet, windy and westerly

Competitions in gentle anticyclones have become for most of us a distant, nostalgic memory. During this second week of August, traditionally a balmy time of year, a succession of Atlantic lows, characteristic of 1992 in general, swept across England. On every contest day the organisation and pilots were haunted by the fear that the day would die prematurely under yet another blanket of cloud and rain advancing from the west. It is a great credit to Ted Richards, the director, and Met man Brian Hawken that they got five contest days, four with finishers, out of such an unpromising brew.

A bonus week for cloud flying, caution, early starts and light wing loadings

It was a competition in which the old game of 'latestartmanship' was dangerous to play. It was much safer to start early, even if it meant less than optimum speeds. However most delayed starts were not due to guile but *force majeure* (French for cock-up). It was also a Comp in which caution paid off on most days. Prizes for aggressive aviating were only awarded on Day 3, the biggest and best task of the week. Under the circumstances it was not surprising that the ASH-25s, generally flying 100 to 200lbs lighter than the Nimbus 3Ds, had a better time of it on the four other days, especially Days 1, 2 and 4.

Day 1, Sunday, August 9; 228-237km, alternative TPs, (Norman Cross, Ramsey, Earith).

A damp moderate south-westerly airstream with holes and thinner patches in the medium and upper cover allowing sufficient heating to push cloudbase up to 2500ft agl with tops 4-5000ft, occasionally higher. Thermals around 2kt but surprisingly large and well formed with some short streets. Later, on the into wind return leg, the middle and high cloud layers slowly thickened to cut off all convection.

The offer of three alternative TPs clearly indicated the diffidence of the director about the conditions we might find in East Anglia. Ramsey was chosen by 31 pilots (five chose Norman Cross, two Earith) partly because it was the furthest of the three alternatives and therefore the best for scoring pure distance – which is all anyone hoped

Note by Mike Bird

This chore of being expected to write the Nationals Report while actually competing in it is too much. I have thought of a wheeze, which is that from now on the winners of all Nationals should be required to write up the Comps report, and in addition to give a one hour how I dunit speech to an international audience of 1000 somewhere in Eastern Europe in the middle of the following winter. One Champion has already told me that such a prospect would make him open his brakes short of the finish line, rather than undergo the ordeal. Well, it might just give me a chance to get into the World Squad before I start collecting my state pension.

This time I am indebted to Edward Downham, who not only navigated and observed brilliantly in the back of number 13, but actually remembered sufficient of what happened to help put together this account of a damp but exciting contest.

for, partly because it was the TP in the middle and offered more options in case of problems, partly because it seemed tolerably soarable there, and lastly because we were clinging together like sheep, the number of gliders exceeding original ideas by a factor of about ten to one.

We knew we were all doomed on the return leg, and followed ragged streets, sinking slowly, watching the sky dying ahead. Alister Kay was the most successful in cloud flying that day, despite problems with water in the ASI. Those of us striving to do the same could hear him on the cloud flying channel calling his height and position; he was obviously going to get furthest before the approaching stratus stopped play. His top height of 6500ft asl near Bedford brought him to within 20km of Abingdon. The day was devalued to 406pts, but it gave him a handy lead of 85pts over Mark Thompson and nearly 200pts over the rest of the field, many of whom landed at Sackville GC for tea and sympathy, not to mention telephones and aerotows.

Psychologically, this big lead was to take some of the fun out of the Comp for Alister. For him it now became a matter of taking minimal risks, while other pilots had an incentive to take chances in an attempt to dislodge him.

Day 1 Top Four

Alister Kay	ASH-25	217.4km
Mark Thompson	Nimbus 3T	188.5km
Chris Lyttleton	ASH-25	172.8km
John Gorringe	ASH-25	152.6km

Day 2, Monday, August 10; 319km, Blakehill Farm, Broadway, Manton, Wing.

A drier airmass with good cu and 4kt averages to 4000ft agl on the western side with tops 5-6000ft. A shower line running SSE-NNW formed in the centre of the country during the afternoon with a large amount of associated spreadout; cloudbase rose to over 5000ft in the east with strong thermals. Later the wind backed and strengthened from the original light westerly and the shower line widened and took on some trough-like features, with a shortlived clearance to weak, low convection just before the end of the day.

Spreadout was visible to the north even at take-off, but we all ran to the first and second TPs in fine racing weather. At Southam the main gaggle took a good climb under towering cumulus, but total spreadout necessitated a 65km glide at tiptoe speed to the nearest sunshine at Manton (TP3). At this stage the gaggles dispersed, several of those taking the westerly route towards Wing encountering cloud, rain and outlandings. Eighteen gliders went down on this fourth leg. A further 17 contestants were sunk along the short last leg, only 47km, between Wing and Abingdon.

The Bird-Downham team were so overjoyed to get back at all this day that they immediately wrote down their impressions for S&G (see box). John Gorringe has very decently agreed to this ego-trip, – so long as we mention in passing that he did actually win the day. Indeed he did, by a vast margin of 13.2km/h or 20%. He took his final glide at Princes Risborough and, though he had ample height in theory, flew home very cautiously – seeing Chris Lyttleton flash by to end up a few fields short – and just rolled over the line.

Edward wrote this of Day 2: "A day which proved the essential uselessness of MacCready theory in the UK – because of the unpredictability of the conditions you ended up doing 80kt to a 1kt thermal and then 50kt to arrive in a six knotter! – the rest of the flight you do at max glide, a speed supposedly never used!"

Day 2 Top Four

John Gorringe	ASH-25	78.8km/h
Mike Bird	ASH-25	65.6km/h
Chris Lyttleton	ASH-25	315.6km
Alister Kay	ASH-25	301.8km

No 13 gets lucky: miracle on Day 2

The thermal only 45km from Abingdon that looked as if it would take us home did nothing of the kind. Ralph Jones was 500ft higher and, we thought, probably would make it. Anyhow, he disappeared into the murk in confident style. However the headwind was still strong, and to make life just perfect rain steadily thickened. (What is the best speed for max glide into a 15-20kt wind with a million water droplets for company?) We

emerged from several drenchings into a dead airmass at 2500ft, but could see sunlight weakly colouring the ground ten miles ahead, and tiny fragments of greyish cumulus only 1500ft above ground. Perhaps we should turn back yet again and go and sit on Chinnor ridge and wait for the new weather, if that was what it was, to come towards us? That idea was jettisoned: it is no joke sitting low on a hill in the rain hoping that a clearance will get to you before you find yourself brushing the treetops and trying to pick a field through the clear vision panel. Besides, Edward said he thought the wind was beginning to blow more along than on to the slope. So we pressed on across the bleached crosses of many grounded gliders, finally to arrive 600ft above Ralph's distinctive Nimbus 4 in a flock of seagulls who were trying, not very enthusiastically, to soar. Abingdon announced that they were being rained on. Hell. They added that they had one finisher so far (John Gorringe).

After a seeming eternity of exploration of these miserable rags, here gaining 200ft, there losing 200ft, always being drifted back fiercely, we pushed forwards at 400ft agl under a dirty mass of vapour. This was our last gasp before giving up and landing with Ralph. (Damn, Ralph is signalling vigorously with his hat not to land in his field. He said later that it was an extremely rough cut oilseed rape field, and, furthermore, the farmer was busily ploughing it up.)

At this moment we ran into an unbelievably steady 3kt of lift to the magnificent height of 1600ft, then entered cloud. What was cloudbase doing nearly 3000ft lower than before? "Obviously a different airmass" I always mutter sagely when I have no idea what is going on. We climbed another 400ft in cloud and when it petered out pushed into wind again. And into more rain. Nevertheless, said the GPS and Peschges in unison, we were momentarily back on glide path and 6nm from home. The glide path included 400ft for a final circuit. Just as well, since the rain was devouring that meagre allowance rapidly. Edward tried to cheer me up by pointing out that all his calculations were to the finish line: the airfield boundary was a few hundred yards closer, so we had a bit in hand.

We gradually increased speed from 60 to 65 then to 70kt – I dreaded hitting heavy sink suddenly and having no energy to cut through it. The beautiful green grass of Abingdon slid towards us, and the airstrip changed slowly from a flattened dark trapezoidal sliver to a magnificent (was it jewel-encrusted or just wet?) asphalt runway just inviting us to forget to lower the wheel. We did not forget, but put it down as late as possible, touched down 200 yards from the crossing and, as we rumbled over the intersection, heard the blessed words "Good finish, number 13!"

Day 3, Friday, August 14; 458km, Malmesbury, Shipston, Leominster, St Neots.

Dry air with WNW flow and convection depth generally less to the west; some flat cu spread initially but soon drying out to 1-2/8. Thermals

2kt to 3000ft agl, becoming 2-4kt west of the Cotswolds, broken and difficult in places with only wispy markers. East of the M40 cloudbase rising to 4500ft and solid 3-5kt with good cu.

The forecast weather for this day indicated a task length of 600km-plus so it was lucky that the task setter didn't quite believe it!

Steve Jones (Nimbus 3DT, with John Arnold P2) did the fastest speed, not only of the day but of the whole contest, at 96km/h. Like most winners, he found the task simpler than everyone else, and avoided falling into holes. He started 20min behind Mike Bird and the mob and caught up 15min by the first TP. "Everybody seemed to be stopping for two knotters. We only took three knotters. Three miles before Leominster we took 6kt, despite it being an into wind TP; coming out of Leominster found we had gained 1000ft on the David Innes/Terry Joint Nimbus 3DT and a gaggle of others." This was a day when uncompromising flying got its reward.

What many pilots took to be masterly delaying tactics by Alister Kay ("What does he know that we don't?") turned out, at confession time in the bar, to have been a straightforward fumble: he made what was intended to be a proper start, whereupon the sky went to worms, and like a cricketer who suddenly realises he is about to be run out, made a mad scramble back to base and landed for a relight. It took only 90sec to get relaunched, but he spent 5hrs of anguish working his way through the field, fearing all the while that the day would expire on him to give a slow time or even a landout. In the event he was a close 3rd behind Mike Bird, and his overall lead remained intact.

Day 3 Top Four

Steve Jones	Nimbus 3DT	95.7km/h
Mike Bird	ASH 25	88.8km/h
Alister Kay	ASH 25	88.3km/h
Mark Thompson	Nimbus 3T	87.2km/h

Day 4, Saturday, August 15; 265km, Pitsford, Aylesbury, Pewsey.

20kt SW wind with 2/8 cu and 2-4kt to around 3000ft agl plus streeting; later rising to 3500ft but broken at low level. In mid afternoon convection was virtually stopped by a thick band of high cloud sweeping rapidly across the task area but the dense cirrus was followed by a temporarily thinner layer which allowed enough heating for weak thermals to around 2000ft, before cutting off completely.

John Glossop (with Bob Bickers, better known as boss of the Lasham startline, as P2) enjoyed the first, downwind leg, arriving at cloudbase just before the turn, as the textbook recommends. Aylesbury and beyond, however, were to be under the influence of wave and everyone struggled, the greatest success going to those who, like John Glossop and Mike Thick, kept close to Abingdon on the way to Pewsey. Mike Bird wasted a good 20min through being drifted too far east in a wave trough. The fact that there was bright sunshine heating the ground only added to the bafflement and frustration at the straggly cumulus and poor climbs experienced by many of us.

After we had escaped from this peril into what felt like normal air, the now customary tea-time

OPEN CLASS NATIONALS

stratus sped in from the south west to blight so many hopes. John Glossop, however, arrived at Pewsey railway station from the north, advantageously positioned upwind of track, and turned at a comfortable 1800ft, happy to see Mark Thompson – at this stage a very serious contender for a top place – coming in as he made for home. The main gaggle struggled in from downwind of the turn under what looked like a dead sky, rounded the TP at various heights around 1000ft, and made for the downs to the north in varying degrees of desperation.

If you were one of those who made a point of regularly using ridges on cross-country flights from your home club, then you weren't too demoralised at the prospect of getting below the scenery, especially with several other pilots in the same predicament. The strong south-westerly wind was blowing rather too obliquely to the downs, which stretched roughly east-west, but it promised to sustain a determined hill soarer till a thermal came along. If you caught a bubble, even at 0.7kt, then you had a good chance of a free ride home: Abingdon lay due downwind, still basking in sunshine, waiting for you to balloon back. By contrast you could almost hear the teeth grinding of those who arrived too late at the downs, pushing into wind towards Pewsey, needing strong climbs but not finding them, and having to share the weak lift with relaxed, smug swine who had got their ticket home. It was remarkable that Mike Young in a Discus got round Pewsey at all, but his ticket home expired just 9km short of Abingdon.

Day 4 Top Four

John Glossop	Nimbus 3d	74.9km/h
Mike Foreman	ASW-22	71.1km/h
Alister Kay	ASH-25	69.3km/h
Ralph Jones	Nimbus 4	68.5km/h

Day 5, Sunday, August 16; 165km, Towcester, Shipston, Bicester.

An unstable 15kt westerly with 2-3kt to 3500-4000ft agl and the odd street with some spread-out; occasional 4-5kt climbs were available under a few of the larger cells, with some tops going to over 6000ft. High cloud slowly thickened from the south-west but did not influence convection much until after 1500.

Many of us were expecting a scrub, especially as the organisers did not want 46 gliders and trailers to be scattered around the countryside when the prizes were to be handed out – the usual last day dilemma for task setters. Eventually a short race was decided, and sceptical pilots found it much better than they had feared, and 38 finished what was the second fastest day of the Comp.

Alister Kay's caution was reflected in his day positions: 1st, 4th, 3rd, 3rd – then 8th on this last race. We knew in advance that the day would be devalued for being well under 200km; Alister could afford to come 20th and still win the contest, so he only had to get round at median speed. The better showing of the Nimbus two-seaters, led by Ted Lysakowski, reflects the sudden improvement in the weather – though it was short lived. The important thing was, yet again, not to start too late. John Glossop's delayed departure after a tactical relight gave him "a bril-



Above: Mike Bird and Edward Downham. Below: A sea of wings.



Below: Mike Young. Photos: Terry Joint.



liant run" for the first 100km but caused him to slide under the usual tea-time stratus and on to the ground at Kidlington, a disappointment after his previous day's win.

Unluckiest competitor

Mark Thompson (Nimbus 3) was heading for the top three overall with placings of 2nd, 6th, 4th and 5th on the first four days. Then a disastrous TP error on this last day, when he should have been 8th equal with Alister, wiped out hundreds of points, dropping him to 7th overall.

Day 5 Top Four

John Gorrings	ASH-25	87.1km/h
Ted Lysakowski	Nimbus 3DM	86.8km/h
Mick Boydon	Nimbus 3DT	86.3km/h
Steve Jones	Nimbus 3DT	85.6km/h

Final Results Top Four

Alister Kay	ASH-25	3856
John Gorrings	ASH-25	3756
Mike Bird	ASH-25	3636
Steve Jones	Nimbus 3DT	3459

ASH, ASH, ASH

The top three gliders were ASH-25s but flown in different configurations. Al Kay flew solo on Days 1 and 5, which he expected to be weak (as Day 1 indeed was, though Day 5 was better than it looked) and with John Cadman on Day 2 and

Chris Simpson on Days 3 and 4. John Gorrings flew solo throughout in an ASH-25 with four ballast tanks as against two in Al Kay's, and took advantage of the greater load of disposable ballast at the price of having to do all the work himself. Mike Bird flew with Edward Downham as navigator on all days, and never used waterballast (a) out of sheer idleness, (b) because the permissible amount of extra water when flying an ASH-25 two up is hardly worth the trouble and (c) with the intention of winning the handicap competition, of which more below.

Handicap results 1992 - for the last time?

One peculiarity of the handicap results is that although John Gorrings and Alister Kay both elected to carry water and carried the same rating of 128, Gorrings came 1st and Kay 3rd: this reflects the severe devaluation, through windcapping, of Kay's win on Day 1 to less than a 100pts.

Top Four Places, handicapped

		Rating	Pts
John Gorrings	ASH-25 wet	128	3405
Mike Bird	ASH-25 dry	126	3333
Alister Kay	ASH-25 wet	128	3331
Mike Thick	ASH-25 dry	126	3142

The highest placed pilots of gliders under 20 metres were John Giddins (DG-202-17, rated 112) with 9th place, Dave Hill (LS-6c, rated 115)

in 10th place, and Simon Hutchinson (Ventus A, rated 109) 12th. In short the handicaps were not sufficient to make up for the ability of big gliders to waft across vast areas of nothing and survive. You need consistently good weather to get a real advantage from handicaps, and 1992 failed to deliver on that score.

That hardy British institution, the wet day whinge-in (funny, they don't seem to have these in Texas) produced a nearly unanimous vote against measuring and rewarding handicapped results in future Opens. Mike Bird felt slightly persecuted, since he was at the time leading on handicap, and suspected a dastardly conspiracy to keep his hands off any pots that might be going. Handicapping, it was felt by the great majority, encouraged too many owners of small gliders to enter the Open Class. The problem was felt not to be a matter of snobbery so much as one of small gliders affecting the character of the Open (ie, unhandicapped) contest itself. The valuation of difficult days is severely affected by the number of gliders that fail to get past Y, amongst which small machines are likely to predominate, and of course speed points are determined by the number of finishers. So the winner of the Open Nationals could be determined by the mixed fortunes of a whole category of gliders that have no chance of winning.

Thus 1992 may have seen the end of handicapped results in the Open Class.

FINAL RESULTS

Open Class Nationals

Pos	Pilot	Glider	Day 1.9.8 229km, alternative TPs, Norman Cross, Ramsey, Earth			Day 2.10.8 319km Bischoff Farm, Broadway, Manton, Wing			Day 3.14.8 458km Malmesbury, Shipston, Leominster, St Neots			Day 4.15.8 265km Pittsford, Aylesbury, Powsey			Day 5.16.8 185km Towcester, Shipston, Bicester			Total Pts
			Dist	Pos	Pts	(Dist)	Pos	Pts	(Dist)	Pos	Pts	(Dist)	Pos	Pts	(Dist)	Pos	Pts	
1	Kay, A. E.	ASH-25	217.4	1	406	(301.8)	4	892	88.3	3	917	69.3	3	961	83.1	8	680	3856
2	Gorrings, J. P.	ASH-25	152.6	-4	218	78.6	1	1000	84.8	7	879	66.2	6	939	87.1	1	722	3756
3	Bird, M.	ASH-25	151.0	-8	211	85.8	2	989	88.8	2	923	59.9	12	895	77.2	16	618	3636
4	Jones, B. G.	Nimbus 3or	151.0	-8	211	(291.4)	-7	847	95.7	1	1000	(233.3)	20	895	85.6	5	708	3459
5	Thick, M.	ASH-25	152.6	17	*198	(291.4)	-13	*787	80.8	11	834	85.4	7	934	82.0	9	669	3430
6	Jones, R.	Nimbus 3r	42.2	43	18	(306.0)	10	*840	85.9	8	890	68.5	4	955	86.0	4	710	3413
7	Thompson, M. H.	Nimbus 3r	188.5	2	321	(299.6)	6	883	87.2	4	905	66.5	5	941	83.1	37	*355	3405
8	Innes, D. S.	Nimbus 3or	152.6	-4	218	(258.9)	22	722	81.2	10	838	60.1	11	896	81.8	10	666	3338
9	Foreman, M. C.	ASH-22	143.9	19	190	(251.7)	-23	699	78.9	14	813	71.1	2	974	81.2	11	680	3336
10	Lyttelton, C. C.	ASH-25	172.8	3	275	(315.6)	3	*902	76.6	-19	788	(210.5)	25	646	83.8	6	683	3294
11	Boydon, M. V.	Nimbus 3or	130.1	-30	150	(208.5)	35	565	80.5	12	831	62.7	10	915	86.3	3	714	3175
12	Elliott, B.	Nimbus 3or	152.6	-4	218	(277.1)	-16	785	81.3	9	839	(211.8)	-23	652	83.2	9	881	3173
13	Lysakowski, E. R.	Nimbus 3or	130.1	-30	150	(291.4)	-7	847	(442.3)	33	453	57.6	15	880	86.8	2	719	3049
14	Hill, D. J. M.	LS-6c	151.0	-8	211	(299.6)	11	*833	73.4	-24	752	(230.2)	26	*640	72.8	20	572	3008
15	Pullen, C. J.	ASH-25	127.2	34	141	(219.1)	36	*548	78.1	15	804	64.9	8	930	71.9	22	562	2985
16	Baily, J. D.	Nimbus 3	151.0	-8	211	(251.7)	-23	699	85.9	5	891	(194.7)	34	570	82.5	17	*802	2973
17	Glossop, J. D. J.	Nimbus 3or	141.3	20	189	(282.6)	21	734	77.8	16	801	74.9	1	1000	(148.3)	41	236	2960
18	Szule, B. J.	Nimbus 3r	149.0	14	205	(251.7)	-23	699	77.4	18	796	(212.0)	22	653	74.9	19	591	2944
19	Davis, C. M.	Nimbus 2	147.4	16	200	(277.1)	-16	785	(392.1)	39	407	58.6	13	886	80.5	-12	653	2931
20	Withall, C. L.	ASH-25	143.2	18	195	(213.6)	31	580	80.4	13	830	(207.1)	-29	629	79.2	14	639	2873
21	Caunt, D.	Nimbus 2	144.5	23	*178	(226.3)	29	620	84.8	8	877	(190.8)	35	551	74.0	23	*548	2774
22	Hutchinson, S. N.	Ventus A	148.1	15	203	(231.8)	27	637	75.6	22	776	(201.2)	32	601	69.7	25	540	2757
23	Torode, H. A.	Kestrel 20	113.4	39	109	(269.4)	18	755	73.1	26	748	(211.8)	-23	652	64.0	31	479	2743
24	Piggott, A. D.	Ventus C	131.9	26	154	(301.4)	5	891	74.7	32	*586	(236.0)	19	698	67.8	35	*410	2719
25	Hartley, K. J.	ASH-20L	134.1	27	161	(291.4)	-7	847	(429.7)	34	441	(207.1)	-29	629	78.5	15	632	2710
26	Williams, P. R.	Nimbus 3r	130.1	-30	150	(277.1)	20	*735	66.5	31	674	(200.1)	33	596	69.9	24	541	2696
27	Spencer, J. D.	DG-600	125.6	-35	136	(279.4)	15	795	71.6	27	731	(181.8)	40	508	(75.5)	18	*601	2689
28	Giddins, J. B.	DG-202/17	36.8	-44	11	(187.0)	45	*403	70.3	28	717	82.9	9	916	75.5	18	601	2648
29	Fox, R. L.	Ventus B	121.8	37	132	(168.9)	40	457	76.5	21	786	(254.6)	18	724	69.6	26	538	2637
30	Smith, A.	LS-6c	142.4	21	186	(194.9)	-38	*472	77.5	17	797	(258.2)	21	*679	63.2	32	471	2605
31	Young, M. J.	Discus B	139.0	24	176	(284.6)	12	817	73.4	-24	752	(255.8)	17	726	(54.8)	45	66	2537
32	Webb, M. J.	Janus Cc	148.7	22	*184	(175.1)	-38	472	71.6	29	*711	(222.6)	28	*630	67.4	31	515	2512
33	Burton, A. J.	LS-6c	64.9	42	47	(268.5)	19	748	76.7	-19	788	(205.5)	31	622	(150.1)	39	239	2442
34	Owen, B. H.	ASH-25	120.5	38	122	(226.3)	-32	*570	(394.3)	-37	409	57.1	16	*626	58.4	33	421	2346
35	Gardner, T. R.	Nimbus 3	151.5	7	212	(166.8)	41	452	(54.9)	44	35	58.0	14	882	80.5	-12	653	2234
36	Pozarskia, P.	ASH-22	151.0	-8	211	(273.2)	34	568	(431.7)	42	*343	(178.4)	41	492	72.1	21	564	2178
37	Sanderson, P. L.	Kestrel 19	130.1	-30	150	(231.5)	28	636	(394.3)	-37	409	(166.2)	-42	433	69.1	27	533	2161
38	Slater, T. W.	ASH-25	151.0	-8	211	(291.4)	-13	*797	(416.3)	35	429	(110.4)	45	191	68.0	28	521	2149
39	Cole, R. A.	Ventus CT	135.7	26	166	(188.2)	37	497	73.7	23	755	(186.1)	37	529	(87.7)	43	140	2087
40	Nunn, A. V. W.	Janet 1	0	46	0	(155.7)	44	426	69.2	30	705	(208.9)	27	838	(78.4)	44	119	1888
41	Walsh, A. P.	DG-400	125.5	-35	136	(228.3)	-32	*570	(388.7)	40	404	(184.2)	39	519	(125.2)	42	201	1830
42	Crooke, P. F. J.	Kestrel 19	138.5	25	174	(223.1)	30	610	(26.3)	45	6	(185.8)	38	527	64.8	34	*416	1733
43	Smith, R. J.	Ventus	128.5	29	152	(251.7)	-23	699	(408.8)	36	422	(91.4)	46	123	50.1	38	333	1729
44	Gardner, D.	Kestrel 19	101.7	40	94	(157.9)	-42	432	(406.3)	41	*370	(189.6)	36	545	(0)	46	0	1441
45	Tuohi, V. F. G.	Kestrel 19	85.4	41	73	(79.6)	46	244	(303.8)	43	317	(118.4)	44	220	53.1	36	365	1219
46	Lee, M. E.	Ventus CT	36.8	-44	11	(157.9)	-42	432	(0)	46	0	(166.2)	-42	433	(150.0)	41	238	1114

* = penalty BGA Competition Scoring Program by Specialists Systems Ltd

1992 was the worst year I can remember for poor weather during the competition season. Competitions are notorious for attracting bad weather. Finland had an unexpectedly poor spell when it ran the World Comps in 1976. The weather was so bad that the shops in Moscow ran out of umbrellas. Australia, that land of sunshine, held a World Comps and the dry river beds were soon flowing with water; lakes appeared where none had been seen for ages.

In England of course we are quite accustomed to at least one contest being washed out but to have so many reduced to four days or less was unusual. Some people spoke about the jet stream being in the wrong place this year; there is some truth in this. The jet stream is often a sign of disturbed weather and its movement is linked to the development and track of depressions.

What is the jet stream?

The jet stream is a narrow belt of very strong winds which is usually found at heights between 25 000 and 35 000ft. The wind speed often ex-

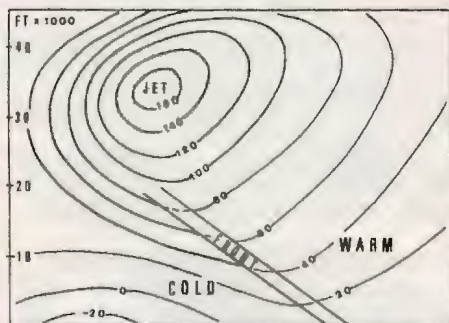


Fig 1. Cross-section through a jet stream lying above a frontal surface.

ceeds 100kt in the core of the jet. Fig 1 shows a cross section through a jet stream. The lines show isolaths of wind speed, ranging from 160kt plus in the core to 20kt or less at low levels. Jet streams are often associated with fronts and on this diagram a frontal zone is shown as a double line separating warm air on the right from cold air on the left.

Factors controlling upper winds

Most people are familiar with the isobars which show the wind speed and direction on surface charts. Charts of upper levels usually show contour lines instead of isobars. These contours define the level of specified pressure surfaces. Contours look very like isobars except that they are usually smoother and seldom have sharp kinks. As with isobars the wind aloft blows along the contour lines with lower heights on the left (in the northern hemisphere). The closer the contours the stronger is the wind.

At high levels contour heights depend chiefly on the air temperature. Air expands when warm and contracts when cold so contour heights are usually lower over the poles than in tropical regions. An aircraft flying at a constant pressure altitude from tropical to polar regions usually makes a slow descent. If it followed the 300mb pressure surface its pressure altitude would read 9164m (30 065ft). Over the tropics the true alti-

LOST CONTEST DAYS AND THE JET STREAM

Can the poor competition season be blamed on the jet stream being in the wrong place? Tom Bradbury says there is some truth in the theory

tude might be 9800m (32 151ft). In polar regions the true altitude is often below 8500m and sometimes as low as 8100 m (26 575ft). Thus an aircraft flying from the tropics to the pole at an indicated altitude of about 30 000ft might actually descend some 5000ft. A radio altimeter would show this change of true height. It would not be a regular descent; in some places the slope would be steeper than the average. The steepest slope occurs when the axis of a jet stream is crossed.

How jets form

Where converging air currents bring cold polar air towards warm tropical air a front often develops and the low polar contours are brought close to the high tropical contours. As the two air masses move closer together the contour lines are packed tighter and the wind becomes much stronger.

Fig 2 shows a 300mb contour map of the Atlantic on August 26, a day when a jet stream extended from Canada to Sweden and transatlantic aircraft reported winds of up to 150kt. The position of surface fronts is also marked with the usual symbols. The jet normally lies on the

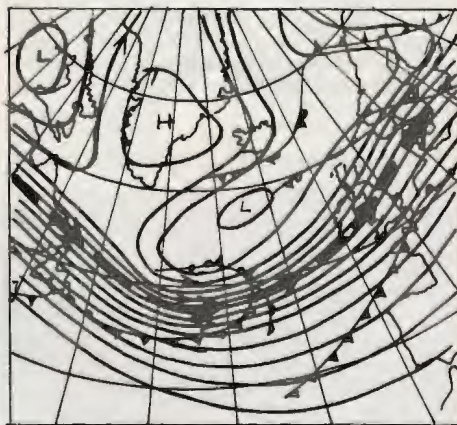


Fig 2. 300mb contour map with surface fronts added.

cold side of the main surface front but can cut across the tip of a warm sector. Forty eight hours later the radiosonde balloon released from Aughton, (near Liverpool) just before midnight on August 28 also gave a maximum speed of 150kt. Fig 3 shows a plot of wind speed against height.

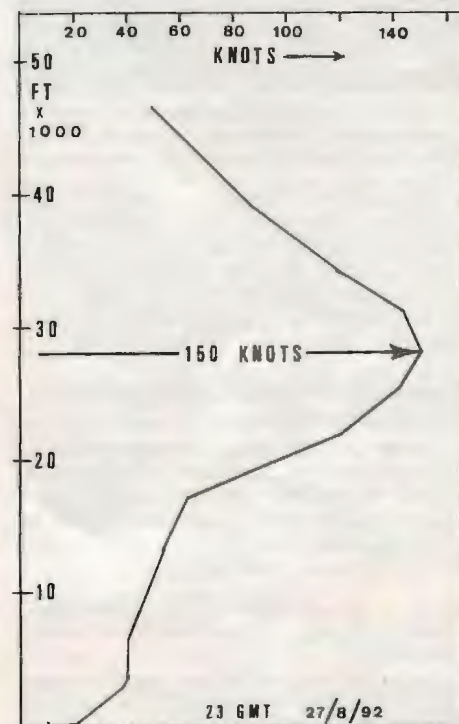


Fig 3. Vertical wind profile of a jet over Liverpool.

How winds aloft affect the weather below

If the high level contours were always parallel and straight the wind velocity would be in balance with the contour field. Then the upper flow would have little effect on the pattern of sea level isobars. However, most contour charts have curves with troughs and ridges. Air going round a trough is obliged to slow down. The speed drops as the air approaches the curve and increases after it has rounded it.

Fig 4 illustrates the process. The upper part shows the contour lines viewed from above, the lower part gives a side view. Where the air slows down there is apt to be a region of convergence, just as there is when a line of fast moving traffic slows down approaching a roundabout. Convergence aloft tends to make the pressure rise at sea level; low level air leaks out of this region of rising pressure and the high level air subsides to take its place.



Photo A. Dark shower clouds about to ruin a contest day at Husbands Bosworth. Photo: Mary Meagher. The rest are by Tom.

When the upper flow has rounded the trough and started to accelerate up the straight there is likely to be high level divergence. (In our motoring example cars leaving the roundabout speed up and the space between them increases.) This upper divergence often pulls in slower moving air from below causing a fall of pressure at sea level.

Feedback between flow aloft and development below

The shape of the jet stream stimulates lows to form in one region and also highs to form in another. Lows can form ahead of the upper trough, highs develop just downwind of the upper ridge. The process of forming a high is a reversal of what happened at the trough.

Photo B. Altocumulus which formed rapidly about 1600hrs on July 28, just too late to ruin a 500km day.



One source of feedback occurs because the depression caused by the jet stream produces northerly winds west of the centre. These draw in more cold air to maintain and even intensify the jet and this in turn brews up new lows. If a really big upper trough settles down west of the British Isles we tend to get a succession of lows which become more active as they approach us. This is what gave us such a poor spell of weather last summer.

Another kind of feedback happens when the cold air in the upper trough produces many thunder showers over a land area. The shower clouds carry up the warmth and the stronger upper winds take it away. The land then fails to warm up as much as usual in spring and summer. This happens over Europe when a large upper trough settles down there in late spring.

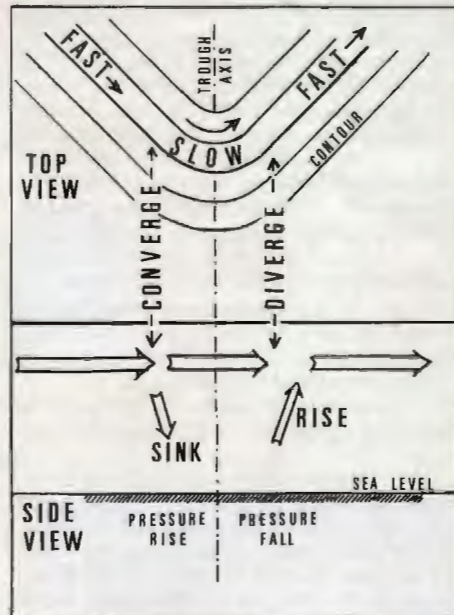


Fig 4. Convergence and divergence as a jet stream rounds an upper trough. The upper part is a top view of the contour pattern; the lower shows a side view with up and down motions.

Photo D. Looking SW along the line of a jet stream.



Photo C. Straight edged jet stream cirrus. The jet was blowing from right to left (WSW to ENE).

The seasonal warming is so much delayed that the upper trough persists many weeks. While the trough persists those parts of Europe lying under the south-westerly upper flow often experience massive thunderstorms.

So Spain, France, Switzerland and Italy had periods of torrential rain earlier this summer. The downpours spread to Germany and Austria later.

Upper ridges bring good weather

Under an upper ridge the feedback has a beneficial effect. Subsidence below the ridge evaporates most of the cloud and makes the air more stable. There is much sunshine so temperatures rise overland; the contour heights rise too and the upper ridge is strengthened. The stronger upper ridge is then able to deflect lows advancing from the west and turn them northwards, perpetuating bad weather to the west and good weather to the east.

What else controls the upper trough?

There are two processes at work: first is the feedback already mentioned, the second is a



global effect. The succession of troughs and ridges in the upper flow form a series of very long waves (2000 miles or more from crest to crest) which go right round the northern hemisphere. Hemispheric contour charts usually show these waves moving slowly from west to east, nearly always much slower than the air passing through the pattern. With certain wave lengths and wind speeds the really big waves become stationary. (But small and much shorter waves can be seen to move round the stationary long waves without affecting them.)

Stationary long waves produce spells of similar weather

Once the very long waves stop moving we tend to get a spell of the same kind of weather. In a good summer we find ourselves under the upper ridge most of the time. A series of highs or ridges develop near us and depressions are turned away as they approach. This year the upper trough settled to the west of us for most of the competition season. Instead of a series of highs we got a series of lows which tended to become more active as they approached.

Photo E. Looking NE along the same jet. Billows are caused by very strong wind shear under the jet.

Seasonal variations

The temperature contrast between tropical and polar regions is greatest during the winter months when the polar regions are in perpetual darkness. The great temperature contrast produces strong jet streams when the two air masses are brought towards each other. In the summer months when the poles are in perpetual daylight the air aloft is warmed up, the temperature contrast between tropical and polar regions is reduced and jet streams are (in most years) much weaker. The UK gets jets right through the year; in one ten year period southern England had jet maxima of nearly 180kt in winter but only about 120kt in summer. This year was unusually disturbed and the jet reached 150kt on at least one day in August. This was partly responsible for the great number of rain days.

Very disturbed conditions like this often alter the weather right round the globe. Some parts, those under almost permanent upper ridges, have prolonged droughts. Others experience exceptional downpours with flooding and loss of life.

Why forecasters need upper air charts

In many recent summers the flow aloft has been so weak that the competition forecaster has not needed to bother about it. 1992 was different; soaring forecasts depended on finding sunny gaps in the stream of upper cloud which kept pouring in from the Atlantic. This meant that the neglected upper air charts became essential data. Here are a few of the items which could not be predicted from the surface charts alone.

Itinerant cloud bands

Large upper troughs stimulate depressions to form but very small troughs exist too. Some of these lesser troughs merely produce a band of medium or high level cloud which seem to have no connection with low level features. These upper cloud bands move along ahead of the trough axis and reduce the sunshine so much that convection is delayed or even prevented. Forecasters working with inadequate upper air charts find it difficult to time the movements of these cloud bands. The satellite pictures show them up but one cannot always get an accurate

speed of movement from a satellite sequence.

The cloud area not only moves but also expands and shrinks with time so one cannot simply extrapolate the motion. Hot summer sun often makes the upper cloud thin out and break up during the afternoon; unpredicted up and down movements of air alter the size and thickness of the cloud sheet. Photo B shows a layer of altocumulus, which formed unexpectedly about 1600 on July 28, Nympsfield's 500km day.

The task setter may protest "You said the cloud will clear from the west but the wind here is easterly!" If you only have a surface chart the upper cloud movements can be baffling because the winds aloft may take the medium cloud in the opposite direction to the low clouds.

The week of the Nympsfield/Lasham competitions had at least three occasions when such upper cloud bands almost ruined the day.

Rapid spread of cirrus

When a strengthening jet stream blows over a developing surface low it draws out ever longer streamers of cirrus. Text books suggest that warm frontal cirrus may be 500 miles in advance of the surface front; when the jet stream is very strong it seems to pull out much bigger areas of cirrus. This cirrus can be so far ahead of the surface low that it extends right over the downstream ridge where, in the absence of high cloud, one hopes to find the ideal soaring conditions.

The first warning sign may be a long curving streamer of cirrus arcing out from the frontal cloud shield. Soon there is a widening band of cloud reaching hundreds of miles ahead. Timing such extensions is difficult, even when one has a satellite sequence. Eventually the stream of cirrus gets so far ahead of its originating low that it separates into two lots leaving a gap for the sun to come through again. In bad years the gap typically arrives too late to be of any use.

Fooled by the satellite

Satellite pictures need to be examined in conjunction with the official analysis. These analyses are available on "Dial-up-Fax" and updated four times a day. There are times when the sequence of satellite pictures seems to be at variance with the computer predicted forecast charts which follow the analyses. Watching the cloud spread using half-hourly pictures from METEOSAT one can get the impression that the low has speeded up and the position shown on the forecast chart will be wrong. Do not be too quick to discard Bracknell's forecast charts. The cloud spread may be entirely due to the jet stream.

Fig 5 illustrates what can happen. The top sketch (A) shows a typical occluding depression with the main cloud mass hatched. The double line marks the jet stream; the fronts are shown by the usual symbols. Some 12hrs later (B) shows how the jet has pulled out a huge extension of upper cloud reaching far ahead of the frontal system. At this stage the forecaster becomes pessimistic and wonders if Bracknell's computer is moving the frontal system much too slowly. Then at (C) the extended cloud sheet develops a break, the sun comes through and cumulus start to pop. The computer's prediction was right after all.



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Undulating Inversions

After an upper trough has passed, or as an upper ridge approaches, the subsiding air often produces an inversion. There is almost always an inversion, or a stable layer on good soaring days. Provided the inversion does not descend too low it merely provides a lid to stop cumulus growing big enough to produce showers. Prolonged subsidence can lower the inversion so much that no cumulus can form and pilots are left with a blue day.

This year the Met Office increased the number of temperature soundings by sending up radiosonde balloons at 0600 and 1800hrs as well as the usual midnight and midday ascents. This made it easier to follow the way the inversion moved up or down. Observing the trend was one thing, predicting it was another matter. On one of the very rare 500km days the inversion was even lower at 0600hrs than it had been at midnight. The trend suggested it would turn into a blue day with weak thermals under the lowering inversion . . . Not so! . . . The inversion had in fact reached its nadir and was just about to rise; in the event 500km was on (just).

On this day the pessimistic Met report arrived so late that the task setter, Tim Macfadyen, decided to let the long route stand. It was triumph for boldness.

Visual Indications of the jet stream

The jet stream is often accompanied by very long bands of cirrus. Sometimes the edge of the cirrus forms an arc several hundred miles long. The jet core often lies near the northern edge of this arc. Occasionally the first sign of the jet is a thin finger of high cloud travelling very fast across the sky.

The edge of jet stream cirrus may form a straight line lying almost parallel to a slow moving front. Photo C shows the edge of jet stream

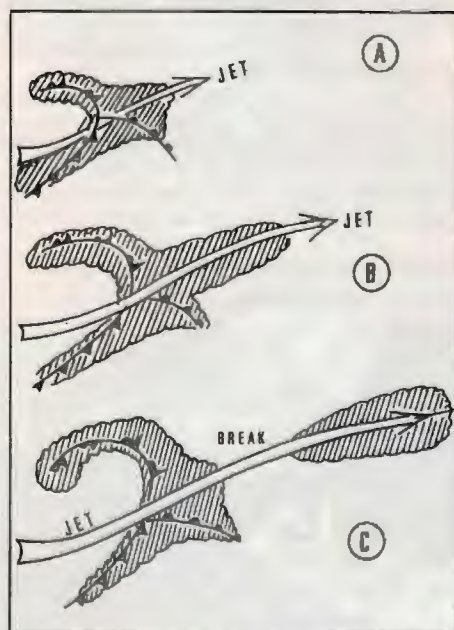


Fig 5. Three stages in the extension of cirrus from a frontal system ending in a break developing.

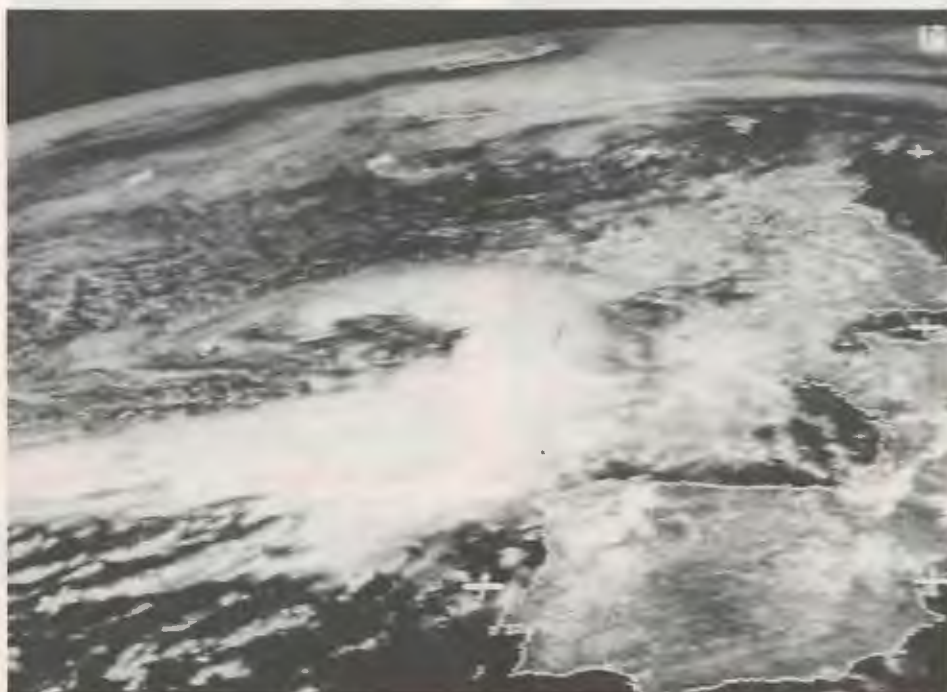


Photo F. Satellite picture at 1330 GMT on Saturday, August 29, showing hook shaped cloud SW of Ireland.

cirrus. The front was at least two hundred miles further away and the wind was blowing from right to left (WSW to ENE). When winds aloft are well over 100kt this kind of cloud can change its appearance in less than 5min.

Photos D and E show a different jet stream looking SW and NE along the edge of the cirrus. There is often a very strong vertical wind shear near a jet and this produces billows aligned across the wind shear. The billows move with the wind and have a very short life, forming and dissolving in a few minutes.

Jet stream cirrus like this often shows both the alignment of the front, which usually lies at least two hundred miles away, and also the developments on the front. If the cirrus edge bulges up towards you and covers more of the sky as time goes on, then it is likely that the front has developed a wave which is approaching. If the cirrus edge recedes it probably means the wave tip has passed and the front is now moving away.

The weather fires a parting shot

After a jet stream has been rampaging across the Atlantic for some days it is liable to brew up a really fierce depression. This is just what happened at the end of the 1992 competition season.

On Friday, August 28, when the UK was still under the influence of the last low, the next depression was some 1500 miles away south of Greenland. All that day it moved eastwards across the Atlantic and by midnight was only 900 miles out. By this time the computers had decided it was going to become a real humdinger.

By Saturday afternoon we could see from the satellite pictures that the centre was beginning to wind up. The cloud pattern showed the omi-

nous hooked shape characteristic of a strongly deepening low. (Photo F.)

Sunday, the 30th, would have been the last contest day but the weather put paid to any hopes of flying. The depression had deepened to 975mb or below and when the centre had passed the westerly winds exceeded 60kt at times and thunderstorms swept across the country. It was the worst August depression for a very long time and a fitting end to a bad contest season.

OVERSEAS NEWS

AUSTRALIAN SOARING CENTRE

A new soaring centre has been opened at Narromine, Australia, where thousands of pilots over the last 20 years have flown including Andy Pybus (an ex Brit) who achieved the first 1000km in a Standard Class glider.

Narromine, which is west of Sydney, will be hosting the Nationals from January 2-16 with no limit on foreign entries. The centre offers for hire an impressive fleet of gliders.

For more information contact Shawn Leigh, Australian Soaring Centre, PO Box 206, Narromine 2821, Australia or tel/fax 61 68 892564 or 61 68 892642.

NATIONAL GLIDING CONVENTION

The Soaring Society of America's annual national convention is at the Washington State Trade and Convention Center in Seattle from February 25-28. There will be more than 30 lectures by famous pilots and manufacturers as well as the latest in instruments, equipment and technology on show.

For more information contact the exhibition chairman, Vitek Siroky, PO Box 33554, Seattle, WA.



Chris Rollings and Dave Teasdel setting off on a 300km goal attempt from Chipping in the BGA Janus.



The club presented Mike Cuming with this elegant T-shirt after his successful 100km triangle following his double-Diamond suggestion in S&G.



An aerial view of the site.

When John Mitchell challenged me in the letter pages of *S&G* (October 1990 issue, p233) to try a 100km triangle from Cockhill, home of the Blackpool and Fylde GC, I resolved at least to visit the place. Oddly enough I was immediately offered a six-month work contract in the area and so – to paraphrase some doggerel I subsequently wrote for one of BFGC's many parties –

*"I vowed at once to come and show
This cheeky . . . where to go . . ."*

A glance at the club's statistics over the last few years showed a gradual, but not alarming, decline in membership and flying badges but on the other hand there had been a gradual improvement in the number of launches and hours flown.

The club's location on the north-west coast near Manchester plainly indicated plenty of sea air intrusion and, of course, lots of rain! However, being 15 miles inland staved off the worst of these problems although a lower than average cloudbase (in the moist air) turned out to be a feature of the Chipping thermals.

The good points, soaring wise, were the very obvious local hills which worked in most wind directions and of course the regular appearance

HOLIDAY SNAPS FROM BLACKPOOL

MIKE CUMING

of wave. So the site would offer good soaring all year round . . .

Although I still can't believe that any club can seriously call itself the "BF" gliding club, BFGC turned out to have managed its affairs very shrewdly over the years and now owns the site and a good fleet of gliders.


The clubhouse is quite respectable and there are good pubs nearby, too. So the only remaining physical difficulties are the boggy ground (being drained, bit by bit) and the cow-pats (since the airfield is grazed).

So what happened? Well, a sort of friendly rivalry developed between me and the club members – every time I went cross-country, so did they: and the fruits of this rivalry can be seen in the *S&G* Gliding Certificates list. They were very easy going but they still kept me on my toes. In return I egged them on a bit – and we had a lot of fun.

The scenery around Lancashire is spectacular – especially viewed from 10 000ft or more over the Lake District – and even the thermals were abundant so that soaring was possible on virtually every day. Now that this secret is out and they can stop pretending it's never soarable, I'm quite sure we'll hear a lot more from Cockhill.

I learned a lot while I was up north, especially about the limited extent to which "the BGA" has successfully communicated with its clubs and members. This is a problem the BGA Executive is already conscious of but now I realise just how much there is to do . . .

The following snapshots hopefully illustrate this otherwise dull piece.

NB. Since Mike wrote this piece BFGC have certainly featured regularly in the Gliding Certificates. 

Below: Roger Alexander after his field landing check flight in the Puchacz. The site is visible at the foot of Parlick hill, three fields away.



A typical BFGC scene. Photos: Mike Cuming.



There's been much comment in S&G over the years about the need for gliding to attract young recruits and occasional concern expressed about the increasing greybeardedness of many clubs' membership.

A scheme which has been functioning for four years at the Ulster GC and which provides subsidised early lessons for teenagers from 14 to 16-plus may therefore be worth examination and be applicable elsewhere.

It was the brainchild of treasurer Ron Lapsley, who was particularly well placed to bring it into being by virtue of being headmaster of the co-ed Limavady High School in the town nearest to our Bellarena site.

The UGC school clubs' liaison scheme began with a very modest grant from the Sports Council for Northern Ireland which was applied to flying lessons for a number of pupils from Ron's own school and the other two secondary level seats of learning in the town.

It has since been expanded by attracting an even more modest grant from the Limavady Sports Council; a donation from the Limavady War Memorial Trust, a purely voluntary organisation funded by the community, and sponsorship from Royal Mail which, impressed by the scheme, said it would match the SCNI input. In addition to its cash award, the Post Office has provided red-and white soaring hats, T shirts and sweatshirts bearing the Royal Mail logo on the front and the club's on the back. The upshot this year is that, in a dedicated five days in July, the club's unpaid instructors and tug pilots turned out to give 28 youngsters three lessons each in the two Capstans, at a time when they would otherwise have been hangared and idle.

How many of these youngsters may have been hooked and will persist in flying remains to be seen.

A key feature of the scheme is that the children themselves have to contribute £15, a sum sufficiently large in teenage pocket-money terms to demand some commitment beyond simply the desire for a jolly day out.

The SCNI grant of £350, the Royal Mail's equal sum, the £100 from the Limavady Sports Council and the War Memorial Trust's generous donation subsidise the flights so the club incurs no significant loss.

The scheme has extended beyond Limavady and now embraces two schools in the nearest

CATCHING THEM YOUNG

Following David Broadhurst's article about gliding on the curriculum in the August issue, p197, Bob Rodwell details the Ulster GC's possibly unique youth recruitment scheme

large towns, Coleraine and Derry. Since you're bound to ask, participating schools come from both of Northern Ireland's two traditions. But as knowledge of it has spread Ron has had telephone pleas from keen teenagers as far away as Bangor, Co Down, about 80 miles from the field.

"I didn't have the heart to turn anyone so enthusiastic down, though in general it makes sense to aim the scheme at schoolchildren who live within cycling distance of the site as they're below driving age and don't command any greater self mobility than a bike."

They must read about the theory and answer questions before getting a trial lesson

Ron also demands some other commitment. Although he takes children on a first come, first served basis after his promotional talks at the five schools in the scheme he insists each applicant reads enough about the theory of flight to be able to name the various airframe parts and explain their functions before they get their trial lessons. Some build model gliders, too.

"It is important to stress the educational aspect rather than simply suggesting it as a good day out if you are to attract grants and sponsorship," he says.


The lesson for other clubs who may try to set up a similar scheme is to trawl through both offi-

cial and private bodies – probably local – for grants and then put the bite on a likely commercial sponsor too, though it has to be said that our Royal Mail award came at its behest and was not initiated by us.

Surprisingly, and consistently, Ron Lapsley has had more applications from girls than boys, news which may come as some encouragement to Diana King and others working to get more women into gliding and give them a better deal once there.

Two of this year's recipients nominated gliding in the context of their working for the Duke of Edinburgh's gold award. It is little known that gliding can be so nominated and that the BGA has a leaflet on it. Of the Duke's Award aspirants particular commitment is demanded so they have to complete a number of menial tasks about the club.

There is another leg in the UGC's drive to catch 'em young. This year, for the first time and at the troop's request, we have granted group membership to an Air Scouts troop in Belfast, 72 miles from the site. It has paid just one full subscription but all its members have the right to fly at the normal members' rates. The result is that once or twice a month the troop fills a minibus for a dedicated flying session in which each scout flies at least once and perhaps more. In June, as a special event, it commandeered the full resources of the UGC for a fathers and sons day on which both generations flew. So perhaps we'll be getting a few more greybeards after all.

Anyone like to book a mothers and daughters day, so we can get the gender balance right and keep Diana happy too? 



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NATIONAL LADDER

The National Ladder has told us in numeric terms what we knew already – 1992 has been a very poor season. Even after the effects of less windcapping, the scores have been lower than they have been for a long time.

Poor though it has been, Cambridge University GC seemed the least bothered. Phil Jeffery has a deserved win in the Weekend ladder with 7683pts (for the L. du Garde Peach trophy) and John Glossop is second despite not having photos for one flight. John Bridge has won the Open ladder and the Enigma trophy with 7737pts, and Steve Mynott could have made it a clean sweep for Cambridge had he taken pictures. As it is Mike Bird (London GC) will be second if he has photos and if not, Tim Macfadyen (Bristol & Gloucestershire GC) will be. **Ed Johnston**, *National Ladder steward*

BGA AGM & DINNER-DANCE

The 1993 extravaganza will be at the Forte Post House at Crick, Northants (just off the M1) on Saturday, February 27. The programme will follow roughly similar lines to the successful event earlier this year with a morning session of interest to all pilots followed by the AGM in the afternoon and the dinner-dance together with the presentation of annual awards in the evening.

Special accommodation rates will be available overnight at the hotel. Booking forms are now available from the BGA office and should be completed as soon as possible.

Barry Rolfe, *BGA administrator*

LAST CALL FOR COMMENTS

The BGA TP List for 1993

Please send any last minute comments for consideration for the 1993 list of BGA Turning Points and Club Sites as soon as possible to the BGA TP co-ordinator at Bentworth Hall (West Wing), Bentworth, Alton, Hants GU34 5LA; Tel 0420 64 195, Fax 0420 63 140.

Copies of the list will, as usual, be distributed to clubs and other interested parties at the BGA AGM at Crick on February 27. Pilots, organisers, QOs and computer programmers using the TP list are advised to destroy old copies and use the 1993 version to avoid embarrassment and possible difficulties with tasks and claims. The list is now published as one document which includes the index, which previously was published separately. Hard copy of the latest list is available for the cost of postage (60p at the last check), or on floppy discs (3.5 or 5.25in) for an extra £1 if you wish a disc to be supplied, otherwise send your own unformatted disc with an address slip and return postage. Each disc will be checked out on Norton 6.0 and Dr Solomon Virus Checker before dispatch.

The 1993 list will contain a number of changes and additions as a result of experience in 1992; aside from "filling in" points in areas of the UK where TPs were sparse, road layouts change and new bypasses, motorways and dual carriageways are built (eg Kettering), and so it is reasonable to change some TP loca-

tions to features which are easier for pilots to find from the air. With POST tasks now in the BGA rules and assuming that TPs are taken from the current BGA list, you may need your own copy sooner rather than later!

If you have a correction, suggestion, or addition, please respond quickly if you wish it to be considered for 1993.

Ian Strachan; *BGA TP co-ordinator*

THE BGA 1000 CLUB LOTTERY

Dr R. P. Saundby won the first prize (£87.75) in the September draw with the runners up – Dr A. Cluskey, S. Robinson, C. E. Broom, K. Thompson and Dr G. H. N. Chamberlain – each winning £17.55.

The October results were: First prize – A. J. Curtis (£98) with the runners up – A. G. Cleaver, R. G. Ludgate, C. Simpson, G. Mathews and J. Patchett – each winning (£19.60).

TREAT THE FARMERS COURTEOUSLY

During the latter part of this summer I have been increasingly aware of the number of retrieve stories involving a difficult or irate farmer. There always have been a few but I have heard of many more than usual.

A justifiably annoyed farmer telephoned me about two pilots who landed in his field, lifted the gate off its hinges to get out, left it off and didn't bother to contact him. And for the first time I heard a farmer compare glider pilots unfavourably to balloonists.

If our freedom to fly cross-country is not to be restricted by no-go areas on the ground as well as in the air, we must remain diligent in ensuring the landowner is contacted and that we leave his land as we found it.

The BGA code of practice is clear (a copy will be forwarded to your club shortly): in all circumstances always contact the landowner or his agent and always be courteous and considerate. **Chris Rollings**, *senior national coach*

REGISTRATION OF GLIDERS

As from January 1 the importer of a glider will have to show the BGA a certificate of de-registration or non registration issued by the country of export. This is to comply with international registration requirements and we understand that certificates can be easily obtained from the licensing authorities in the country of origin by the seller of the glider. These certificates should be furnished to the BGA in future at the same time as the request for the glider to be issued with a BGA No. and brought on to our register.

REGISTRATION OF IMPORTED AEROPLANES

Dick Stratton, BGA chief technical officer, says that when you buy a foreign registered aeroplane (glider, motor glider, tug etc) you must make sure that the vendor cancels the registration in his own country.

In a letter from the CAA it is pointed out that the Germans think up to 100 gliders in the UK may still be on the German register.

DICK STRATTON HONOURED

Dick Stratton, the BGA's chief technical officer, has been awarded the Roderick Turner trophy by the Private Flying Association. It is in recognition of the successful Mogas trials, which cleared more than 200 different types of aircraft to use this fuel, and for initiating the removal of the fixed time between overhauls for all engines certificated in the private category.

The two Airworthiness Notices put the UK in a unique situation worldwide.

STOLEN EQUIPMENT

A complete DG-202 instrument panel was stolen from the Bristol & Gloucestershire GC containing a LX1000 flight director with 57mm vario readout; airspeed indicator; Winter 57mm vario 10kt, altimeter, T&S indicator and compass. Also stolen were a TM6 aircraft transceiver complete with microphone; a 14 volt battery charger manufactured by Severn Valley Sailplanes and a Pye 3 channel transceiver (TM62).

The LX1000 vario may be identified by its internal polar configuration for the DG-202 and the battery charger is an unusual type.

If you have any information, please contact G.Dale, CFI/manager of Bristol & Gloucestershire GC, tel 0453 860342.

OSTIV PAPERS

Anyone wanting to submit papers for the 23rd OSTIV Congress at Borlänge, Sweden from June 17-24, 1993 should send an outline by December 31 to one of the following:-

Meteorological and joint session papers – Dr M. E. Reinhardt, Winterweg 1, W 8031 Wessling, Germany.

Technical session papers – Winfried M. Feifel, 7107 South Ryan Street, Seattle, WA 98178, USA.

Training and safety papers – William G. Scull, 6 Will Hall Close, Alton, Hants GU34 1QP, England.

PROTECT YOUR FLYING FUTURE

The General Aviation Awareness Campaign has been launched to influence national and local government to stress the importance of general aviation to the community and to make provision for its requirements – mainly aerodromes and airstrips – in planning and policy guidance.

David Ogilvy, the campaign director, is asking for contributions and commitment. Local authorities and planning inspectors are influenced by the strength of written support for projects and feel the weight of opinion when considerable numbers attend planning meetings or public inquiries.

So far 62 existing or proposed aerodromes and airstrips have been targets for attack. If anyone has news of a further threat to an

aerodrome or a problem over planning consent they are asked to either contact David Ogilvy or Jack Wells, the campaign co-ordinator.

Payments should be made to the General Aviation Awareness Campaign, c/o AOPA, 50A Cambridge St, London SW1V 4QQ.

1993 COMPETITION DIARY

May 16-27: Overseas Handicapped Nationals, Leszno, Poland.

May 29-June 6: Eastern Regionals, Norfolk GC.

June 12-26: World Championships, Borlange, Sweden.

June 12-20: Booker Regionals, Booker GC.
July 3-10: Competition Enterprise, Devon & Somerset GC.

July 10-18: Open Class Nationals, Enstone Eagles GC.

July 10-18: Western Regionals, Bristol & Gloucestershire GC.

July 24-August 1: Standard Class Nationals, Lasham Gliding Society.

July 24-August 1: Northern Regionals, Yorkshire GC.

July 24-August 6: Women's European Championships, Budejovice, Czechoslovakia.

July 24-August 6: Junior European Championships, La Roche-sur-Yon, France.

August 7-15: Edgehill Regionals, Shennington GC.

August 7-15: 15 Metre Class Nationals, Coventry GC.

August 17-26: Inter-Services Regionals, RAFGSA Centre, Bicester.

August 21-29: Dunstable Regionals, London GC.

August 21-August 29: Junior Nationals, Avon Soaring Centre.

August 21-29: Gransden Regionals, Cambridge University GC.

August 22-28: Two-seater Competition, Wolds GC.

BGA ACCIDENT SUMMARY

Compiled by DAVID WRIGHT

Ref Number	Glider Type	BGA No	Damage	Date Time	Place	Pilot/Crew		
						Age	Injury	Hr
58	K-21	-	N3	25.4.92 1635	Dunstable	43 P2 0	N N	10 000 2
In a strong wind the winch cable weak link broke. Although the wind was almost down the strip the cable end drifted on to a car that had been parked near the trailer park.								
59	Astir CS77	2480	M?	27.5.92 1625	Rufforth	45	N	353
In strong turbulent winds the pilot decided to land diagonally across the field. This gave a final approach across a field of crops. Flying at 60kt and with half brake he thought he would clear the crop but on finals the left wing dropped and caught the long grass. The glider swung violently to the left and dropped hard on to the ground.								
80	SF-27	2752	M	25.5.92 1530	Nr Buckingham	46	N	130
The pilot selected a good field and made a normal circuit, aiming to land near the boundary which had no fence or hedge. Just after touch down the glider hit the far lip of a drainage ditch which damaged the nose and fuselage structure. The 1.5m wide ditch was hidden by grass and had not been visible from the air.								
61	Falke	M/G G-BDFA	W/O	9.5.92 1640	Cold Kirby, York	47	N	630+35pwr
On final approach to a "familiar strip" the motor glider pilot saw an electric fence two thirds up the runway. He opened the throttle but appeared to get a "rich cut" which caused a delay in the go-around. By the time power was gained he could not stop or clear the fence and hit this and the wall at the far end of the field.								
62	Open Cirrus VTC	3730	M	21.5.92 1827	Ewelme, Oxon	35	N	475
The glider was landed in a grass field with a gentle upslope. During the landing run the undercarriage collapsed and the glider continued on its belly, dropping a wing which caused a groundloop.								
63	Astir	-	S?	16.5.92	Lasham	36	N	116
The pilot was making a normal approach behind another glider which landed ahead. He decided to overfly this glider but in doing so allowed his speed to fall and the glider stalled while about 10ft above the runway. The glider landed hard on the main wheel damaging the wheelbox.								
64	K-8E	2408	M	3.5.92 1030	Sandhills Farm	51	N	49
While being towed out behind a car the wing dolly hit a hole and jackknifed the glider. No damage was seen and so the glider was launched. In the climb a slight resistance was felt on the stick. After a normal flight the pilot again felt a sticking point during the flare and ballooned. The tailplane had been damaged by the collision with the car.								
65	K-8E	2408	M	17.5.92 1448	Faringdon	51	N	51
The pilot saw a line of power cables running parallel to the intended landing run but did not see a spur line running across the boundary hedge with posts hidden in large bushes. The nose of the glider hit the wires which broke over the pilot head and the glider landed normally.								
66	K-13	1430	S	7.5.92 1825	Tibbenham	40 P2 36	M N	390 13
Before a winch check P2 was briefed on low speed wing drops and P1 was ready to pull off quickly with a hand on the release. During the ground run the glider ran over the edge of the concrete taxiway and the right wing dropped as the glider turned. The tip caught in long grass and, although P1 released quickly, a severe groundloop followed.								

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GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	Name	Club	1992
379	Weir, N.A.	Cranwell	26.5
380	Angell, Julie	London	26.5

DIAMOND DISTANCE

No.	Name	Club	1992
1/567	Weir, N.A.	(in France)	26.5
1/568	Angell, Julie	London (in France)	26.5

DIAMOND GOAL

No.	Name	Club	1992
2/2053	Stermdink, J.W.A.	Ex Deeside (in Australia)	15.1
2/2054	Forbes, A.S.	Inkpen (in Australia)	11.1
2/2055	Milner, T.J.	Bristol & Glos	3.5

GOLD BADGE

No.	Name	Club	1992
1632	Lynch, G.W.	Essex	14.2
1633	Stermdink, J.W.A.	Ex Deeside	15.1
1634	Dennett, M.I.	Yorkshire	26.6
1635	Grimley, A.P.	Avon	24.11.91

GOLD DISTANCE

Name	Club	1992
Lynch, G.W.	Essex (in Australia)	14.2
Stermdink, J.W.A.	Ex Deeside (in Australia)	15.1
Dennett, M.I.	Yorkshire	26.6
Forbes, A.S.	Inkpen (in Australia)	11.1
Milner, T.J.	Bristol & Glos	3.5

GOLD HEIGHT

Name	Club	1992
Grimley, A.P.	Avon	24.11.91
Arrowsmith, M.	Northumbria	14.8
Wild, P.J.	Glyndwr	7.5

SILVER BADGE

No.	Name	Club	1992
8922	Mayle, D.	Thrupton	25.7
8923	Mayle, P.	Thrupton	25.7
8924	Johnson, P.T.	Essex	25.7
8925	Parker, N.J.	South Wales	27.6
8926	Coates, W.A.	London	27.7
8927	Munns, W.C.C.	Buckminster	28.7
8928	Creamer, I.S.	Kestrel	22.7
8929	Watkins, B.	Booker	31.7
8930	Holdaway, M.	Booker	28.7
8931	Warren, P.M.	Staffordshire	27.7
8932	Thirkill, Pauline	P'boro & Spalding	28.7
8933	Healy, E.W.	Lasham	26.5
8934	McGregor, J.M.	Yorkshire	30.7
8935	Bardon, T.M.	Devon & Somerset	9.9.91
8936	Yeo, S.M.	Devon & Somerset	24.6
8937	Evershed, M.D.	London	9.6
8938	Woodman-Smith, N.	London	27.7
8939	Burdett, J.C.	Lakes	30.7
8940	Bowtell, D.B.	Lasham	28.7
8941	Rebbeck, H.	London	22.7
8942	Gardiner, D.	Cotswold	4.8
8943	Davies, J.P.	Cambridge Univ	6.8
8944	Rayner, J.R.M.	Pegasus	30.7
8945	Mornin, T.J.	Cambridge Univ	28.7
8946	Webb, Lorna	Cambridge Univ	29.7
8947	Thorne, Claire	Avon	24.7
8948	Cohler, M.D.	York	6.8
8949	Wales, N.	SGU	24.7
8950	Short, D.A.E.	Deeside	1.7
8951	Wheeler, T.	Brackley	28.6
8952	Wrigley, A.	Ouse	5.7
8953	Ward, K.J.	Staffordshire	16.5
8954	Bertorelli, F.A.	Devon & Somerset	14.8
8955	Chapman, M.	Lasham	14.8
8956	Peters, C.	Bicester	14.8
8957	Crow, B.	South Wales	28.7
8958	Jowett, J.	Devon & Somerset	14.8
8959	Adam, R.A.	Southdown	17.6

67	Kestrel 19	1723	N	23.5.92	Farnborough	52	N	1548
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Two autotow launches were aborted after the pilot had failed to control wing drop. As the glider was pushed back to the launch point the wing man pointed out that the right aileron was not connected. In spite of carefully checking the connection the pilot had not made any positive control checks. (Club policy is for an independent control check.)

68	L-6c	-	W/O	26.5.92	Nr Swindon	43	N	1929
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After a two year lay-off the pilot was given a check flight before a cross-country. On this he had to make a field landing. On finals he selected land flap and opened the airbrakes. An undershoot developed and so he reduced the flap but apparently forgot to close the brakes and undershot into the near hedge.

69	K-21	-	M	15.5.92	Sutton Bank	54	N	2076
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During the acceleration on the winch launch the canopy opened. The hinge was broken and the rear perspex shattered. The canopy was probably unlocked or only partly locked. Improvements have since been made to the canopy latches.

70	K-6cr	1098	M	10.5.92	Keovil	57	N	263
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As the winch launch started the glider swung to the right and the pilot was unable to prevent the wingtip catching in long grass. He grabbed for the release but hit the airbrake lever first, then got the release at his second attempt. The glider nosed down while travelling sideways then tore the tailskid off as it landed.

71	Hornet	2168	W/O	7.6.92	Seighford	61	M	500
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As the winch launch started the pilot tried to correct a swing to the right with left rudder. The left wing dropped and caught in 8in long lush grass but the pilot continued and tried to lift the wing. However, as the glider became airborne the left wing apparently stalled and the glider rolled until it impacted almost vertically.

72	K-21	-	M?	24.5.92	Dunstable	38	N	200
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The glider was being winch launched when about one third along the ground run P1 noticed that the adjacent cables were moving, so he released. While slowing down there was a pull on the left wing from a cable and the glider groundlooped. Chutes are now removed from inactive cables and good separation from the live ones ensured.

73	K-21	-	M?	28.5.92	Dunstable	42	N	840
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On a check flight P2 allowed the speed to decay on the approach and after regaining speed, rounded out late and flew the glider on to the ground. The landing was not thought to have been severe but serious damage was found to have occurred. It was thought the damage may have been at partly or wholly a result of a previous heavy landing.

74	LAK-12	3745	S	25.5.92	Watford Village	36	M	79
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The pilot was at 1000ft over an area of poor fields when he encountered sink. The only available field was very small with a 50ft tree on the boundary. The glider's right wingtip hit the tree top and swung the glider around 270° before it impacted vertically 50 yards into the field. The pilot fractured his vertebra.

75	ASW-15a	3452	W/O	12.6.92	Hinton in Hedges	31	N	17
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On his first flight on type the pilot decided to release as the tug took off before him in a cloud of dust and stones. At first he could not release and became airborne in a very low tow position. When he finally released the glider pitched nose down. Thinking he was stalling, he initially eased the stick forward and the glider landed heavily.

S=Serious; W/O=Write-off; M=Minor; N=Nil.

8960	Passmore, N.J.	Southdown	20.6	8999	Walker, P.J.	Trent Valley	5.9
8961	Paterson, N.S.	Anglia	15.8	9000	Flint, R.	Trent Valley	5.9
8962	Matcham, P.S.	Lasham	28.7	9001	Toone, A.S.	Burn	5.9
8963	Knibbs, D.P.	Midlands	28.8	9002	Thompson, P.B.J.	Coventry	10.8
8964	Clarke, D.	Dukeries	28.8	9003	Bookless, N.	618 VGS	7.9
8965	Patrick, R.C.	Newark & Notts	31.8	9004	Brevern, G.F.	Phoenix	12.9
8966	Braddock, M.A.	Derby & Lancs	18.8	UK CROSS-COUNTRY DIPLOMA			
8967	Edwick, C.	Avon	31.8	Complete			
8968	Marvin, A.	Ouse	29.8	Name	Club	1992	
8969	Nuza, R.	York	24.8	Passmore, N.J.	Southdown	20.6	
8970	Forshaw, H.	Burn	13.6	Morris, H.T.	Midland	27.6	
8971	Thorne, M.A.	Thrupton	31.5	Scott, R.A.	Southdown	20.6	
8972	Vidion, A.	Coventry	31.8	Part 1			
8973	Berfoya, Elizabeth	Shalbourne	31.8	Name	Club	1992	
8974	Shackell, B.J.	Shalbourne	25.8	Harrison, P.G.	London	3.5	
8975	Algeo, S.	Welland	29.8	Adam, R.A.	Southdown	17.6	
8976	Bacon, C.R.	Vectis	21.8	Bartley, J.	Southdown	20.6	
8977	Watts, J.C.	Burn	5.9	Fellis, M.A.	Northumbria	26.6	
8978	Holmes, P.	Wolds	29.8	Pickering, K.	Southdown	17.6	
8979	Hutton, J.J.	Humber	5.9	Thirkill, R.G.	P'boro & Spalding	28.6	
8980	Pinckney, Nicola	Bicester	5.9				
8981	Tucker, G.D.	Portsmouth	5.9				
8982	Foster, G.M.	Ouse	5.9				
8983	Marshall, P.J.	Four Counties	29.8				
8984	Wallis, K.	Pegasus	6.8				
8985	Hepworth, P.	York	5.9				
8986	Colebrook, M.S.	Vectis	29.8				
8987	Pickering, K.	Southdown	12.6				
8988	Elvidge, P.	Wolds	5.9				
8989	O'Neill, G.M.	Oxford	5.9				
8990	Neal, B.W.	Gliding Centre	8.9				
8991	Bradford, S.	Norfolk	8.9				
8992	Ben-David, J.	Surrey & Hants	10.6				
8993	Dallimer, W.A.	Cotswold	13.6				
8994	Busby, T.	Ulster	26.6				
8995	Halt, Susan	Northumbria	15.6				
8996	Crowhurst, J.	P'boro & Spalding	12.9				
8997	Scarborough, I.G.	Aquila	31.8				
8998	Clare, R.H.	Derby & Lancs	7.9				

Laws and Rules. The new (11th) edition is available from the BGA at £1 plus 20p for p&p so you can destroy all previous editions and get up to date.

HAVE YOU ANY GOOD PHOTOS?

We are always grateful for the loan of good quality colour photographs as potential covers or for use inside S&G and the Yearbook. Colour prints are very acceptable.

WORLD CLASS GLIDERS

Mike reports on the evaluation process for those gliders which reached the prototype stage of the World Class design competition

The International Gliding Commission (IGC) decided some years ago to challenge established thinking and launched a design competition to try and find a cheap, simple machine which would offer respectable performance at modest cost – a sort of latter-day K-6, if you like.

The principal design requirements were:-

1. Absolute minimum cost.
2. Kit-built option.
3. Simple conventional construction with a fixed wheel and big airbrakes.
4. L/D of 30, stall speed of 35kt and min sink of 1½kt.
5. A degree of crashworthiness and pilot protection in excess of current JAR 22 rules.

Designers were encouraged by the prospect of National, International and World Class competitions on a one-design basis (with the certainty of big sales for the winner) and 45 serious preliminary designs were submitted by the due date.

The prototype stage

Twelve designs were selected to proceed to the point of building a prototype to participate in the final evaluation at Oerlinghausen in north Germany, which was over three weeks around the end of September.

The judging panel and test pilots were volunteers from all over the world and we had a lot of fun debating, flying and crawling over the seven prototypes which eventually made it to the finals.

The IGC management group are now debating the judging panel's results and a fuller report with photos and three-view drawings will appear in the next S&G.

NB. Mike, with Oran Nicks (USA) and Mike Valentine (Australia) was in group 1 evaluating flight performance and handling qualities while Tony Segal, who flies at Lasham, was concerned with human factors in group 4.



Mike took this photo of three of the gliders. From l to r they are the Italian Velina, the USA Cygnet and the Polish Junior.

A KITE 2 CALLED PERCY



David Carrow (in the cockpit) is renewing acquaintance with a Kite 2 – this one is owned by Peter Warren, on the right. They were photographed by Ann Warren at the Vintage Glider Club meeting at Lasham in June. In 1950 David bought his Kite 2, called "Percy", from Dick Pilcher who was a direct descendent of pioneer Percy Pilcher. David built its trailer outside his Chelsea flat and it is now used for Peter's glider. Peter came back to gliding in 1990 when he bought his Kite 2A, BGA No. 689, and restored it to look like "Percy", fulfilling a schoolboy ambition to own a Kite having seen Dick Pilcher fly his in 1947. Since then he has flown all three Silver badge legs in the Kite which is based at the Staffordshire GC. The height was achieved at the May 1991 Vintage GC rally at Lasham, the distance at the May 1992 rally and the duration at the Long Mynd this July. He says his thoughts are now turning to a Gold badge. "It should be possible to get the height in wave somewhere and 300km would be a real challenge," he told me. "It was done once from Lasham to Perranporth by Bill Tonkyn."

NB. At the Vintage GC dinner Peter was awarded an engraved tankard for Percy's restoration and the Ed Hall trophy for the most meritorious flight from Lasham in 1992 – the Silver distance.

GULL 3's FIRST FLIGHT

Below our photograph by Simon Rishton is the first flight from Blackpool and Fylde GC this September of the Gull 3 built by the pilot, Peter Philpot, and Dave Masterson and Reg Wooler from a kit of parts made by the late Mike Garnett.



THE 1993 BGA COACHING PROGRAMME

1992 provided a fair number of lessons for future years. Not least of these was just how beastly a British summer can be if it really tries.

The principle problem was that bad weather and/or large numbers on courses sometimes resulted in not all students being able to receive two-seater cross-country instruction during the week. In short, an unsatisfactory instructor/pupil ratio. For 1993 we intend to ensure this problem does not recur and will always have at least two coaches and usually two two-seaters available on the course. We will also limit numbers to 12 per week. Unfortunately this means slightly higher prices and more to the point fewer course places.

In summary, what is available in 1993 is a smaller number of places on better courses. These are:

1. Instructors' cross-country course 1, Bicester, May 1-7. This is primarily aimed at instructors with very little cross country experience (including AEs needing a Silver distance).

2. Instructors' cross-country course 2, Nympsfield, May 16-22. This is primarily aimed at instructors who already have a modest amount of cross-country experience and wish to learn to fly faster and more efficiently. Pupils will probably already have flown 300km once or twice or at least chalked up some near misses. Some time will be spent on teaching soaring instruction techniques which instructors will be able to use with their students.

3. Instructors' cross-country course 3, Sutton Bank, July 18-24. Again, primarily for those instructors who don't get away from the site as often as they would like, but more experienced cross-country pilots will be welcome too, perhaps with a little summer wave thrown in?

4. Soaring and cross-country course 1, Blackpool and Fylde GC, June 6-12. Not restricted to instructors but to enable anyone with a Bronze badge to explore the enormous soaring potential of the north-west under the guidance of the BGA coaches, and to make flying in the BGA DG-500 and Discus available to as many as possible.

5. Soaring and cross-country course 2 at the Welland GC (near Corby, Northamptonshire), June 27 - July 3. Same availability as the previous course and with the intention of making efficient use of the excellent facilities being developed at the Welland club's new site.

6. Soaring and cross-country course 3 at Challock, August 2-6. Again, for anyone with a Bronze badge or higher to have access to the BGA gliders and coaches in a part of the country that has not seen much of the coaching operation in recent years.

7. Advanced competition course at Booker (where else?) July 4-9, aimed at turning also-rans into winners. This is at the request of a number of Nationals pilots who feel they are not progressing up the list and want to move up. The intention is to consider the psychological and strategic problems as well as flying technique and tactics. Very much an experiment.

8. Competition coaching week at Bidford, August 16-20. This is primarily for pilots who have never flown a competition but feel they would like to at sometime. Soaring instruction and a guide through the ever more complicated rules. Special rates for Junior Nationals competitors. (The Junior Nationals at Bidford, August 21-29.)

9. Thermal wave cross-country course at Portmoak, September 5-11. Last time we ran one of these one pilot arrived with a Bronze badge and about 12hrs P1. Seven days later he went home with a complete Gold badge (yes, distance too) with Diamond height. It could easily happen again! Open to anyone who wants to sample Scottish flying with some help and supervision.

10. Wave courses at Aboyne, September 26 - October 30. Five seven day courses at what is probably the most productive wave site in the world. Experienced wave pilots will be given training and encouragement to fly cross-country, but for most it will probably be simply the coaching and help they need to get a Gold or Diamond height. If you haven't already booked, probably the only way to fly at Aboyne in October is on a BGA course.

In addition there are 14 Instructor courses at various venues around the country and a large number of completion courses, also at a number of different sites. Contact the office for details and to book on the courses.

All dates given are inclusive. Costs involved are BGA course fees - see below, temporary membership fees and launch fees to host clubs (some clubs do not charge temporary membership fees to BGA course members) and flying fees for BGA or club gliders.

BGA charges are: Falke - £42/ph, ie 70p/pm, DG-500 - £24/hr, ie 40p/min/hr for first 2hrs of any flight and the Discus is the same.

Course fees

Instructors' course - £195, seven day soaring and cross-country courses - £95*; five day soaring and cross-country courses - £75*, wave courses - £85.

*£20 discount for instructors, including AEs.

Places on those courses described as for instructors only will be made available to non-instructors if they are not fully booked by January 31. At the time of writing one or two dates or venues are still provisional and there may be minor changes in the programme.

One final point, if the Blackpool and Fylde GC are unsuccessful in their planning appeal for aerotowing permission then Llewenni Park in North Wales will be the alternative venue for the course since Blackpool's CFI and I are agreed that a large scale winch launch only soaring course would be impractical at Chipping.

Chris Rollings, senior national coach

1993 OVERSEAS NATIONALS

The BGA Competitions and Awards Committee have unanimously voted in favour of holding the 1993 BGA Overseas Handicapped Nationals at the Central Gliding School,

Leszno, Western Poland following an excellent report by Angela Sheard who now lives in Poland. The provisional dates are May 16-27.

Leszno airfield is described as being huge and flat, surrounded by predominately flat terrain set in farmland with lakes and woods.

There is a hotel on the site with a restaurant for residents plus a cafe for non residents which is open most of the day. The airfield hotel can take up to 100 people with two to five per room; there is camping and caravanning on the site with a shower block and a swimming pool, tennis court, basketball court and barbecue area. Alternatively you may wish to stay in one of the small hotels.

The site has a telephone, fax and telex machines, a resident mechanic and a night security guard. Leszno is a small historical town in the Wielkopolska region with good rail links to Poznan and Warsaw.

The Central Gliding School has a professional Met man with the latest satellite links and all the usual forecasting facilities. Launching will be by the club fleet of nine fast and powerful Wilga and Jak tugs.

We hope to negotiate a beneficial deal with either a cross Channel ferry company or a shipping line for cars, trailers and passengers. It is usually possible to get a discount from most of the operators. Scandinavian Seaways have a ferry from Harwich to Hamburg (430 miles from Leszno) which takes about 20hrs and would minimise driving, but it may be relatively expensive.

Those who plan to fly solo in Polish gliders must send photocopies of their relevant flying qualifications with a current medical certificate not less than two weeks before visiting. This doesn't apply to competitors flying their own gliders. Passports must have a minimum of six months to run before the expiry date but visas are no longer required.

Following the initial announcement in the BGA Newsletter I have had various offers of administrative assistance from people prepared to pay their own expenses, and these have been gratefully received. But we still need a scorer, and I would like to hear from anyone interested with scoring experience at Regionals and Nationals level, and others with experience for various other jobs.

The provisional cost of entering the competition is £230 which includes the entry fee, films, maps and 12 aerotows. The provisional cost of the airfield hotel is £20 per day on current exchange rates.

It is anticipated the competition will be heavily subscribed and will be provisionally restricted to 45 entries plus the Polish Junior National team who will fly *hors concours*. There will be an opening and closing ceremony.

Ken Sparkes, competition director of the 1993 Open Class Nationals and 1993 Overseas Nationals.

FATAL ACCIDENT

Dianne Steele was killed on September 5 as the result of a winch launch accident. She was flying a Std Cirrus from the Vale of Neath GC.

Provisional Priority and Promotion Lists

These lists compiled as described in the 1992 Competition Handbook will be used for determining 1993 Nationals entries. Entry forms are available from the BGA and the closing date is January 31. GUY CORBETT, BGA Competitions and Awards Committee

The lists are provisional; some Regional final results were unavailable at the time of going to press. Any queries should be addressed to Guy Corbett on 081-231-3408 (work) or 081-449-4386 (home).

NATIONALS

PRIORITY LIST 1992

1 A. E. Kay (O)	24 G. M. Spreckley (HO)	48 M. W. Durham (S)	72 A. Tribe (QL)	96 D. A. Smith (15)
2 T. J. Wills (15)	25 D. S. Innes (O)	49 S. J. Redman (QL)	73 N. G. Hackett (QL)	97 T. R. Gaunt (HO)
3 C. C. Rollings (S)	26 J. R. Edyvean (QL)	50 P. G. Crabb (HS)	74 D. J. Langrick (S)	98 S. Olender (QL)
4 J. P. Gorringer (O)	26 W. M. Kay (QL)	51 E. W. Richards (QL)	75 T. R. Gardner (QL)	99 P. R. Williams (O)
5 M. D. Wells (15)	28 S. M. Wells (S)	52 D. Hill (O)	76 R. Arnall (HS)	100 J. P. Ashcroft (S)
6 S. G. Jones (S)	29 M. C. Foreman (O)	53 M. J. Young (QL)	77 C. L. Withal (O)	101 J. D. Spencer (O)
7 C. Garton (HO)	30 B. T. Spreckley (QL)	54 S. N. Hutchinson (15)	78 P. F. Brice (QL)	102 J. C. Kingerlee (S)
8 M. Bird (O)	31 M. J. Jordy (15)	55 C. J. Pullen (O)	79 G. Metcalfe (S)	103 A. Somerville (QL)
9 D. S. Watt (15)	32 G. McAndrew (S)	56 R. A. Cheetham (15)	80 M. J. Miller-Smith (QL)	104 R. L. Fox (15)
10 P. Jeffery (HS)	33 C. C. Lyttelton (O)	57 A. Pozerskis (HO)	81 D. Caunt (O)	105 R. Lemin (QL)
11 B. L. Cooper (15)	34 K. D. Barker (15)	58 M. Strathern (QL)	82 L. S. Hood (QL)	106 J. A. T. Angell (HS)
12 E. R. Smith (HS)	35 P. G. Sheard (QL)	59 N. A. Weir (HS)	83 P. A. King (HS)	107 G. W. G. Camp (QL)
13 M. G. Thick (O)	36 W. E. Malpas (HO)	60 C. J. Alldis (S)	84 P. E. Baker (QL)	108 J. B. Giddins (O)
14 E. W. Johnston (15)	37 E. R. Lysakowski (QL)	61 S. J. C. Parker (QL)	85 M. G. Throssell (S)	109 G. V. McKirdy (S)
15 A. J. Clarke (HO)	38 J. D. J. Glossop (HS)	62 J. D. Baily (O)	86 H. A. Torode (O)	110 P. S. Hawkins (QL)
16 W. Aspland (S)	39 J. D. Cardiff (QL)	63 J. R. Jeffries (QL)	87 J. B. Dobson (QL)	
17 R. Jones (O)	40 M. V. Boydton (O)	64 A. D. Evans (15)	88 D. R. Stewart (S)	
18 T. J. Scott (15)	41 D. R. Campbell (QL)	65 B. C. Morris (QL)	89 M. B. Jefferies (QL)	
19 M. F. Cuming (HS)	42 P. R. Jones (15)	66 K. R. Atkinson (S)	90 G. N. D. Smith (HS)	
20 R. D. Payne (S)	43 T. M. Mitchell (S)	67 E. H. C. Downham (HS)	91 R. W. Harding (QL)	
21 M. H. Thompson (O)	44 R. J. Toon (HS)	68 S. A. White (S)	92 K. J. Hartley (15)	
22 A. J. Davis (15)	45 T. J. Murphy (HO)	69 B. Szulc (O)	93 A. D. Piggott (O)	
23 B. Elliot (S)	46 G. D. Morris (15)	70 R. J. Smith (15)	94 M. R. Dawson (15)	
	47 P. A. Gaisford (QL)	71 C. M. Davis (O)	95 N. H. Wall (HS)	

(O)=Open, S=Standard,
15=15 Metre,
HO=Handicapped Open,
HS=Handicapped Sport,
QL=Qualifying List)

REGIONALS

PROMOTION LIST 1992

1 D. W. Allison (JN)	25 P. C. Fritchie (LB)	50 R. L. Fox (QL)	75 J. I. May (QL)	100 C. P. Ebbs (QL)
2 A. Miller (IS)	26 D. G. Lee (QL)	51 A. Pozerskis (HB)	76 M. Strathern (QL)	101 A. J. Garrity (E)
3 M. W. Durham (DB)	27 D. le Roux (E)	52 P. J. Coward (QL)	77 A. Tribe (IS)	102 R. C. Bridges (QL)
4 P. Davis (LB)	28 M. J. Miller-Smith (QL)	53 J. R. Jeffries (DB)	78 M. C. Foreman (QL)	103 R. H. Wright (HB)
5 P. F. Whitehead (NO)	29 J. Gattfield (NO)	54 S. R. Nash (E)	79 P. T. Healy (LB)	104 P. H. Hurd (QL)
6 S. J. Crabb (HB)	30 R. A. Cheetham (QL)	55 G. V. McKirdy (QL)	80 J. H. Roberts (EN)	105 G. E. MacDonald (JN)
7 P. M. Wells (EN)	31 J. W. A'Court (JN)	56 B. C. Marsh (JN)	81 N. Parry (QL)	106 R. H. Dixon (QL)
8 D. K. McCarthy (LA)	32 D. A. Booth (HB)	57 F. G. Bradley (QL)	82 P. G. Crabb (QL)	107 J. G. Bell (LA)
9 R. C. Bromwich (NC)	33 J. Warren (QL)	58 C. Hyett (LB)	83 B. C. Morris (DB)	108 M. J. Heneghan (QL)
10 D. J. MacPherson (DR)	34 D. J. Gordon (IS)	59 R. C. Sharman (QL)	84 T. J. Murphy (QL)	109 D. D. A. Lorraine (IS)
11 A. Walsh (E)	35 D. H. Gardner (QL)	60 D. P. Francis (IS)	85 T. P. Browning (LB)	110 K. Lloyd (EN)
12 S. R. Housden (JN)	36 J. N. Wilton (ED)	61 R. Palmer (QL)	86 C. G. Corbett (DR)	
13 M. W. B. Logan (IS)	37 A. D. Piggott (QL)	62 D. Starer (DR)	87 P. R. Pentecost (QL)	
14 G. Pitchfork (IR)	38 J. F. Beringer (IR)	63 A. Somerville (QL)	88 J. Arnold (IR)	
15 G. N. D. Smith (DB)	39 P. F. Brice (DB)	64 N. H. Wall (ED)	89 P. Atkinson (QL)	
16 D. J. Eade (LB)	40 D. J. Langrick (QL)	65 M. R. Dawson (QL)	90 R. Lemin (DB)	
17 P. B. Walker (NO)	41 S. Sampson (LB)	66 T. R. Gaunt (IR)	91 C. Milton (QL)	
18 M. J. Jordy (HB)	42 S. J. Connolly (JN)	67 M. F. Brook (QL)	92 P. R. Jones (QL)	
19 G. W. Craig (EN)	43 N. A. Weir (QL)	68 D. A. White (NO)	93 R. Kalin (NC)	
20 K. Hodgson (JN)	44 R. M. Grant (LA)	69 E. H. C. Downham (DB)	94 J. A. T. Angell (QL)	
21 G. Stingemore (IS)	45 P. E. Rice (QL)	70 P. Stratten (LA)	95 J. A. Hallam (JN)	
22 S. J. C. Parker (DB)	46 R. A. Browne (IS)	71 E. Wright (QL)	96 A. Smart (QL)	
23 K. R. Merritt (LA)	47 J. P. Ashcroft (NO)	72 M. W. Meagher (HB)	97 D. J. Sharp (NO)	
24 R. W. Alcoat (NC)	48 P. F. J. Croote (QL)	73 S. G. Hunt (QL)	98 P. D. Duffin (QL)	
	49 D. Robson (NC)	74 R. J. Toon (JN)	99 P. R. Barley (IS)	

(DB)=Dunstable Blue,
DR=Dunstable Red,
E=Eastern, ED=Edgill,
EN=Enstone, HB=Husbands
Bosworth, IS/IR=Inter-
Services, JN=Junior
Nationals, LA=Lasham A,
LB=Lasham B, NO=Northern
Open, NC=Northern Club,
QL=Qualifying List)

Copy and photographs for the February-March issue of S&G should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 0223 247725, fax 0223 413793, to arrive not later than December 1 and for the April-May issue to arrive not later than February 9.

ANGLIA (RAF Wattisham)

Matt Jones has the UK cross-country diploma; Tony Alcock flew 50km; Nicky Pinckney and Nick Paterson's 50kms completed their Silver badges; Keith Shearer has a Bronze badge; Glenn Oxford and Oggy have 5hrs and Carol Thomas Bronze legs and Silver height.

We have two new assistant instructors, Gwyn Thomas and Andy Hill.
N.P.

AVON (Bidford)

In this poor season we have at least had first solos and badge flights from Bronze to Diamond. Richard Palmer competed in the 15 Metre Nationals and Anne Hopkins, Claire Thorne and Iain Evans in the Junior Nationals.
C.T.

BATH, WILTS & DORSET (The Park)

We are settling in at The Park. The site is operating well and we're having fun exploring the terrain which is very different from Keevil. The clubhouse is coming on well as are the numerous other projects which transform a field into a refined gliding club.

Our August *ab-initio* course was well attended and brought a bunch of new members. We have also been joined by some experienced pilots – welcome to you all. The Inter-Club League was an interesting experience for some of our cross-country pilots.
S.G.

BLACK MOUNTAINS (Talgarth)

We invited Talgarth residents to our annual social to thank them for their co-operation and celebrated our chairman's birthday with a party.

We have had some good flights this autumn; work has been completed on the Swallow and it now matches our newly sprayed T-21, which has been a popular acquisition, and we have had several successful visits from other clubs. The trailer park is rapidly filling up with the usual migration from flat sites. There will be flying over Christmas, except for Christmas Day.
S.R.

BOOKER (Wycombe Air Park)

Bernie Morris is our new chairman and Paul Brice has taken over from Mike Williamson as treasurer.

Booker pilots completed their clean sweep of the Nationals with 1st and 2nd places in the Open Class. Jeff Warren gained Diamond height at St Auban and Tamsin Runnels and Paul Greening have soloed.

The winter programme will include mini expeditions and weekend early morning pre-solo in-

tensive training. A very competitively priced all-inclusive package is also being offered to non members wishing to make rapid progress.

The log cabin is being extensively remodelled as a real clubhouse as well as increasing briefing facilities.
R.N.

BORDERS (Galewood)

Spencer Johnston has gone solo and Andy Henderson has an AEI rating.

The Supacat has been serviced ready for the wave season and despite the poor late summer, we have had a lot of flying with Friday air experience flights being very popular.
R.C.



Dorset GC's new site, Eyres' Field, photographed from the club tug by Brian Stobart. For more details, see the report on p347.

BRISTOL & GLOUCESTERSHIRE (Nympsfield)

Sara Little and Matt Turnbull have gone solo, Matt on his 16th birthday. Pete Mallinson and Andy Cunningham won their categories in the first Aerobatic Championships at Odiham.

We are proud of our Inter-Club League team and leader who won the final for the third year running (see report in this issue). We had a meeting in September to discuss the budget and members voted to slash spending, not increase charges, and may be asked to help at the launch point.
S.R.

BUCKMINSTER (Saltby Airfield)

Dave Sargeant and Roger Perry have gone solo, Roger having a cable break on his first solo. Jim Holton, Alan Poole and Sam Morecraft have Bronze badges and Roger Hamilton Silver distance.

We did well in the Inter-Club League final with

2nd place and several Class winners, while Mike Jordy was 9th in the 15 Metre Nationals and Russell Cheetham 15th. Paul Tolson (BG 135) narrowly missed his 300km.

Our thanks to John Harwood and Alan Middleton for their hard work on the club equipment.
M.E.

BURN (Burn Airfield)

September 9 was the season's best soaring day. Matt Ellis flew his 50km and Roy Colman, Andrew Jackson, John Watts and Andy Toon their 5hrs, Andy for his Silver badge having flown the distance a fortnight earlier.

As we are getting excellent service from our

Tost winch bought from a German club we have bought another from a different German club. It's a pity about the devaluation but is anyone interested in two redundant winches?
P.N.

CAIRNGORM (Feshiebridge)

Alistair Robertson and Sinclair Bruce have their 5hrs; Roy Lambert Silver distance and Nick Norman Diamond height. By an amazing coincidence Nick equalled Bill Longstaff's site record of 26 963ft.

We have two new members through our school sponsorship scheme. The new two drum winch is giving good launches – many thanks to Andy Carter for building it.
T.C.

CAMBRIDGE UNIVERSITY (Gransden Lodge)

The BGA cross-country course at Gransden Lodge in July was well attended and encouraged a number of Silver distances and 100km diploma flights. Our August task week, directed by Phil Jeffery and with visitors from Dorset and Sackville GCs, had less favourable weather. The overall winner was our chairman, Richard Baker.

Our team of Richard Maisonnier, Geoff Brown and Rhod Turner won the Anglia TV cup



Dave Betts of Burn GC dreaming of that 500km.



Above: Terry Dean of Culdrose GC being congratulated by his instructor, John Cockfield (r), after going solo. Below: At Wolds GC's civic evening they flew the Mayor, Alec Petrie, who is also a club member. Photo: Len Nicholson.



Beryl Stephenson has three generations who gained Silver badges at London GC – her first husband Carr Withall (who was killed in the Battle of Britain), her son Carr (a BA senior captain) and her granddaughter Lucy Withall. Carr is photographed above with Lucy. Beryl's husband Geoffrey, whose cross Channel flight of 1939 was featured in the last issue, p266, now sometimes flies with Carr in his ASH-25.



Above: The day the fur flew at Channel GC – Ron Armitage launched their Bearday fly-in with Blueberry bear as a passenger. Below: Fred Price of Stratford GC after going solo. ➔



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at Tibenham. Harry Boal has become a full Cat (at 69!); Catharina Edwards, Christophe Grote, Penny Minnitt and Phil Atkin have AEI ratings; Alan Dibdin Diamond distance; Ariane Decloux and Claudio Villa Gold distance and Diamond goal; Lorna Webb, Andy Walford, Robert Verdier, Tim Mornin and Jem Davies Silver badges; Neil Carnegie, Mark Rennison and Nick Robinson Silver distance and Manhar Bhalsod, John Moore and Wendy Hathaway have gone solo.

A number on our intensive winch courses have gone solo and many have joined the club. J.L.B.

CHANNEL (Waldershare Park)

Some excellent days have been interspersed with frenzied ground activity. The workshop has been fitted out, the club Swallow is on line, air-field undulations reduced and work begun on the T-21 hangar. We have another club K-7; Nigel Wilkinson has gone solo; David Goldin has resoloed and Nic Silk flew Silver height without a barograph.

We have a winter programme of briefings and lectures, will continue weekday flying and visitors are always welcome, though it is advisable to 'phone first. N.O.A.

CLEVELANDS (RAF Dishforth)

Poor weather and absent tugs have had a depressing effect, but we look forward to winter wave and welcoming visitors to our Christmas/New Year festivities.

Paul Whitehead has become an area motor glider examiner; Eddie Edwards has a Bronze badge and Glen Steward his 5hrs. J.P.

COVENTRY (Husbands Bosworth)

Although it was a poor summer there have been some notable flights with many Silver heights and Bronze legs as well as Paul Thompson and Gisele Pellegrini gaining Silver distance. Our first Regionals for many years was a success,

even though we had poor weather and only three days. It was won by Steve Crabb (LS-7).

Euan Videon and Richard Devey went solo shortly after their 16th birthdays. The Puchacz and SF-27 are back after slight incidents.

On November 21 we celebrate our 40th anniversary with a large party and the annual dinner-dance will be on January 9. T.W.

CULDROSE (RNAS Culdrose, Helston)

The course in August went well with ten solos in the fortnight. This has probably been our worst year for cross-countries but on a rare good thermal day in September Peter Green flew Silver distance, Marc Rowly completed his Bronze badge and Marjorie Andrews got her first Bronze leg.

We have had our annual expedition to Aboyne and the dinner-dance will be at Budock Vean on December 5.

R.A.

DARTMOOR (Brentor)

Graham Lobb, Phil Brett, Roger Matthews and Peter Lamb have been elected trustees. Brothers, Rodger and Steve Bolton and Alan Cooper have gone solo.

In spite of some terrible weather we have managed over 9000 launches in just over the year. Members wanting wave and mountain fly ing have visited other sites in the UK and France. F.G.M.

DEESIDE (Aboyne Airfield)

We thank John Dransfield for his many years as CFI and his help and guidance during the crucial time of switching from a single to twin runway operation. Dave "Chalky" White has taken over.

Ben Anderson, Mark Delacroix, Mike Baillie and Susan Waring have gone solo; Roy Wilson has all three Diamonds with a 508km double O/R and Lionel Sole (Lo-100) won the British Aerobatic Championships. The autumn wave has been working most days with heights to 22 000ft in August and 27 500ft in September. Our thanks to Mike Law, ably supported by Judith and Sarah, for barbecues for up to 60 twice a week during the summer and autumn.

We have levelled and re-seeded more of the field for tug parking. G.D.

DEVON & SOMERSET (North Hill)

We had three mediocre contest days for the August task week. Frank Bertorelli and John Jowett (both K-6s) gained Silver distance (John with a barograph this time!). The overall winner was Rex Grayling (K-6) with John Jowett and Ian Snelling runners-up.

In mid-September a small expedition to Glyndwr GC experienced Welsh wave with Gold height for Chris Oldfield and Gordon Bonny (both K-6s). Malcolm Chant (Pegasus) narrowly missed Diamond height. This is clearly a site for better acquaintance.

Simon Leeson and Frank Bertorelli have their 5hrs and Stuart Proctor a Bronze badge. Adrian McMullen and Dick Stevens have gone solo and Gilly Cox has resoloed after 15 years. I.D.K.

DORSET (Old Sarum/Eyres' Field)

When you read this we should be well established at our new home, Eyres' Field 3km north of Wool, Dorset. The move started in early October by taking down the aircraft hangar – a major undertaking which went smoothly with a team of about 30 members. Flying will start as soon as everything is in place – probably mid November.

The new site has a significantly different catchment area and we welcome all new members. G.G.S.

DUKERIES (Gamston Airport)

After a long wait conditions have been particular good in recent weeks. Dave Clarke has a Silver badge; Pete Uden a Bronze badge, 5 hrs and, with Mike de Torre, Tom Newton and Colin Pellatt, Silver height and Bob Staveley and Colin Pellatt have both Bronze legs. There is an expedition to Portmoak in October. J.C.P.

FULMAR (RAF Kinloss)

We have had good wave flights throughout the year. Terry Slater brought the Scottish Gliding Association's ASH-25 for a weekend with numerous visiting pilots. Our open day was very successful with many air experience flights. Reciprocal membership with the Highland GC has a lot of potential.

The new Tost winch is a winner and the tug is in great demand. I.J.D.

GLYNDWR (Denbigh)

Alan Windsor-Smith, Eddie Lees, Roger Salmon and Bill Hatton have gone solo; Chris Butler has a Bronze leg; Sandy Pels a Bronze badge; Dave Morgan, Arnie Pennant and Ray Cronin Silver height with 5hrs for Ray Cronin and Alex Jones; Liz Silverstone and Jim Lynchehaun Gold height and Peter Manchett Silver distance and an AEI rating.

Our thanks to the helpers at the open day ➡

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At the top and bottom of this column are Glyndwr GC pilots. Above: Sandy Pels before the first flight in the new K-6. Below: Chris Butler after going solo.



Brothers Steve (l) and Rodger Boulton of Dartmoor GC with their instructor, Alan Holland (centre), after their first solos. The background is the lower slopes of west Dartmoor. Photo: C. Boyd.

which attracted several hundred visitors. We have another K-13 and two K-6 syndicates.
G.H.

GRAMPIAN (By Laurence Kirk)

We have planning permission for our site from the local authorities.

Rod and Angus have gone solo on Portmoak courses and Dave Smith flew for 5hrs in his LS-4. Dennis Canny and Keith Jack have bought a single-seater.

R.J.S.

HUMBER (RAF Scampton)

Our 25th anniversary party went extremely well and so have our achievements: Dave Sage, Dennis Sandford-Casey (solo); Nick Dean (5hrs); Tom Lamb (Silver distance); Joe Hutton and Al Docherty (Silver badge), Al finally being able to convert his ATC instructor rating to an assistant Cat.

We are hoping to have an ex ATC Grob Acro before the end of December.

D.M.R.

LAKES (Walney Airfield)

We have had some good flights with Neil Braithwaite, Graham Sturgeon and Phil Gilbert soaring the screens at Wastwater, Neil to 14 000ft in wave.



Above: Channel GC often take mini expeditions abroad and our photo is of Nic Armitage flying a Schweizer 126 at Eustis, Florida.

John Burdett completed his Silver badge with a 50km from Sutton Bank; Peter Lewis, Peter Redshaw and Dick Redhead achieved various tasks at Le Blanc while Dave Bull gained Silver height and a Bronze leg after only ten solo flights. Roger Copley and Graham Welch have gone solo.

Blackpool & Fylde haven't collected their pic-

ture lately so we are thinking of sending them a photograph of it!
P.G.

LASHAM (Lasham Airfield)

Because the Tibetan plain did not warm up sufficiently, the jet stream stayed too far south and we all had a rotten summer.

Below: A photo of Surrey Hills GC's portable hangar which now has electricity.



Our training two-seater fleet of nine K-13s, an Acro, K-21 and the Super Falke are just waiting for pilots to fly them and we are promised big fat Euro thermals in 1993!

Roll up for the Standard Class Nationals together with a bumper Regionals starting on July 24, 1993 - entries are flooding in. This year with no Nationals at Lasham but only a 50 entry mini Regionals, club flying continued unabated and everyone was happy.

The new lease is ours and we are now collecting madly for the freehold.
W.K.

LINCOLNSHIRE (Strubby Airfield)

We virtually took over Pocklington for the Two-seater Comp. Dick Hannigan and John Kitchen flew the Bocian to a respectable 9th place and several members gained cross-country experience in the back seat. And most of our single-seater fleet took advantage of the aerotows and soaring conditions not normally available at our site.

Gordon West and Steve Crozier have AEI ratings and Steve has become an assistant instructor. Phil Trevethick has a UK cross-country diploma and Russell Hague has gone solo.
R.G.S.

MARCHINGTON (Tatenhill Airfield)

Piet Walton Knight has gone solo; Nigel Render, Neil Morgan and Adam Oakley have Silver distance; Val Roberts Silver height and distance and Ian Taylor an AEI rating.

Several members enjoyed an expedition to the Long Mynd in September despite the easterly winds and for some it was their first experience of winch launching.
A.R.

MIDLAND (Long Mynd)

We had five competition days for the task week at the end of August. Earl Duffin and Dave Jobbins from Skew won, flying a Nimbus which Earl took to Diamond height above the site on August 25.

The September trip to Aboyne yielded Gold heights for Paul Stanley, Richard Bennett, Harold Griffiths, John Parry and Howard Bradley (badge completed) and Bob Rice gained Diamond height. We have welcomed a number of visiting clubs including Cambridge and Lasham.

Malcolm Loveday has soloed and Richard Swire, Dave Knibbs and John Collins have their 5hrs and several visitors gained Silver heights and durations. Nick Heriz-Smith is now an assistant instructor and Baron Taylor a full Cat.
A.R.E.

NENE VALLEY (RAF Upwood)

Our task week in September was successful despite the weather - our thanks to Chris Rollings for the loan of the Puchacz.

Jose Mora and Julian Pool have Bronze badges; Les Ward has Silver distance and Jose Mora Silver height.
D.H.

NEWARK & NOTTS (Winthorpe)

We had a very successful open weekend with a considerable number of membership inquiries. The party to the Wolds GC's Two-seater Comp had a thoroughly good time and there are plans for a larger entry next year.

Bob Patrick completed his Silver badge with a cross-country.
M.A.

NORFOLK (Tibenham)

Our thanks to Malcolm Springall for his hard work on the new hangar and Falke fuel store. With David Munro and Peter Leney he has become an assistant Cat.

Carla Leney, Andrew Briggs, Jackie Bradford, John Allen, Chris Vanstone and Dave and Rod have gone solo; Billy Middleton and Steve Metcalfe have Silver distances; Brian Kennard 5hrs and Silver height; Steve Bradford a Silver badge and part 1 of the UK cross-country diploma and Steve Roderick and Ken Blake AEI ratings.

The harvest task week was very enjoyable with tasks set by Roy Woodhouse and Eric Arthur over five windy days. It was convincingly won by Alf Warminger (Ventus) with John Ayes (DG-400) 2nd and Ray Hart (IS-29) 3rd.

We hosted physically handicapped youngsters and have funds to help some fly next season. We also hosted the Anglia TV trophy (won by the Cambridge University GC) and had a 1940s night and a barn dance.

Our thanks to Mike Bean (outgoing chairman) for all his hard work in that position and a welcome to Eric Arthur as the new incumbent.
R.J.H.

NORTHUMBRIA (Currock Hill)

We only had two flying days on our September expedition to Portmoak but excellent results with Diamond height for Colin Sword, CFI, Gold height for Colin Tweddell and Dennis Driver, Colin also gaining 5hrs, and Silver height and 5hrs for Werner Hindmarsh. Ron Davis missed Diamond height by 163ft!

At Currock Hill Sue Hall gained Diamond height whilst Martin Fellis narrowly missed Gold distance. We had disappointing weather for the September club course but time was well spent refurbishing a caravan and launch point control vehicle.
R.D.

OXFORD (Weston on the Green)

Chris Woodcock has gone solo and Rick Underhill and Mike O'Neill have Silver distances, Mike completing his Silver badge in one season.

Andy Barnes (K-6E) won the Novice Class at the Inter-Club final and John Giddins (DG-202-17c) was 1st on handicap on a day of the Open Class Nationals. The expedition to Portmoak had disappointing weather.
F.B.

PEGASUS (RAF Gütersloh)

The club is getting smaller with members leaving as the station prepares to close but the stalwarts soldier on. We are preparing for the final Pegaparty on January 23 (see advertisement in this issue for details).

We had a wet August but Keith Wallis completed his Silver badge. We have an expedition to Austria in October and a few are going to Benalla, Australia in December.
D.R.M.

PETERBOROUGH & SPALDING (Crowland Airfield)

We could have had kinder weather for the soaring fortnight but several completed tasks. The annual barbecue was again a big success.

Some members flew at North Wales GC in August and we hope to have an expedition there soon; a party has just been to Portmoak and at Tibenham's competition weekend Roger Gretton, Tony Fidler and Andy Griffith came 5th overall. James Crowhurst has his Silver badge.
D.K.P.

PHOENIX (RAF Bruggen)

During a good summer Andy Card, Jim Goebels, Rob Chambers and Helen Binnie have gone solo. Pete Jones and Steve Randles resoloed, Steve within two days and gaining a Bronze leg. Marielle Boerdijk, Ian Keylock, Carol Priestly and Greg Breven have Bronze badges and Gary Binnie, Fitz Fitzgerald (in 4hrs) and Andy Elliot have flown 300km, Gary also coming 7th in the Laarbruch mini comp.

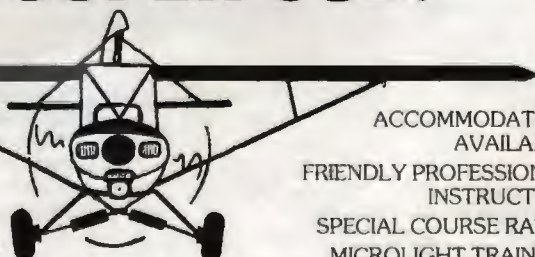
Thanks mainly to Norman and Gary the K-7 has been refurbished. Andy Elliot has replaced Al Farmer as CFI. Our thanks to Al for all his hard work.
M.C.

RATTLESDEN (Rattlesden Airfield)

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10-12 Feb	3-5 Mar	For Bronze Badge Pilots & above	
5-6 Nov	(2 days)	Air Experience Instructor Courses	£55.00
17-18 Dec	14-15 Jan	Follows BGA approved course	
18-19 Feb	25-26 Mar	CFI Approval required	
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		Post Solo, Pre Bronze	
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with representatives from the Sports Council and local authorities.

Julie King has Silver height; Richard Goodchild Silver distance and height and David Milner has gone solo.

M.E.

SACKVILLE (Riseley)

We enjoyed the Cambridge University GC task week, flying on days that wouldn't normally be considered soarable and fairing quite well. Several have gone solo at Talgarth where we visit into the autumn.

Diane McDonald-Smith soloed in just three weekends while her children were in America.

D.C.W.

SCOTTISH GLIDING UNION (Portmoak)

We welcomed the SGA ASH-25 which is an excellent asset to Scottish gliding. On its first cross-country from Portmoak it covered 370 km in 3hrs 1min flown by B. Scougall and M. Shaw.

The Tuesday evening Bronze course has finished due to lack of daylight. I. Trotter, S. McFarlane, A. Grant, A. Laling and K. Hook have Bronze badges. Our thanks to instructors Colin Hamilton and Dave Hatton.

Shortly before his 60th birthday Neville Allcoat climbed to 18 400ft for Diamond height; R. Ferguson has gone solo; B. Fairhurst completed his Silver badge with Gold height *en route*; A. Grant and E. Murphy have Gold height and P. Hackett has become an assistant instructor.

G.N.

SHALBOURNE (Rivar Hill)

The weather has severely curtailed flying. Our autumn open day was a washout and on one of the flyable task week days a spot landing competition was won by Andy Brind (K-7). But the *ab-initio* week was a success thanks to the instructors Jonathan Mills, Ken Porter and Roger Madelin.

Rob Sharpe, Verity Murrice and Alan Cook have gone solo; Bryan Vowell has a Silver height and Jeff Goodenough, Fergus Glen and Tom Glen Bronze badges, Fergus also flying 5hrs but Tom missing his 5hrs by 2min. Steve Glassett has become an instructor.

J.R.

SHROPSHIRE (Sleep)

Hans Wiesenthal flew a 1000km zigzag during his annual trip to Spain with 750km the previous day.

The high point of our August camp was to have three gliders over the Menai Strait in wave – Alan Levi at 17 000ft and Vic Carr and Laura Scott close behind.

Six of our pilots joined the Bidford September expedition to Feshiebridge and had three good wave days out of the first four in south-easterly winds downwind of areas seemingly covered in low cloud.

A.B.A.

SOUTHDOWN (Parham Airfield)

Despite poor weather this has been a record year for solos – 18 already. The latest are Rob Rowe, Michel Carnet, Trevor Miller, Dave Bayliss, Mathew Martin and Jon Kern. Kevin

Fresson and Mike Bennett have Bronze badges.

We have a new glider maintenance workshop which Ron King talked us into. Jim Tucker has been busy with the electrics. Our long serving control van will shortly be replaced by a converted mini bus. Our thanks to Jim Heath for all his hard work. We look forward to the autumn northerlies so we can soar the ridge.

W.S.

SOUTH WALES (Usk)

In spite of the weather training is well underway and we have quite a few new members. The winch built by Colin Broom and his team is giving us much higher launches. Dave Jobbins and Earle Duffin have all three Diamonds.

N.S.J.

STRATFORD ON AVON (Snitterfield Airfield)

Sandra Wood, Bob Gibson and Fred Price have gone solo; Bob Russon has a Bronze badge and Tony Palfreyman has an assistant instructor rating.

CFI Dave Benton's procedure manuals are a welcome introduction, being explicit and written in layman's language. Visitors and new members are guaranteed a good welcome. We fly Thursdays, weekends and Bank Holidays.

G.J.B.

SURREY HILLS (Kenley Airfield)

Our successful season saw an increase in members and weekly courses well attended. Norman Heals, Mike Woods, Brian Connoughton, Nigel Hearn and Jim Ferry have gone solo, Jim resolving after four years; Chris F, Mike Hughes, Peter Wann and Dave Williams have Bronze badges and Tricia Pearson, Richard Swires and Chris F have 5hrs with Silver height for Chris and Stuart Abbot.

Our new clubhouse/office and workshop are almost habitable with water and electricity connected. Our thanks to all who helped.

P.A.P.

THE GLIDING CENTRE (Hinton-in-the-Hedges)

We have had an exceptionally good season with 7000 launches and 40 first solos in six months. Now we are expanding and looking for more instructors and gliders – see your club noticeboard for details.

The courses are still full and we are going into November to cope with the demand, as well as running wave courses in Poland in early 1993.

M.C.F.

TRENT VALLEY (Kilton in Lindsey)

Rex Flint and Peter Walker have Silver badges; Jeremy Lee has 5hrs and his wife Allison flew in the K-13 to Burn with Steve Slater to bring back the rose bowl.

M.P.G.

ULSTER (Bellarena)

We introduced a party from Dunstable, brought over by our former CFI, Bill Craig, to the joys of flying off the incomparably flat, smooth, wide, long and beautiful Benone Strand in perfect conditions on October 4.

Planning permission for our new site was granted in September. We hope the hangar will

be moved during our short mid-winter closed own for annual refurbishment.

As well as traditionally spending Easter with us the Dublin GC are visiting us in October.

R.R.R.

WELLAND (Lyveden)

Our thanks to Chris Rollings and Chris Pullen for a very successful cross-country course. Everybody learnt from it. The most notable performance was three 300km flights on consecutive days by Richard Large.

Our task week was enjoyable but the weather was indifferent. Class winners were Peter Bisgood and Peter Andrews. Andy Parrish flew 6hrs 10min for Gold distance and Diamond goal and Dick Short 313km. Jim Skorupa and Steve Algeo gained Silver distance; Steve Algeo and Bob Jackson 5hrs; Nigel Betteridge a Bronze badge and Owen Smith, Keith Mellor, Mark Osborne and Malcolm Smith have gone solo.

The hangar is now in use.

R.H.S.

WOLDS (Pocklington Airfield)

Despite the bad weather we have had some notable flights. On September 19 five flew 300kms. Alan McWhirter gained his Gold badge at the Northern Regionals.

We hosted a civic evening for local dignitaries including the Mayor of Pocklington, Alec Petrie, who is a long standing member and solo pilot.

N.R.A.

WREKIN (RAF Cosford)

We had a busy summer with the Bath task week and the old members' reunion week a great success.

Julian Paszki, Ian Cramman and Brian McKenzie flew Silver distances, Brian to complete his badge. Tony Mountain, our newest AEI, has a UK cross-country diploma and Chris Gault both Bronze legs. Mick Boydon was 11th in the Open Class Nationals, Dave Gordon 4th in the Inter-Services Regionals and Richie Toon was 8th in the Overseas Nationals.

We have so many *ab-initios* we now have early morning syndicates to utilise the two-seaters. It was Les Simpson's idea and has been a great success.

R.J.

YORK (Rufforth Airfield)

Clive Stainer flew 300km to complete his Gold badge and Tom Stoker (Libelle) climbed to 22 000ft for a very cold Diamond. The late summer also gave us a glut of Silver distances by Andy Marvin, Paul Hepworth, Roy Nuza and Gavin Foster, Gavin in a Swallow.

The AGM in September returned Alan Park, Howard McDermott-Row and Paul Hepworth as directors with Bob McLean, Pete Ramsden and Colin Richardson joining the committee.

H.McD.R.

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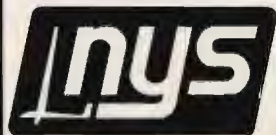
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DOWN TO EARTH – FIRST SOLO

Julian Pellatt says that a BGA safety lecture by Mick Boydon helped him deal with a potentially dangerous situation a few weeks later on his first solo attempt

The setting was Lleweni Parc on a pleasant, bright Sunday in early May. For once I had achieved that rare combination of early arrival, an uncluttered flying list, smart launch rate and good flying weather. With 65 launches spread over nine months in my increasingly battered logbook I had begun to anticipate the invitation to go solo at about the 80-90 launch mark in six to eight weeks' time. Recent introductions to the charms of stalls, spins and one simulated cable break at 600ft were early warning signals.

My first flight of the day was a 5min circuit flown without comment or assistance from the "presence" in the back of the K-13. (Len Dent's patient "I have control" responses to my early, fumbling attempts at premature self-destruction as a raw *ab-initio* at the Long Mynd in August 1991 still burn my ears!) The second flight was a simulated cable break at 500ft with encouraging approval from the P1.

On the third flight the P1 took us up in strong thermals and handed control to me at 2500ft over the Clwydian range. We went up to cloudbase at 4200ft, flew over the North Wales GC site and waggled our wings at the gliders sitting on the ground. An hour later we set course for home and practised seemingly endless stalls, spins and negative *g* demos.

At 1500hrs, somewhat to my surprise, the P1 strolled over and casually suggested another round of flights. Nestled innocently and comfortably in the cockpit with a steady westerly breeze down the airfield and a slight southerly component, my attention was distracted by the vision of the P1 kneeling at my side.

"Just fly like you did before and you'll be fine..." he said. It took several seconds to realise the significance of this pronouncement. This couldn't be true. I wasn't ready for going solo yet! In an upwards pitch of voice from baritone to contralto I squeaked, "I don't know if this is such a good idea – I'm not sure if I feel too comfortable about this!" My feeble protestations were overcome by the P1's quiet reassurances and the ring of smiling conspirators looking down at me.

The Supacat shot me forward and gave a smooth launch past 45kt, easing into the full climb at 50kt. Passing through 200ft with the wings level and on the way up something was badly wrong!! The aircraft felt heavy and mushy. There was no sensation of the normal climbing surge. The controls were slack and sloppy. The airstream had gone quiet. The winch power was fading...

A quick glance at the ASI showed the speed falling off through 38kt. A split second reaction was to put the nose down and I pulled the cable release twice. Particles floated around my face as I topped the hump. I pointed at the ground, kept the nose down until the approach speed of 55kt showed on the clock and then eased out of the dive. With the airbrakes fully out, I aimed at the old hedge line across the middle of the field. I let the speed build up to 66kt but I was committed and going in. I checked the speed and flared with the far boundary and winch coming up fast. There were some PIOs during the float so I adjusted the airbrakes and hit full airbrake at about 2ft to bump without dignity on to the deck. With the stick fully back I stopped 50-100 yards from the perimeter.



Julian is now flying Glyndwr GC's K-8 and gained his first Bronze leg at the Long Mynd in June.

Did I do the right thing? There was no way I was going to hang on to that launch at 200-250ft with the ASI falling through 38kt. Not once did the question of turning enter my mind. From up there, once I'd pulled off, I knew I could put it down in the space ahead – and I did. Maybe a more experienced pilot would have dog legged it down, hung on to a safer height, turned 180° and landed downwind. But I used my judgment, committed myself to a plan and arrived where I wanted to be – down and safe.

The long walk back to the launch point with the P1 helped to steady the nerves. I knew I had to complete that circuit to go solo and before there was time to hide away I was back in the

cockpit and launched. On landing, in the quiet moments before the arrival of the retrieve, I couldn't help shouting "You did it" and did a somersault of pure delight under the starboard wing – before anyone could hear or see me.

What lessons did I learn from my first solo attempt?

1. It can happen to you at any time.
2. There is very little time/height to mull over the options – you have to get it right.
3. My escape was marginal – slightly more height or a little less wind and I would have connected with the far perimeter had I landed ahead and not groundlooped and/or applied heavy skid.
4. Up there I remembered Mick Boydon's safety line – "Aviate, Navigate, Communicate" – and it helped.
5. Solo means there is no one up there with you to say "I have control". This concentrates the mind.
6. Glider pilots are miserly with the truth. I was the only person at the launch point who didn't know that I was to be sent solo!
7. The post solo celebration is expensive but worth every penny!
8. Now the real learning begins.

BOOK REVIEWS

Air Riders' Weather by Alan Watts. Published by A. C. Black, London 1992 at £14.99.

Alan Watts is very well known as a writer on nautical weather; he has written numerous books and articles for yachtsman. This is his first book for people who fly and is aimed primarily at pilots of paragliders and hang gliders.

The book is in two parts. The first deals not only with general meteorology but also the aerodynamics of various aircraft ranging from sailplanes to paragliders. The polar curve for a paraglider is most depressing.

The second part of the book is an ABC of Met terms with explanations. Much of this is very useful. The book contains many diagrams and photographs. A special section of 24 colour photographs of clouds with captions and comments separates parts one and two. Cloud photos can often be interpreted in more than one way and his suggestion that a pileus cap means that the cumulus will build into a very big cloud is not invariably true.

The author sets out to use simple terms and writes in a chatty style which sometimes takes a lot of words to convey a little information. Perhaps it is his nautical background which leads him to use the term "deck" where most people would say layer or level. His decks may mean boundary layers, inversion levels, flight levels (referred to as "Flying Deck") or even the entire troposphere stretching from ground level to the base of the stratosphere. He avoids the well known word "cumulus" and uses the dismal term "heap cloud" instead.

In earlier books (for example his **Instant Weather Forecasting**) he compiled elaborate tables for predicting the weather from personal observations. Similar tables appear in this book. They consist of several columns headed "sky now, sky was, air state now, likely to become," etc. Another table is entitled "Things that may change the wind". Anything worthwhile demands an effort from the reader and I found these tables quite hard work; there is a lot in them.

The book contains a wealth of interesting information. His descriptions of sea breezes, low level airflow and the effect of obstructions on the wind near the ground are very detailed. Unfortunately in his effort to make complicated matters look simple he has included some state-

ments on general meteorology which are not strictly accurate or, as in his comments on computer forecasts, no longer up to date.

If you are collecting a library of Met books this is an interesting addition to have.
TOM BRADBURY

Gliding Safety by Derek Piggott.

Published by A. & C. Black at £14.95 and available from the BGA at £15.95 including p&p.

Once in a while one reads a book which really stimulates. **Gliding Safety** is one of these books. It is geared towards helping instructors understand and solve their students' problems and therefore presupposes a significant degree of knowledge regarding principles of flight on the part of the reader. At times even a full Cat could be taxed! It did, however, initiate several heated discussions in our house along the lines of "if this is true, then ...".

Its first section on avoiding accidents is remarkable for the insights it offers – hands up everyone who knows which wing to hold on a crosswind winch launch and why. It dealt with accident prevention in situations ranging from ground handling and spin recovery to aerotowing and cloud flying, all in a responsible and in-depth manner. I found it fascinating and controversial.

The second section, "Moving on to other types of glider", was somewhat less thought provoking as it contained information found in a series of articles Derek wrote for *S&G* some time ago about which glider to buy. Even so, the chapter on polishing flying technique was super and I shall be putting it to use this season.

Section three, on "Better gliding instruction", is very valuable, as well it might be coming from Derek Piggott. I'm not an instructor, but I've flown with some of the best, and I thought his advice most useful (especially when giving guidance for aerobatics!).

The last part deals with power pilots converting to gliding, and while it might be outside the experience of many gliding instructors, it is certainly interesting reading.

Gliding Safety is an excellent book, at times controversial and at all times helpful. Its position on my bookshelf is next to **Be a Better Pilot**, and **Winning On The Wind**, in other words, proper bed-side reading. It will undoubtedly stir up exchanges of opinion, and healthy discussion, which leading to the acquisition of knowledge is never a bad thing.

MERRI HEAD

The Modern Soaring Dictionary – A Handbook on Soaring Jargon, 1993 edition, by John Roake and John Phillips and available at £8 from the authors – Private Bag, Tauranga, New Zealand (personal cheques accepted).

This 226 page book is already on its second printing after publication in August. It is quite a compendium of quips and quotes which go to make up the unique language of English speaking soaring pilots. It also has descriptions and line drawings of many sailplanes past and present together with much information on gliding in general.

MY DAY AT THE NATIONALS

By ALEX THOMPSON (née Joint), as told to Wally Kahn

I was really lucky – my godfather David Innes had lent me his Nimbus 7 and Steve Jones (whose son Ralph Jones Junior is engaged to my sister Jenny) as managing director of Amalgamated Soaring Suppliers Ltd – the old SAS, RD and SS companies had lent me all the new "SMART" instruments which would surely help me to win the National Championships.

But first I must set the scene. Ever since the "Junior Revolution" when we abolished the BGA Comps Committee and imprisoned the members for bias and incompetence, we the younger pilots had decided how to run the Nationals. Great uncle Ian Strachan had perfected his Mark 19 POST task which meant that the pilots met at the BGA AGM in January to set the various tasks to be flown.

I well remember Lord Rollings of West Drayton who made a rousing speech about airspace and then declared the Championships open. What a man – what a history!

Under the new rules, each pilot could choose her days and provided she flew the Strachan Mark 19 POST task, the results were faxed to the BGA office. At the end of the year, a clear winner will emerge.

I was determined to be that Champion. My father-in-law had never won. Ralph Jones Junior, soon to be my brother-in-law, came from a long line of Champions and my father Terry, who was the overall director of the contest, was equally keen for me to win.

The authors are both New Zealanders so it is not surprising that the content has a distinctly New Zealand flavour. John Roake is the editor of *Gliding Kiwi* and a vice-president of the International Gliding Commission, while John Phillips is the FAI awards officer for the New Zealand Gliding Association. Although the various entries are brief, and some are quite light-hearted, there is a great deal of serious, useful information. In fact there is something for every soaring pilot.

The authors realised the need to keep updating and correcting, so have decided to make the dictionary an annual event and have included simple updating pages (and order forms) which can be returned with the reader's suggestions. This means the addresses of the many organisations included should always be correct.

A dictionary review can clearly be aligned with a review of the telephone book as "a vast list of characters but no plot", so it's not a book to devour at one sitting. But as a source of information it is a useful addition to the soaring enthusiast's bookshelf.

ROSS MACINTRYE



N i m b

Alex wasn't always so happy in the cockpit as her father found out when he took this photo!

The Mark 19 POST task is really very simple. The first and last control point must be 50km from the start point. Thereafter there are only three mandatory TPs, only one of which must be used. The pilot can select up to 30 other BGA TPs during the flight.

The three mandatory TPs are Perth prison, the Needles and the Dogger Bank.

Now to MY day. The L/D of my Nimbus was 74:1 but as I was flying at 1550kg all up I managed to get permission to take off from Heathrow behind our 360hp Super Pilatus. Only Filton runway was longer but the conditions favoured the east side of the country.

I had programmed my Purnell "HOTCAT" (Hands Off Thermal Centring Automatic Turner), set my Matrix GPS TP personal calculator and fed the thermal strength/cloudbase height and wind speed figures into my on-board weather satellite up-date plotter.

Before take-off, I naturally checked that my thermal imaging sun-glasses head-up-display unit was working satisfactorily.

I will not bore you with "How I done it" details of the flight. As you will know, I rounded Perth at 1500hrs – the new winglets which made my ship 37.5 metres span gave me an achieved speed of 223km/h. From Perth, south was straight forward until I had rounded North Hill and was on the way home.

Until then I knew that I had Ralph Junior cold. I worked out that I would get one million points. I heard him land at the Mynd after rounding the Dogger Bank which only gave him 465 000pts. Then disaster struck. I had to land; no matter what I did and tried was useless. I knew Lasham had flush toilets, the mere thought made it worse. I landed there – damn men – it's not fair!

REGIONALS' RESULTS

EASTERN REGIONALS – Tibenham, Norfolk, May 29-June 7

Pos	Pilot	Glider	Day 1.31.5 153.9km	Day 2.2.6 101.1km	Day 3.3.6 187.2km	Total Points
1	Jones, S. G.	Discus	630	687	1000	2317
2	Walsh, A.	DC-400	632	702	873	2210
3	Le Roux, A.	K-6c	594	672	995	1961
4	Nash, J. & S. R.	Ventus	571	625	938	1829
5	Rice, P. E.	Libelle	369	581	703	1743
6	Gentry, A. J.	Discus	121	391	927	1439
7	Ryland, P.	PK 20	136	536	565	1237
8	Marsh, B. C.	ASW-24	625	695	453	1153
9	Raper, M.	Sport Vega	284	43	685	992
10	Vaysey, L.	ASW-15a	0	266	672	938
11	Warringer, A.	Ventus B	110	44	559	713
12	Kelly, N.	ASW-15a	131	64	550	745
13	Sargeant, B.	DC-400	115	233	170	527
14	Evans, I.	ASW-24	35	0	68	127
15	Duffin, P. D.	Club Libelle	0	0	122	122
16	Ciowes, N.	IS-30	6	0	78	84
17	Cunningham, E.	ASW-24	59	0	58	127
18	Abraham, R.	ASW-24	59	0	58	127
19	Wright, M.	Twin Astrir	57	0	DNF	57
20	Staff, D.	K-6c	12	0	3	15

DNF = did not fly

= penalty

Our thanks to the scorers who sent us results, especially Tim Newport-Peace of Specialist Systems for including all the information we need for these tables.

Sport Class

Pos	Pilot	Glider	Day 1.25.7 110km	Day 2.27.7 245km	Day 3.28.7 305km O/R	Day 4.30.7 154.8km	Day 5.31.7 120km O/R	Day 6.1.8 132km	Total Points
1	Bromwich, R. C.	LS-4a	304	1000	834	958	181	571	3948
2	Alison, R. W. P.	DC-300	206	880	880	512	498	510	3936
3	Robson, D.	Std Jantar	58	825	886	806	505	570	3652
4	Brook, M. F.	SHK-1	181	842	1000	834	147	605	3609
5	Kalin, R.	ASW-19	0	807	882	971	0	463	3123
6	Tillett, R.	ASW-15a	158	590	891	753	364	336	3062
7	Blackmore, R.	Puchacz	62	718	848	794	495	429	2944
8	Marriott, R. J.	Std Cirrus	245	—	844	—	44	—	—
9	Weatherhead, A.	—	—	886	—	930	—	0	2829
10	Sword, C. D.	Pegasus 101	30	718	886	584	275	413	2906
11	Pritchard, B.	Astrir	181	820	802	368	164	587	2842
12	Brightman, P.	K-6c	88	866	783	772	0	44	2533
13	Felmann, M.	ASW-19a	68	840	727	789	42	0	2464
14	Stott, B.	SHK-1	0	851	831	703	0	0	2385
15	Davis, K.	LS-4a	0	828	758	707	82	0	2375
16	Noad, S.	ASW-19a	32	134	376	773	802	258	2073
17	Griffin, B.	DG-100	0	790	355	785	0	98	2061
18	Donner, S.	Cirrus	0	561	382	402	0	0	1345
19	Murfit, R.	Astrir CS77	0	72	389	231	0	0	692
20	Antcliffe, S. N. R.	K-6c	0	0	54	148	0	0	202

LASHAM REGIONALS – July 25 – August 2

Class A

Pos	Pilot	Glider	Day 1.25.7 177.1km polygon	Day 2.27.7 317.4km polygon	Day 3.28.7 POBT	Day 4.29.7 204.8km	Day 5.30.7 196.2km	Day 6.31.7 380.2km polygon	Total Points
1	Jones, R.	Nimbus 4	905	1000	942	936	782	1000	5545
2	McCarthy, D. K.	Mini Nimbus	981	894	937	963	719	906	5400
3	Merritt, R. R.	Keatrel	856	758	1000	964	615	946	5139
4	Gunn, R. M.	Keatrel	1000	887	980	989	451	855	5092
5	Stratton, P. J.	Janus C	884	948	749	956	644	940	5003
6	A Court, J. W.	Discus	991	839	801	1000	418	427	4476
7	Bell, J. G.	Keatrel	844	848	904	864	515	483	4358
8	Redding, P.	PK 20c	256	999	785	922	509	875	4343
9	Gardner, T. R.	Nimbus 3	881	871	773	826	524	807	4282
10	Nunn, A.	Janet 1	554	806	846	706	557	853	4122
11	Ferguson, S. J.	Mosquito	389	696	744	875	455	934	4073
12	Watson, A.	Mosquito	845	251	798	750	628	475	3847
13	Macleod, J.	Ventus	638	827	582	728	511	431	3817
14	Murray, W. J.	Mosquito a	990	64	817	952	541	555	3719
15	Cousins, R.	ASW-20	707	764	274	938	477	502	3662
16	Hunt, T.	Ventus	585	118	853	722	584	852	3554
17	Brisbourne, R. P.	DC-200	562	0	818	818	515	481	2994
18	Harwood, H. K.	ASW-20a	268	556	420	739	348	161	2580
19	Matcham, K. S.	Nimbus 2c	495	0	93	613	502	367	2070
20	Laver, F. W.	Nimbus 3a	210	142	415	71	324	832	1994
21	Hoodman, J.	ASW-20	863	0	0	0	0	0	863
22	Hart, K.	ASW-20	863	0	0	0	0	0	863
23	Merritt, S.	Nimbus 3a	80	0	0	0	0	0	80

Class B

Pos	Pilot	Glider	Day 1.25.7 175.8km polygon	Day 2.27.7 225.8km polygon	Day 3.28.7 POBT	Day 4.29.7 173km	Day 5.30.7 163.2km	Day 6.31.7 304.1km polygon	Total Points
1	Devis, P.	Discus B	1000	978	950	1000	791	905	5624
2	Eade, D. J.	LS-4	747	962	836	981	619	828	4673
3	Fitchie, P. C.	LS-4a	949	978	719	757	718	848	4985
4	Sampson, S.	Discus B	882	786	706	770	685	1000	4809
5	Hyatt, C.	DC-200	851	947	702	635	604	845	4684
6	Healy, P. T.	ASW-19	963	972	882	840	881	4695	4695
7	Browning, T. P.	Astrir CS	853	826	640	827	752	924	4622
8	Briggs, R. C.	Pegasus 101a	851	912	856	707	578	879	4581
9	Copeland, D. D.	Std Cirrus	806	874	766	839	876	532	4513
10	Ellner, J. P.	Discus	859	552	578	872	722	803	4301
11	Smithers, J.	Grob 102	749	827	678	753	593	778	4176
12	Snow, A. R.	Discus	630	417	774	532	614	915	4088
13	Piggott, A. D.	Astrir LS	841	467	821	841	704	371	4045
14	Marczynski, Z.	STD-85	851	437	563	671	596	919	3997
15	Marsh, B. C.	ASW-24	429	900	735	222	612	815	3714
16	Mee, M. P.	LS-4a	647	448	503	620	485	683	3386
17	Elgasa, S.	Discus	486	442	415	813	573	505	3238
18	Shelton, P. M.	Discus	827	487	0	855	528	507	3205
19	Judkins, M. S.	G103c Twin 3	181	120	871	831	835	526	3164
20	Darlington, A.	Libelle H201a	923	438	508	762	203	298	3128
21	Wilson, G.	DG-101	486	468	563	503	438	473	2911
22	O'Donnell, P.	LS-7	372	0	249	878	688	487	2455
23	Cannon, P. C.	DC-300 Club Elean	30	384	287	581	531	434	2247
24	Todd, A.	ASW-20	96	87	238	486	500	529	1815
25	Pridal, B.	K-6c	20	301	0	505	368	294	1488
26	Devis, C. J.	ASW-20	240	0	104	216	246	48	975
27	Sole, L. J.	Cirrus	513	0	DNF	DNF	DNF	DNF	513
28	Hodgson, K.	Pegasus	423	DNF	DNF	DNF	DNF	DNF	423

(Lionel Sole grounded on Day 1 and then flew four hours on banded aircraft)

NORTHERN REGIONALS – Sutton Bank, July 25-August 2

Open Class

Pos	Pilot	Glider	Day 1.25.7 148km	Day 2.27.7 315km	Day 3.28.7 400km O/R	Day 4.30.7 168.5km	Day 5.31.7 168km O/R	Day 6.1.8 132km	Total Points
1	Whitehead, P.	Ventus	154	977	843	783	487	551	3795
2	Walker, P.	LS-7	9	1000	903	895	233	851	3491
3	Gatfield, L.	ASW-20a	81	602	843	277	668	981	3302
4	Ashcroft, J. P.	LS-7	9	765	915	734	190	808	3297
5	White, D. A.	Vega 17a	92	829	858	646	654	96	3175
6	Hunt, S. G.	LS-7	7	782	1000	748	853	0	3168
7	Sharp, D.	Keatrel 19	23	818	880	596	661	58	3034
8	King, R. A. F.	ASW-20a	80	893	813	746	264	232	3028
9	Nash, S.	Ventus B	—	—	527	—	477	—	—
10	Nash, J.	—	—	477	—	835	—	628	2832
11	Roberts, P. L.	DC-200-17	60	818	758	95	487	585	2803
12	Ramsden, P.	Keatrel 19	68	682	796	582	21	658	2797
13	Robertshaw, S.	ASW-20a	31	706	540	513	492	505	2787
14	Ellis, J.	DC-500a	89	777	518	481	285	635	2775
15	Collingham, C.	ASW-20	27	740	857	588	640	214	2746
16	Burton, A. J.	LS-6c	102	733	947	783	80	0	2645
17	Osbourne, P. J. E.	ASH-25	108	689	628	699	177	0	2500
18	Griffiths, P.	LS-7	39	785	390	624	0	649	2487
19	Truman, A.	Keatrel 19	23	804	471	568	438	58	2420
20	Taylor, D.	Diamond	0	895	559	117	204	649	2224
21	Green, G. R.	DC-500-22	21	657	468	373	171	463	2194
22	Turner, P.	Keatrel 19	0	818	538	519	284	109	2048
23	Ryland, P.	PK 20	0	732	508	540	8	77	1865
24	Northmore, R.	Janet 1	0	109	739	475	258	0	1581
25	Rice, J. W. R.	Speed Astrir	54	797	183	435	20	8	1495
26	McWhirter, A.	—	70	—	537	—	91	—	—
27	Grinter, A.	—	0	—	—	444	—	0	1142
28	Moore, G.	ASW-24	18	0	0	0	0	0	18

INTER-SERVICES REGIONALS – RAF Abingdon, August 4-13

Sport Class

Pos	Pilot	Glider	Day 1 237.1km	Day 2 312.1km	Day 3 95.5km	Day 4 220.4km	Total Points
1	Miller, A. B.	LS-4	968	934	20	881	2803
2	Logan, M. W. B.	Ventus	900	928	9	791	2628
3	Stingemore, G. P.	Discus	968	1000	11	582	2569
4	Gordon, D. J.	Discus	786	787	11	770	2334
5	Browne, R. A.	LS-6c	959	778	12	575	2322
6	Franks, D. P.	Discus CS	836	637	12	566	2253
7	Tribe, A. D.	LS-4	733	813	12	860	2218
8	Housden, S. R.	LS-3-17	734	855	9	538	2194
9	Barley, P. R.	Discus	840	755	11	578	2184
10	Loraine, D. D. A.	Discus	861	638	9	832	2140
11	Pike, M. I.	ASW-19	395	902	21	751	2069
12	Ellis, P. R.	Discus	488	770	16	814	2068
13	Evans, R. M.	Discus	722	723	19	580	2044
14	Harrie, A. R.	Astrir CS	829	945	34	235	2043
15	Critchlow, M.	ASW-24	455	951	12	606	2

REGIONALS' RESULTS

MIDLAND REGIONALS - Husbands Bosworth, August 8-16

Pos	Pilot	Glider	Day 1 8.8 191.7km	Day 2 13.8 344km	Day 3 15.8 130.2km	Day 4 16.8 116km	Total Points
1	Cribb, S. J.	LS-7	890	871	944	688	3384
2	Jordy, M. J.	ASW-20c	586	1000	912	507	3005
3	Booth, D.	DG-300	541	985	745	654	2885
4	Pozarski, A.	Pegasus	877	877	105	857	2576
5	Meagher, M.	Pegasus	304	825	783	556	2568
6	Fritche, P.	LS-4	282	868	579	555	2384
7	Wright, R.	Discus	324	872	527	588	2322
8	Foster, D.	Std Cirrus	250	807	456	588	2101
9	Pozson, A.	Sport Vega	640	519	348	450	1995
10	Middleton, H.	Discus	516	—	—	—	1842
11	Shaw, K.	LS-4	348	88	865	638	1939
12	Dixon, R. H.	Keel 16	52	588	818	466	1915
13	Scott, K.	DG-200	25	474	787	810	1899
14	Woodhouse, I. C.	LS-4	0	531	878	33	1742
15	Davidson, R.	LS-4	0	754	323	850	1807
16	Westwood, D.	Libelle	631	427	30	429	1523
17	Thomas, G.	Pegasus	257	585	588	59	1479
18	Smith, G.	ASW-19	282	363	204	620	1469
19	Wesley, J.	Libelle	337	506	0	0	1459
20	Wesley, J.	Discus	203	355	0	890	1183
21	Asquith, D.	DG-400	883	286	DNF	DNF	1179
22	Palmer, B.	Venus CT	213	745	0	DNF	988
23	Fairman, K.	Keel 19	0	61	140	427	628
24	Shaw, R.	Std Cirrus	83	435	0	99	617
25	Kangas, A.	Pegasus	257	0	109	127	403
<i>Hours concurred</i>							
1	Kirton, W.	LS-7	DNF	DNF	DNF	536	536
2	Toulson, B.	Vega	0	426	DNF	DNF	426
3	Cheetham, H.	DG-600	300	DNF	DNF	DNF	300

DUNSTABLE REGIONALS - August 22-30

Pos	Pilot	Glider	Day 1 23.8 219.2km 3 legs	Day 2 25.8 180.1km 3 legs	Day 3 28.8 POST	Total Points
1	Macpherson, D. J.	ASW-20	941	518	1000	2459
2	Thick, M.	ASH-25	887	408	949	2144
3	Bird, M.	ASW-22	767	548	726	2042
4	Jordy, M. J.	ASW-20c	1000	241	782	2003
5	Starr, D.	Keel 20	800	525	541	1866
6	Corbett, C. G.	Venus C	905	437	808	1850
7	Hurd, P.	Vega	920	0	640	1560
8	Spencer, J.	DG-400	740	90	695	1485
9	Tennar, D.	Vega	860	—	682	—
10	Lyons, B.	ASW-20c	822	110	—	1452
11	Nicholson, B.	Nimbus 30	750	130	399	1276
12	Newland-Smith, M.	ASW-20c	529	79	566	1173
13	Middleton, B.	LAK-12	758	129	227	1115
14	Bell, G.	LS-3	457	198	240	895
15	King, R.	ASW-20c	302	164	357	823
16	Russell, F. K.	Glaesigol 904	429	0	231	660
17	Bolton, M.	ASW-20	2	0	226	226

Blue Class

Pos	Pilot	Glider	Day 1 23.8 219.2km 3 legs	Day 2 25.8 180.1km 3 legs	Day 3 28.8 POST	Total Points
1	Durham, M. W.	LS-7	838	301	976	2115
2	Smith, G.	LS-7	744	126	1000	1870
3	Parker, S. J. C.	LS-7	719	188	852	1769
4	Brics, P. F.	ASW-24	637	140	971	1748
5	Jeffries, J. J.	K-21	703	169	836	1707
6	Downham, E.	LS-7	668	0	972	1640
7	Morris, B. C.	LS-7	682	80	880	1632
8	Lamin, R.	Discus	696	58	870	1625
9	Craig, G.	LS-4a	691	890	1581	1561
10	Watt, C. C.	Std Cirrus	776	35	766	1577
11	Angell, J. A. T.	SZD 85	590	147	747	1484
12	Chapman, J. C.	LS-7	—	75	—	—
13	O'Donald, P.	LS-4a	674	25	709	1471
14	Westwood, D.	Libelle 201	608	0	751	1360
15	Craig, W.	Cirrus 17.7	568	0	788	1354
16	Roberts, M.	ASW-15a	—	34	—	—
17	Tillett, R.	—	550	—	714	1268
18	Freestone, I.	Pegasus	526	38	601	1185
19	Beardley, G.	LS-4a	364	19	785	1138
20	Strithern, M.	LS-7	484	171	453	1088
21	Lamb, D.	LS-4a	495	—	—	—
22	Elgee, S.	—	—	0	492	967
23	Knight, R. J. S.	LS-7	553	37	383	973
24	McCoehm, J.	Pegasus	450	29	386	874
25	Rebeck, H.	K-23	20	73	529	622
26	Woodman-Smith, M.	ASW-15a	98	—	—	—
27	Woodman-Smith, M.	—	—	36	472	606
28	Moore, G.	Pegasus	0	0	578	578
29	Morris, E.	K-23	20	0	551	571
30	Zewiler, T. B.	ASW-34	501	28	0	523
31	Warr, A.	K-23	14	42	438	494
32	Ward, R.	K-21	14	0	475	489
33	Thompson, M.	R-6c	18	0	457	475
34	Cornell, D.	Twin Astir	414	18	0	424

INTER-SERVICES REGIONALS - RAF Halton, August 22-30

Pos	Pilot	Glider	Day 1 23.8 127.8km	Day 2 25.8 135.8km	Day 3 28.8 211.7km	Total Points
1	Pitchfork, G.	Astir 77	408	167	884	2057
2	Berlinger, J.	K-21	444	67	945	1300
3	Gault, R.	K-21	307	115	1000	507
4	Arnold, J.	Astir 77	554	54	700	2045
5	Deen, M. J.	Astir 77	392	107	887	840
6	Somerville, A.	K-21	289	67	797	152
7	Mason, A. D.	Viking	326	22	680	2362
8	Joly, C.	Astir	48	119	723	2143
9	Kirschner, M.	ASK-21	159	57	654	1816
10	Mathews, G. U.	Astir CS	0	18	735	915
11	Hersheghem, M. J.	SZD Junior	19	0	708	2238
12	Hart, C. J.	Astir CS	31	34	592	2337
13	Sharp, K. R.	Astir 77	322	4	299	2240
14	Harper, S. J.	Astir CS	19	122	303	2349
15	Lavender, J. J. D.	SZD Junior	0	57	378	2381
16	Peck, J. D.	DG-100	39	38	287	1220



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WAY OFF TRACK

Merri's future progress ...

Having once shared ownership with John Rolls, and others, of a Std Cirrus I hesitate to enter into dispute with such an agreeable and amusing syndicate partner and safari companion. But insofar as I understand what he was asserting in the last issue, p249, in saying "TV, as we all know, isn't 'user friendly' in our gliding cir-

cles" he seems to be saying that it is difficult to get gliding featured in TV.

Spherical objects, John! Horse feathers! TV magazine producers are *always* desperate for highly visual and appealing images. Getting gliding on screen, at regional level if not nationally networked, is as easy as falling off a log – given the right attitude by clubs and, crucially, a helpful and friendly approach by members when a TV crew arrives.

Similarly, steam radio and printed media. Show me a regional or local paper, or an intelligently selected magazine, which won't jump at the chance of an illustrated feature on gliding from time to time. I doubt if one exists.

The failure which John perceives of gliding to attract and hold more adherents has nothing to do with the level of promotion, or otherwise, by the BGA at national level. The sport's growth is dependent, and rightly so, on promotion within their own catchment areas by individual clubs and the attitude of each club's individual members.

And I have occasionally seen such offensive, rude and sheer unwelcoming behaviour by some enthusiasts towards visitors, including the media – though never on this side of the water, I hasten to add – that their failure to attract and hold members needs no other explanation.

John's letter raises a key question, however; to what extent do we want the movement to grow? We could certainly use more members over here. But in the busier airspace of main-

land Britain and with clearly overloaded facilities evident at some of the more obvious centres, is the movement equipped and able to handle substantial growth?

It would certainly require more sites – and as the move of an established club like Bath & Wilts clearly shows (also in the last issue) that won't be achieved without considerable pain, given the extent of anti-aviation hysteria which exists in some parts of Britain but of which we, again, are mercifully free over here.

Back to John Rolls' point about promotion and the role therein of the BGA; Merri Head's main challenge in publicising soaring does not lie in overcoming a lack of media interest but in ensuring that her best efforts are not frustrated by the thick, arrogant and uncouth present on some gliding sites.

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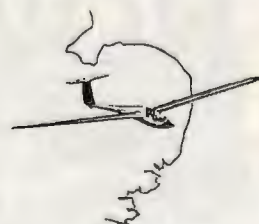
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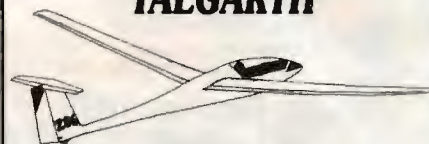
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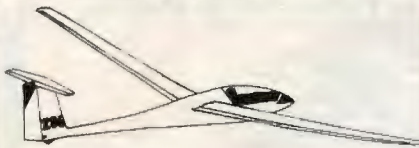
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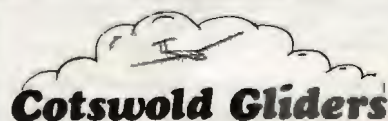
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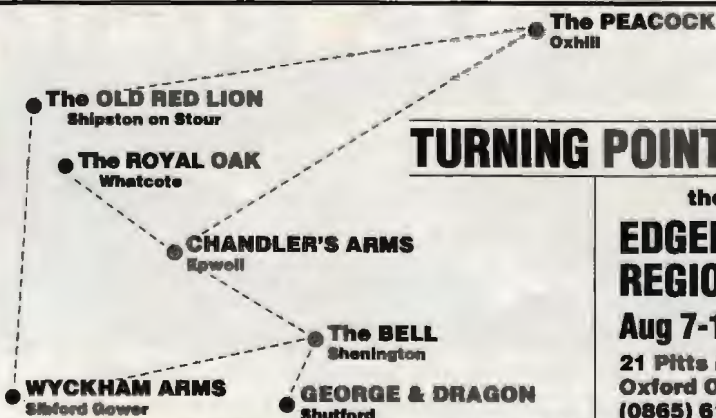
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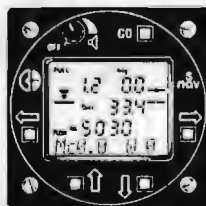
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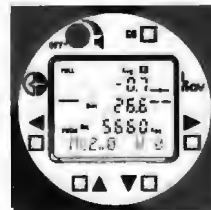
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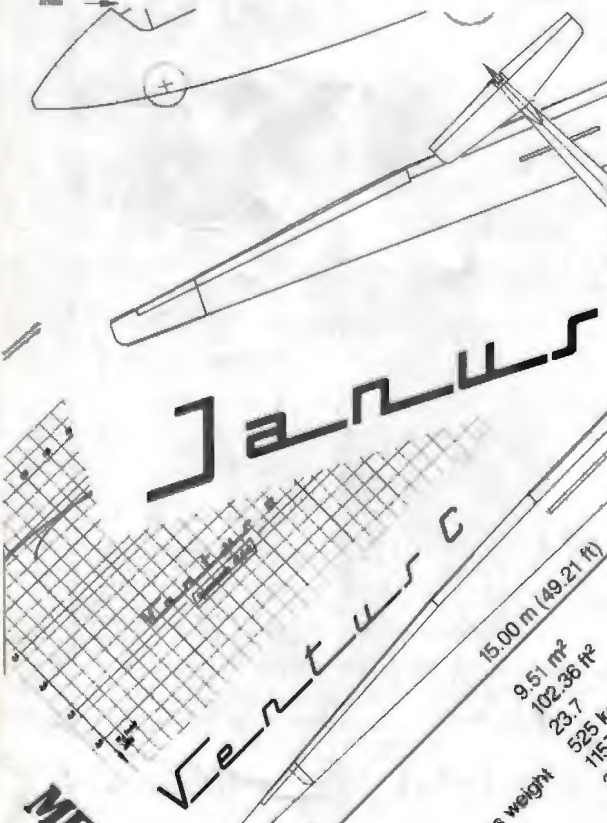
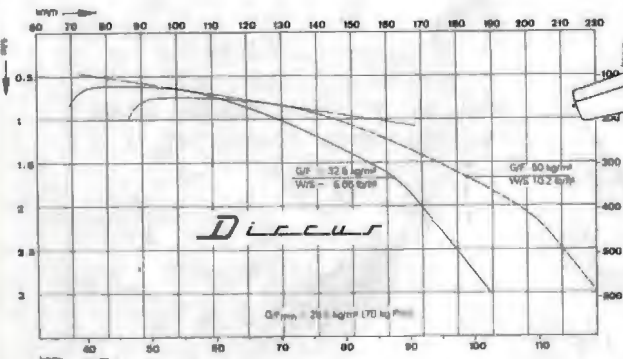
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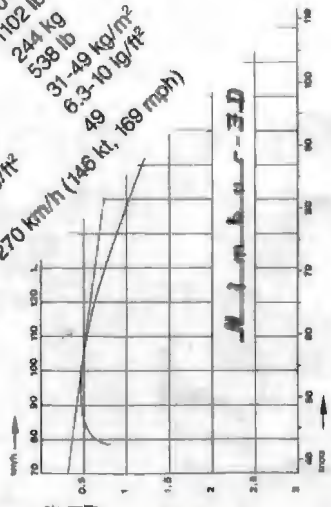
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	270 km/h (146 kt, 169 mph)	



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Aspect ratio	36	36
Max. permitted gross weight	1653 lb	1764 lb
Empty weight approx.	1069 lb	1168 lb
Wing loading	6.9-9.1 lb/ft ²	7.4-9.7 lb/ft ²
Minimum sink rate at 47 kt (54 mph)	89 fpm	95 fpm
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