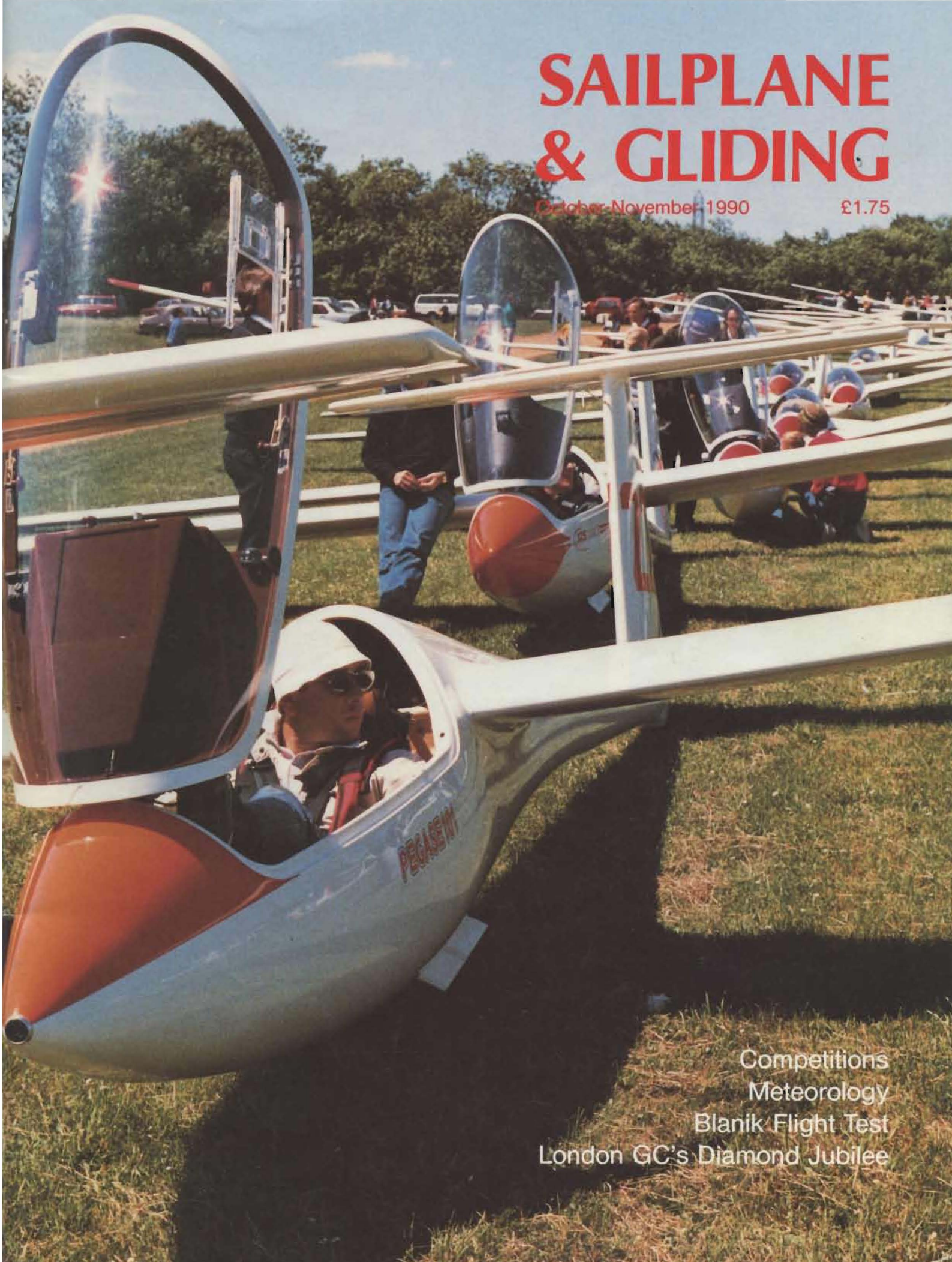


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EDITOR
Gillian Bryce-Smith
281 Queen Edith's Way, Cambridge, CB1 4NH
Tel 0223 247725
Fax 0223 247725

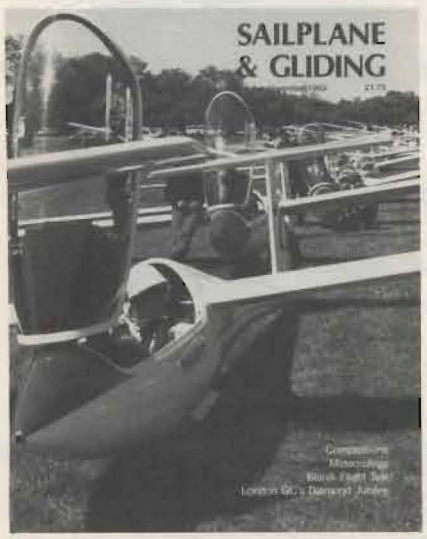
CONSULTANT EDITOR
Rika Harwood
66 Maisemore Gardens, Emsworth, Hants, PO10 7JX
Tel 0243 374580

SUBSCRIPTIONS
Bev Russell
BGA Office

COMMITTEE
A. W. F. Edwards (Chairman)

ADVERTISING MANAGER
Helen Richie
Cheiron Press Ltd
241 Desborough Road, High Wycombe
Bucks HP11 2QW
0494 442423

PUBLISHER
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Cover: The grid at the 1988 Standard class Nationals at Nympsfield photographed by Amanda Deadman. Brian Forrest in a Pegasus is in the foreground and Chris Garton and Justin Wills can be seen in the background.

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YOUR LETTERS

A LESSON FROM AUSTRIA

Dear Editor,

I have been following the correspondence concerning the frustration of "wrinklies" faced with long waits at gliding clubs (June issue, p119). I am 66 plus and still working. I have spent long hours of waiting in RAF flight huts/crew rooms and find it difficult to accept the edict that if you aren't prepared to spend long periods waiting to fly, gliding is not for you.

I am able to have days off during the week but curiously it is very difficult to find anywhere to fly on non-peak days. The nearest I have got at several clubs I have investigated is roughly - we often run courses during the week and you might be lucky if there's an aircraft available.

Having loved my time on Hurricanes and Spitfires in the 1940s, I have taken up gliding with immense pleasure. In three years I have put in 70hrs on annual holidays in the Austrian Tyrol. When flying is possible I can book the day before and there is virtually no waiting.

I flew many hours on Austers, Cubs and Aeroncas in the 1950s. The Austrian club invited me to take my PPL and eventually to tug, being paid an allowance to do so. On suggesting in England that for wrinklies and young mums a weekday tug pilot could be organised, I was told that I, for instance, would have to pay a further £150 subscription for the privilege.

The Austrian club has several professionals on the books and top standards of instruction. If it can be made to pay, whilst providing the greys, wrinklies and young mums with painless hours aloft, surely Britain should be able to do the same.

"ANCIENT AVIATOR"

WHY NOT *HAVE WOMEN'S COMPETITIONS?*

Dear Editor,

I agree with Dave Watt that, in a perfect world, there should be no place for all-women's gliding competitions and events and that women should participate and compete on equal terms with men. (See letter in the last issue, p173.) Sadly, although there would seem to be no physical factors placing women at a disadvantage, the fact is that there are very few women taking part in our sport. I touched on some of the possible reasons in my article "Women in Gliding," in the April issue, p71. (Dave may have been one of the men who did not read it, believing it to be irrelevant to him.)

The BGA Women's Working Group is now investigating the causes of women's low participation in more detail and in due course we hope to see many more women, *ie* more people taking up the sport and doing well in it.

In the meantime we believe it is still appropriate to give extra support and encouragement to this minority group, in the same way as the juniors have been given encouragement by the introduction of the Junior Nationals. Women who feel confident and able to compete against all comers will no doubt continue to do so and we are pleased to see them succeed. No one can or should be forced to compete in women's competitions if they don't wish to do so.

I hope that this competition and other events like it will help to develop women's flying to the point where women are truly competing on equal terms. At that time, these events may well disappear, having served their purpose. In the meantime, they are beneficial to some people and are not detrimental to the gliding movement in general or to Dave in particular. Let them continue on that basis for as long as they are needed.

DIANA KING, Solihull, W. Midlands

Dear Editor,

I don't think we need to apologise to Dave Watt for hosting the 12th European Women's Gliding Championship next summer, despite his evident disappointment at not being eligible to participate (short of undergoing minor surgery).

Possibly Dave and his gentlemen colleagues in the self-perpetuating oligarchy that we subsidise year after year to represent the UK (and Guernsey) in the World Championships have lost sight of the reason most of us take part in the sport. It is wonderful fun to take part in a competition. That's why I do it, despite an impressive record of consistent mediocrity.

Sure, women may participate on an equal basis with men - in gliding, in sailing, in horsemanship, where physical brawn counts less than skill and brains. Women would like to participate on an equal basis in the 1000 wealthiest people in Britain as well, but there are very few of us there, except HM the Queen, and she wisely lets her menfolk play with *her* aeroplanes.

When women are equal to men in income, spare time, and freedom from family responsibility, the cream will truly rise to the top and you will get used to the phenomenon of winning women. Meanwhile, Dave could learn quite a lot about team flying if he followed the German girls round a task or two.

MARY MEAGHER, *Oxford*

Dear Editor,

I read Dave Watt's letter with very mixed feelings. I entirely agree that men and women can and should compete equally in gliding since physical differences do not prevent it. But we are not there yet.

Women don't come to gliding with an equal start. We have many difficulties and prejudices to overcome, often operating in our own heads. We have to break out of long standing social patterns to feel that we are justified in spending large amounts of time and money on a non-productive hobby outside the home.

For women with children, biological drives seem to form a barrier. Many women pilots experience reluctance to take risks when they have small, very dependent people waiting at home.

They need a little encouragement and women's competitions may be an interim measure to help the competitive to enjoy their sport to the full. We have so few women in gliding it would be nice to look towards a more balanced membership in future.

Women must represent a great potential source of new recruits so do please give us that little extra encouragement until society in general catches up with Dave Watt's egalitarian views.

BRONWEN TAYLOR, *Midland GC*

RIDGEWELL OATLEY

Dear Editor,

Following the letter in the last issue, p175, from Frank Holmes I would like to point out the limitations of the Ridgewell Oatley site. Over five years the original club averaged 1750 launches for never better than 200hrs with the membership varying between 14 and 50.

The site length (900m) limits the launch height and doesn't allow for landings behind the launch point. Also the limited width means a glider that has landed will hold up the next launch until moved clear. Launching has to be efficient, *eg* a two drum winch with the second glider being launched before the first one conflicts.

Based on national average figures for a 50 member club, you need an annual minimum of 2500 launches which have to be high enough to contact thermals. Unless using people and gliders from other clubs, it takes three to five years to build an adequate operation, avoiding the treadmill of too many *ab-initios*.

The investment in equipment is also quite critical. A hangar is essential for maximum flying time; a high performance two drum winch for efficient launches and you need at least a K-7 or K-8. The potentially high rent (a target of £10000/year) would be almost impossible with a 50 member club.

It is difficult to see how a club could be viable unless the site can be increased to create 5000 plus launches and a 100 to 120 membership. Also long term security is important.

I have endeavoured to be realistic in my appraisal so that any plans stand a reasonable chance of success.

BILL SCULL, *BGA director of operations*

KEN RECOGNISED A NEED

Dear Editor,

Regarding the review by Bernie Morris in the June issue, p121, of Ken Stewart's **Basic Exercise Notes for Gliding Instructors,** I would like to make the following comment.

When I arrived at Lasham two years ago I was checked out by the BGA to make sure I was able to run instructors' courses at Lasham the BGA way, having been used to the RAFGSA method. I was told that the BGA training manual was due out within a couple of months but since then there hasn't been any news of BGA help on this matter.

Ken Stewart on the other hand recognised a need for some form of help to the newly qualified instructor, *ie* a basic *aide memoire*. As he is often asked by the BGA to help on instructors' courses I am sure he has seen some of the many shortcomings of the course and produced this aid to help these people.

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including students who also find it very helpful, and as the BGA don't stock it, readers may buy it from us during office hours.
TERRY JOINT, *CFI, Lasham Gliding Society*

IN DEFENCE OF KEN'S PUBLICATION

Dear Editor,

I was incensed to read Bernie Morris' abject dismissal of Ken Stewart's **Basic Exercise Notes.**

This work addresses a gap unfilled since Ann Welch's **Flying Training in Gliders,** and within the limitations set out by Ken himself in his introduction its contents could be of real value to many instructors, particularly those who have not had the benefit of recent BGA training.

In terms of format, legibility and lucidity, Ken's publication puts to shame the BGA's paucity of printed offerings on the subject of instructing. Mr Morris may be well advised to put his own glasshouse in order before hurling bricks at others.
TONY HOUSDEN, *CFI, Cotswold GC*

DANGEROUS TECHNIQUE

Dear Editor,

I was horrified to read in the AAIB Bulletin 5/90 that a gliding club had adopted a technique of having their Pawnee tug descend in a series of tight turns inside the stall buffet. It doesn't seem to have occurred to anybody that descending in this fashion in a crowded circuit could only have had one result if violent avoiding action had had to be taken.
MIKE USHERWOOD, *Huntington, York*

THOSE COMPLAINING YOUNGSTERS

Dear Editor,

I was greatly distressed to read the letters in the last issue, p177, alleging mistreatment of young members, which plainly - if true - is a grave problem.

However, since I suspect that I am the instructor who "stole"! 1000ft of aerotow, who couldn't stay up for 15min and who "ordered" log-keeping to be done, may I defend myself?

I've done about 2000hrs and although I enjoy instructing I have to admit that not every flight is perfect. In fact after six or seven consecutive trips I wouldn't mind doing the log for a bit - except that my writing's too bad, and of course there sometimes aren't enough instructors to go round.

I like soaring, too (better than the horrible frightening circuits and hopeless landings students often give you) but sadly I have noticed that not enough stall/spin training goes on before solo, and so sometimes I concentrate on that. After all I'm not there only to give the student a good time.

The latest BGA instructor training recommends a target figure of 100 plus stalls and 50 plus assorted spins before soloing and I think that's about right: it does take a few more launches (some of them only 5min!) but the pilots are much better trained.

Teaching aerotowing (and often circuits) can be tricky, too. If the student hasn't got the point then you can save a lot of time and money in the long term by taking over and re-demonstrating - but of course it's not always popular, and never popular with bright youngsters.

I'm glad Amir-Reza is happy at Lasham. When he's an instructor in a few years time I'm sure he'll understand the process a bit better.
ONE OF THE LESS YOUTHFUL

IN SEARCH OF NON-GLIDING HUSBANDS

Dear Editor,

On the subject of Platypus's article in the June issue, p136, as I'm "out of current practice", and as the soaring has been so poor this year, I wondered where limitless supplies of non-gliding husbands exist, prettying themselves up, bored, awaiting the return of their nimbi'ed loved ones? Eager to give their favours to any passing female pilot! I've heard ****er has a large percentage of female pilots, so perhaps I should book a course for a non-soaring week.
JENNY PRAGNELL, *Isle of Wight*

WAS IT AN OPPORTUNITY MISSED?

Dear Editor,

I made a special point of watching "Liftin' The Blues" on Channel 4 on July 13, as *per* instructions in the BGA Newsletter, and found it a complete misnomer as none of the participants seemed to be enjoying themselves one little bit.

Those of us already in gliding know about 95% of glider pilots never enter serious competitions and don't have even a quarter share in a £30000 glider, but we do manage to "wiffle" round a few kilometres in our aged glass or timber relics. Surely if the idea was to promote gliding to a wider audience (was that the idea?) a broader spectrum of our activities from high wave flying in Scotland, hill soaring in Wales or the real epic flight of a T-21 managing a 300km (with all the occupants actually enjoying a not too expensive, totally different, hobby) would make a potentially spectacular and very absorbing film.

Instead we were treated to what seemed a very long Discus commercial with very few human interest breaks. Was this a rare opportunity missed or have I missed the point?
CHRIS PRICE, *Hove, Sussex*

WAKE TURBULENCE BEHIND CU-NIMS

Dear Editor,

By now everyone should know, or at least ought to know about wake turbulence behind large aircraft taking off or landing so I shall not go into that now. If in doubt ask your CFI about it.

What I would like to point out is that cu-nims are a much more serious cause of wake turbulence, because they are much larger, much more powerful and may persist for a long time after the cloud has either dispersed or moved on. A cu-nim is just an enormous thermal which can contain as much energy as one third of an atomic bomb. As the air within it ascends, precipitation occurs, but as the updraught may exceed 100mph it is carried up to the top of the cloud where the air is thinner and the rain or hail falls faster. In fact as fast as the air is coming up and just accumulates there until the updraught packs up. If you fly a glider through this part you will find that streams of water find their way into a cockpit which is normally quite dry, almost as if you were underwater.

As the anvil builds up the insolation is cut off and this together with the vast weight of water in the cloud causes a reversal of flow so that now the air may descend as fast as it previously climbed. A cubic nautical mile of air weighs five million tons and a big cu-nim can be ten to one hundred times more than this, so when it is set spinning it forms a pretty efficient flywheel since the amount of drag is small, as the surface is small in relation to the volume.

The practical effect of this is to create vast areas of up or down which appear to bear no obvious relation to the appearance of the sky. I can't pretend that I know how to handle this problem since I have been caught out by it often enough. What I can only suggest is that you should fly across the weather rather than with it.

This may sound rather mysterious advice but in practice it is usually obvious enough which way the weather is moving, but watch out. The effect may occur again on the other side, so when you find the rising area fly along the weather until you have loads of height in hand. If you are forced to land in these conditions do a careful crosswind leg across the field where you intend to land to make sure you are going to land upwind. **You** may get a nasty surprise because you may find yourself obliged to land in the opposite direction.
BRENNIG JAMES, *Marlow Common, Bucks*

SAFETY? YOU'RE KIDDING!!

Dear Editor,

Am I the only one to be continually irritated by the authors of sciolistic articles on safety, seemingly designed to make devotees of gliding feel vaguely uneasy whenever they participate in their chosen recreation?

While the guest of a friendly group of Cyprus parachutists they convinced me, gently and with great tact and good humour, that without training it was almost impossible to (a) successfully exit a stricken glider, (b) orientate oneself sufficiently to pull the ripcord and (c) descend safely under the open canopy.

Subsequently, my inquiries into the facilities available in the UK led to the surprising discovery that "regulations" forbade the training and experience I sought. In other words if, as an assistant instructor, I or my students draw the short straw, nobody gets upset provided the right coloured pieces of paper are on file. I recognised that, stripped of its verbiage, I was being told that I was too old at 56 for the system to bother about (no money in it, you see), so I complained to "a senior BGA official" about what appeared to be an inexcusably casual attitude to general safety. The BGA's ➡


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attitude was that it could not become involved in a "personal vendetta!" Safety, gentlemen, is not a personal vendetta except in the context that I believe my students are entitled to the best instruction it lies within my power to give.

This preamble is necessary to explain my view that the article in the June issue, on "Lightweight Pilots", p133, is remarkable for the omission of the one single absolute cause of the three fatalities:

Conclusion 9. The pilots were unable to successfully extricate themselves from their stricken gliders due to the absence of basic training in the discipline.

I believe this is where we came in!!
JOHN G STORRY, *Boston, Lincs*

Bill Scull, BGA director of operations, replies: I'll start by not taking offence at the comment, "sciolistic". Like John we are all doing our best to "make it safer" by increasing awareness of a particular problem. However, he raises some perfectly valid points which have been exercising our minds for some time. Regarding successful exit, deployment and descent there have been many more successes than failures. Further:

1. The pilots in question would almost certainly not have been able to exit the glider in time given the height available and the glider's attitude, speed and flight path.
2. So far as training is concerned even the RAF no longer go so far as to have their pilots actually jump; the risks incurred in training cannot be justified. Past experience of glider pilots, admittedly limited, supports this philosophy as does the number of successful emergency bale-outs compared with the failures.
3. Another philosophy worth consideration is the possibility of a requirement to always carry a parachute. Arguments against are limited launch height, parachute wear-and-tear and longer to prepare for launching (in the training role), cockpit load limits, etc. None of these are valid if you need a 'chute and don't have one!
4. So far as training is concerned the basics of care and maintenance, how to put it on and adjust the harness, how to get out (canopy jettison), deployment, the parachuting position and landing are all fundamental. With this in mind I believe that any pilot donning a 'chute rehearses this sequence in his mind, albeit subconsciously.
5. Finally, we have been trying to raise the money to produce a video dealing with most of the above points. Nothing forthcoming from the manufacturers so far!

DOUBLE DIAMOND FOR MIKE

Dear Editor,

If Mike Cuming wants a new challenge – something that is as difficult to get as a Diamond badge was in 1965, then please ask him to come and attempt a 100km triangle at Cockhill. (See the last issue, p173.)

A Double Diamond awaits him – whatever the outcome of his attempt!
JOHN MITCHELL, *Blackpool and Fylde GC*

NECESSITIES FOR SURVIVAL!

Dear Editor,

What a terrifying thought to be stranded suddenly at 20 000ft over the wastes of Dartmoor, stretching as they do over a radius of as much as 100nm. What would you do without your water purifying tablets? Where could you go? In a sailplane with severely degraded performance of, say, 20:1, and nil wind, you've only got 75 miles or so in which to check off the items in your survival bag. Gulp. You may not be able to reach the Scilly Isles, Cherbourg or even the Isle of Wight, so Peter Williams' list in the June issue, p121, is by no means comprehensive enough.

Where's the shark repellant, mackerel line and outboard motor? For higher performance machines and those odd days when the wave is associated with wind, where's the Linguaphone? Discus jockeys might care to include travellers' cheques sufficient to cover dinner and cabaret for two at the Folies Bergere so that they can stay warm, dry and alert while they wait to be rescued.
JULIAN ROACH, *Welshpool, Powys*

IN DEFENCE OF JOURNALISTS

Dear Editor,

I feel I must take issue with Platypus over his virulent attack on British journalism. (See the last issue, p190.) He tars all sectors of the British press with the same brush – and, granted, there is a large part which thoroughly deserves his wrath.

His blanket criticism does except "one or two aviation specialists", but I would contend that there are many responsible newspapers and journalists, most of whom have little other than superficial knowledge of aviation matters, but are quite able and willing to provide balanced reporting – if someone takes the trouble to provide the information in a manner they can easily assimilate and transcribe to paper.

In an attempt to ensure informed and accurate reporting it would be appropriate for all aviation groups, whether concerned with gliding, general aviation, hang gliding, etc, to ensure that at least one well informed member of their club is nominated as a contact for the press. Any editor, particularly in the regional and weekly press, would be delighted to have that special type of knowledge available to him.

I must finally give an example of responsible British journalism – which I can assure all your readers is still alive and well all over this country. The area in which my company's newspapers circulate recently suffered the loss of a Shackleton aircraft and its crew from RAF Lossiemouth. Platypus referred obliquely, I believe, to this crash and I do entirely agree that some of the reporting and headlines which followed this incident were ill-informed and at times verged on the malicious in suggesting, without a scrap of evidence, that the aircraft's age was a factor.

I am happy, however, that the papers I publish take a responsible attitude to all reporting, not just on aviation matters. I am proud also that we have a letter dated May 11, 1990, from the CO of RAF Lossiemouth to one of my editors which reads in part: "May I thank you most sincerely for your discreet and sympathetic coverage of the recent tragic loss of our No 8 Squadron Shackleton and crew. Your editorial, in particular, was both sensitive and moving; a great support to the bereaved families and to my Station personnel".

Not all journalists are responsible or insensitive when it comes to aviation reporting.
STEPHEN YOUNG, *chief executive, The Moray & Nairn Newspaper Co and chairman of Highland GC*

POOR STATE OF PARACHUTES

Dear Editor,

Over recent years a number of emergency parachutes have been brought to us by glider pilots for examination, servicing and repacking. In many cases the assemblies had no record of recent or adequate servicing and, of far more concern, had they been used in that condition it is probable there would have been a serious malfunction. Most of the parachutes were in use until examined.

We feel that a small number of civilian glider pilots don't give a high priority to the maintenance and proper packing of parachutes. Although late in the season, it is still appropriate to remind pilots that routine repacking and examination of parachutes should be by qualified packers who are approved on type. Obviously the type manual must be available.
IAN B. WRIGHT, *director and quality assurance manager of Irvin Great Britain Ltd*

BOOK REVIEW

Derek Piggott on Gliding, published by Adam & Charles Black and from the BGA shop at £10.50 including p&p.

Opus 64? Theme and variations. Derek Piggott's theme is well shaped, classically unemotional and shows the influence of his earlier works in the same genre. I particularly warmed to the last movement, based upon the heart-stopping theme of how to jump out of an endangered glider and fall directly into a tree whilst playing the harp on the parachute's rigging lines. Luckily this was the last chapter of the book only. In any event, that near fatal practical experience and the advice given about using parachutes well repays the book's price.

Amongst other useful items, the book also contains reprints of several of DP's *S&G* articles. One of these articles/chapters deals with suitable first syndicate gliders (no GRP here – quite a few golden oldies) and will be particularly useful to anyone contemplating forming a syndicate that doesn't blow an irreparable hole in the wallet.

The only criticism I would make concerns the proof reading. Since when has K-6E had a max rough air of 54kt! This is probably the only error in the entire book. Unfortunately I happen to fly a K-6E (nice machines, well worth buying!) and went straight to the relevant section to check out the details!
STEVE LONGLAND

IAIN BAKER

BRITISH OVERSEAS HANDICAPPED NATIONALS

Roanne, France, May 31-June 8

The combination of inconsistent UK weather and the promise of continental conditions has always enticed British pilots into Europe. With the tendency of UK based competitions to suffer from the vagaries of the weather and have a limited number of competition days, and the success of several RAFGSA Regionals based in France, the BGA sanctioned the first British Overseas Handicapped Nationals to be run by the GSA at Roanne.

Roanne is home of Les Ailes Roannaises Aeroclub, a combination of power pilots and *pilotes de planeur*. It is a large airfield with an immense north-south runway used for the relatively infrequent power visitors and the twice daily King Air shuttle to Paris. A large grass area parallel to the runway is easily capable of coping with a large competition grid and tugs landing alongside.

To the west and south, forest covered hills rise to about 2000ft above the site, giving a superb panorama. More relevant, these can also trigger the early thermals or be a good source of lee wave.

The superb quality of soaring in 1989 and the fact that the competition was held during term time had limited the number of entrants. Even so, 25 gliders with associated pilots and crew entered, together with two Gallic pilots flying *hors concours*. Most turned up in time for two or three practice days before the Comp started. These days proved to be an appetiser, with "average" French conditions, but easily soarable and cross-countryable.

And then the competition started.

Only John managed to scrape back using the last of the evening thermals from the Loire valley

The met man was in a quandary on Day 1, Thursday, May 31. The weather forecast was split in two; good strong thermals to the north but with a general drift of poor weather from the south. Gambling on getting reasonable conditions (but not absolutely stonking), a 319km triangle was set to the north-west. In reality the southerly drift speeded up and the 5000ft cloudbase evaporated into the blue. Only John Delafield in the ASH-25 managed to scrape back, using the last of the evening thermals from the Loire valley. Everyone else landed out.

Graham Davey called marginal final glide, but eventually overstretched the glide and spun into a backgarden about 2km from the airfield. His ASW-22 was a write-off and he was hospitalised for the remainder of the competition while his right leg was carefully repieced together.

Meanwhile everyone else was having the (generally) new experience of landing out in a foreign country. Many could not speak French, but survived surprisingly well by affecting a French accent and waving their hands at appropriate moments. And the average French farmer (and his family and friends and neighbours) proved extremely friendly and welcoming. Nick Hackett (LS-7) even had the offer of a lift to a telephone from a passing helicopter. Fortunately he realised that if he accepted he would have absolutely no idea how to find the glider again from his phone. However, RAFGSA are apparently considering retrieve by Chinook.

Of all the retrieves, Al Tribe's was probably the most eventful. His trailer had collapsed at Roanne after the drive through France. The condition was diagnosed as galloping rust and virulent rot. His crew valiantly tried to rebuild the trailer in the practice days before he landed out. Their efforts were in vain and they had to borrow Jerry Odell's trailer - after he had been retrieved. Consequently Al's retrieve was somewhat late and he spent the night in refuge in a local church until the crew arrived at 5am.

The next two days were not eminently soarable as the southerly drift brought warm, even hot, stable weather. No one went cross-country, despite the potential prize of an excessive amount of Cote Roannaise vin rouge offered by the competition director. Most enjoyed the weather by topping up their suntan and doing frivolous things like windsurfing and winding up Warren Kay.

Day 2, Sunday May 3, was soarable - but only just. The warm weather persisted and a 223km triangle was set. Many pilots managed to struggle round the first TP and back to the airfield, but could never get enough height to venture the short distance to the second TP and back. Again only John Delafield managed to get around the task. By this time we were suspecting he had a secret weapon, but he wasn't letting on.

When Ian MacFadyen (Ventus CT) landed out and explained that he was a *"pilot de planeur en le Championship de vol a voile Brittanique"* the locals congratulated him on flying all the way from England. I believe he explained how he did it at the ensuing press conference.

There was yet more glider damage. The Janus groundlooped in a sloping field and the tailplane skin delaminated. Lynn Norman landed her ASW-24 into a barbed wire fence and, while unhurt herself, the fuselage nose was badly smashed and the starboard wing creased at the root.

Monday and Tuesday passed in overcast conditions as frontal systems swept through.

It is traditional that the winner of the day stands up and tells everyone else how he did it. This can be informative, educational and, in the infamous case of Pete Sheard, superb training on becoming a professional after dinner speaker. Despite Tuesday being scrubbed, Warren Kay still regaled us with his "how I dun it". He'd had a dream - and his dream was that he had won a competition day. Of course the rest of us knew it was no dream. It was pure fantasy.

By this stage it was clear that the competition was doomed to poor weather. And that it was turning into a combination of a field selection course and a survival contest.

Day 3, Wednesday, June 6, conditions looked soarable with up to 5kt predicted to 4000ft. The main problem was the high cover cloud forecast to invade from the west and cut off any lift. Still, in desperation the devalued task of 174km triangle to the north-west and the Loire valley was set.

Initially lift was good if somewhat irregularly scattered. It was almost like English conditions: generally weak lift, some reasonable climbs, some lines of lift and large areas gently sinking. Everyone bobbled along, gradually falling to earth. The surprise winner was Warren Kay (ASW-24), the only pilot to pass the second TP. His photograph needed careful interpretation as instead of taking the required bridge over the Loire, he had concentrated on the signature of the architect. His speech was marginally shorter than the task.

Thursday dawned, overcast and grey and windy. The French forecasters, in disgust at their

FINAL RESULTS
British Overseas Handicapped Nationals

			Day 1.31.5 318.9km ▲			Day 2.3.6 222.4km ▲			Day 3.6.6 173.5km ▲			Day 4.6.6 209.8km ▲			
Pos	Pilot	Glider	Dist (Speed)	Pos	Pts	Dist (Speed)	Pos	Pts	Dist	Pos	Pts	Dist (Speed)	Pos	Pts	Total Points
1	Delafield, J.	*ASH-25	(60.4)	1	1000	(51.9)	1	651	79.0	6	41	(63.0)	4	748	2440
2	Clarke, A. J.	Discus	323.2	2	999	155.1	=3	540	83.8	=2	45	(70.5)	1	788	2372
3	Kay, W. M.	ASW-24	281.3	7	861	155.1	=3	540	107.4	1	61	(67.1)	3	770	2232
4	Spencer, J. D.	DG-600	282.4	6	865	151.3	6	525	62.9	=11	30	(49.1)	7	674	2094
5	Farmer, A. T.	*Mini Nimbus	263.9	5	870	156.8	2	555	73.4	9	37	197.0	10	480	1942
6	Baker, P. E.	ASW-20	195.7	24	579	149.3	7	517	65.2	13	29	(68.1)	2	775	1900
7	Mitchell, T.	Discus	233.7	23	704	155.1	=3	540	53.6	14	23	213.5	8	525	1792
8	Odell, J. H.	*Vega 17L	252.3	15	766	90.4	19	282	52.0	15	22	(57.6)	5	719	1789
9	MacFadyen, I. D.	*Ventus CT	249.2	=17	755	80.6	=21	243	76.6	=7	40	(55.5)	6	708	1746
10	Hackett, N. G.	LS-7	273.7	12	836	91.4	18	286	83.8	=2	45	210.9	9	518	1685
11	Cook, I. R.	Ventus 17.6	244.6	20	740	129.3	14	437	81.0	4	43	183.9	11	445	1665
12	Roberts, D. G.	ASW-20bl.	235.1	22	709	141.1	10	484	27.0	20	5	166.8	12	398	1596
13	Arnall, R.	Discus	292.0	3	896	139.6	11	478	80.5	5	42	53.4	17	91	1507
14	Batty, C. J.	*ASW-20L	276.4	11	845	133.1	12	453	77.5	=7	40	50.5	18	83	1421
15	Tribe, A. D.	Vega 15	191.2	25	564	142.6	9	491	49.9	=16	21	104.0	14	228	1304
16	Walsh, A.	*DG-400	264.3	=17	755	148.9	8	516	39.2	18	13	DNF	=19	0	1284
17	Galloway, J. P.	LS-7	280.4	8	858	15.4	=23	0	62.3	=11	30	164.1	13	391	1279
18	Glossop, J. D. J.	*Nimbus 3or	245.2	19	742	116.8	15	387	50.5	=16	21	61.0	15	111	1261
19	Marren, C. A.	DG-300	276.7	10	846	102.0	16	326	65.1	10	31	DNF	=19	0	1205
20	Dobson, J. B.	Janus C	241.0	21	728	131.3	13	445	DNF	=21	0	DNF	=19	0	1173
21	Norman, Lynn	ASW-24	287.6	4	882	92.1	17	288	DNF	=21	0	DNF	=19	0	1170
22	Joslin, C. I.	LS-7	289.9	13	789	84.3	20	257	DNF	=21	0	58.9	16	105	1151
23	Moules, K. A.	*Kestrel 20	251.9	16	764	80.6	=21	243	35.9	19	11	DNF	=19	0	1018
24	Jeffery, P.	LS-7	277.6	9	849	18.7	=23	0	DNF	=21	0	DNF	=19	0	849
25	Davey, G. R.	ASW-22	252.8	14	767	DNF	=23	0	DNF	=21	0	DNF	=19	0	767

*Scores courtesy of DeeWood Computer Service. All distances are after windicapping and handicapping. *=no water ballast; DNF=did not fly.*





Left: John Delafield, the Overseas Nationals' Champion. Above: A general view of the site. Photos: Robert Bryce-Smith.

own wayward weather, had gone on strike. The day was scrubbed but reasonable wave forecast in the 15-20kt westerly. The local pundit gave advice to all on the exact positions for the best and highest lift and many of the competitors flew both high and for long. Highest was Tony Walsh who went to 14500ft in his DG-400.

Friday, June 8, was the last day of the competition. A task had to be set. It looked reasonable - the required blue sky with pseudo cumulus bubbling away - but the "snifter" glider reported problems in finding consistent lift. Eventually the grid was launched on the fallback task of a 210km triangle. The uncertain conditions were reflected by the pilots - some stormed away almost immediately, other struggling in the same air minutes later. Relights and restarts were required by some, so much so that the last start was nearly 3hrs after the first. Conditions around the task were somewhat cyclic and lift generally u ninspiring. However seven gliders completed the task with the ASH-25 the first to return yet again. "Nobby" Clarke (Discus) won the day on his handicapped speed of 70.5km/h.

Overall winner was John Delafield, with "Nobby" (dark horse) Clarke 2nd. Despite the habitually argumentative nature of competition pilots, the handicapping system had worked reasonably well and fairly, even at Nationals level.

It was disheartening that the poor (and unseasonable) weather had such an impact on the competition. Every other aspect of a good competition was in place; the organisation was efficient but still personable and instead of a great green army, a few key people and the local people made the competition work.

Next year will be better. *Et vive l'entente cordiale.*

BERNARD SMYTH

15 METRE CLASS NATIONALS



Nympsfield from June 16-24



Andy Davis, the 15 Metre Champion.

This was a Comp where you definitely needed a sense of humour! Director Doug Jones set the right tone and he had an ally, cartoonist Al Cooper (alias Nomad), in keeping up everyone's spirits despite the weather, which left Nympsfield vying with another club for the title Damphill.

On the first two days the sky looked so unpromising that most coarse pilots wouldn't bother to rig! But the 45 competitors were made of sterner stuff. On Day 1, Saturday, June 16, they set off on a 227km triangle to Sherborne (Dorset) and Andoversford (Gloucestershire).

Eleven made it round the course, with Andy Davis (Discus) winning 1000pts at 69.08km/h. He said the conditions that looked so grey near the Severn improved after Bath.

Second was Justin Wills (LS-6) with 65.26 km/h for 980pts. Chris Garton and Martyn Wells (both flying LS-6s) tied for 3rd place on 976pts with 64km/h.

On Day 2, Sunday, June 17, the wind got up from 6kt to 13 and no one managed the 238km triangle, Alton railway station and Didcot chimney. Andy and Justin tied on 830pts by flying 211km. Andy was now leading by 20pts - 1830 over Justin's 1810. Martyn Wells did 209.8km for 824pts, making him 3rd overall with 1800.

With a 20kt wind on Day 3, Tuesday, June 19, the competitors were given a choice of TPs. They could choose Husbands Bosworth or the M1 junction 20, turn at the A43/A5 junction or the M1 junction 15. Surprisingly, 25 made it round, most doing 252km.

Chris Garton came 1st at 126km/h for 1000pts, which took him to 3rd overall on 2776pts. Justin Wills was 2nd at 125km/h, staying overall 2nd on 2801pts. Martyn Wells was 3rd with 122km/h, staying 4th overall on 2774. Andy Davis just stayed in the lead by doing 122km/h for 972pts. But he had only 1pt more than Justin.

After two wet days, during which even Tom Bradbury's Met "cabin" was flooded, task setter Paul Little gave the field the challenge of a 268km ➡

THE "CREW"
Director: Doug Jones
Task setter: Paul Little
Scorer: Ken Brown
Met: Tom Bradbury
Safety and airspace: Peter Bray
Launch marshall: Doug White
Control: Pat White and Lindsay Parker

Below: The grid. Both photos by Bernard.



quadrilateral in a 30kt wind on Friday, June 22.

Local knowledge came in useful for Andy Davis, who was able to soar the Gloucestershire slopes and beat the other 18 who got back by doing 86.43km/h for 1000pts and the Championship title. He amassed 3802pts, beating Justin into 2nd place. Justin had managed 80.66km/h for 957pts, taking him to 3758. Third on the day was George Metcalfe (ASW-24) with 78.37km/h, who became 6th overall.

Martyn Wells came overall 3rd with a speed of 71.19km/h, which made him 10th on the day. Chris Garton managed only 65.15km/h for 16th position, and slipped from 3rd overall to 4th. Last year's Champion, Pete Sheard (Discus B), came 15th overall.



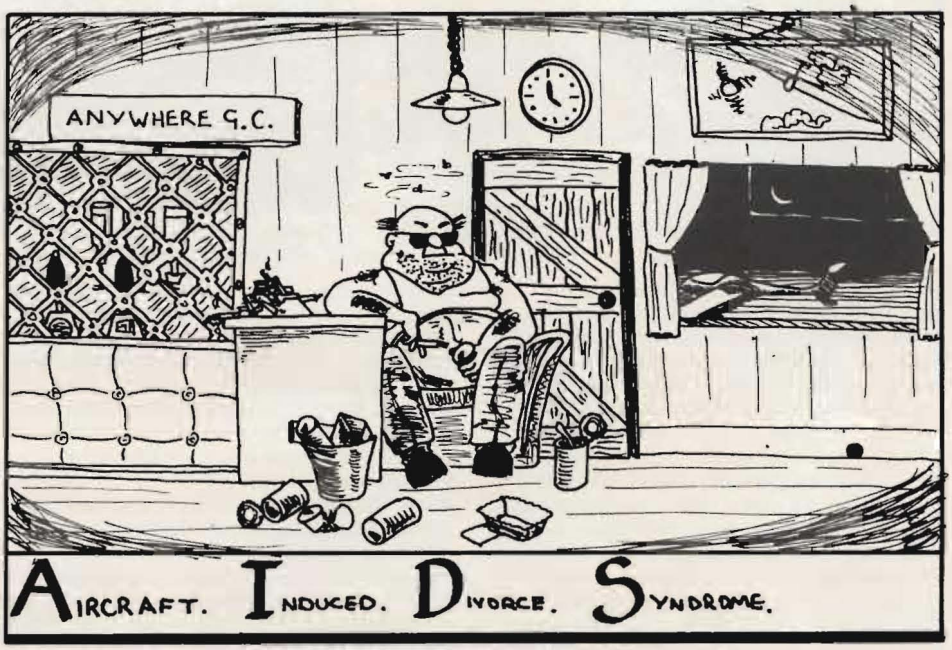
Lady Philippa Scott photographed by Steve Bicknell.

Sir Peter Scott's widow, Lady Philippa Scott, came up from the nearby Wildfowl and Wetlands Trust at Slimbridge to present the prizes and declare the new clubhouse open. She charmed everyone by recalling her days as a glider pilot and crew for Sir Peter.

Doug Jones said the club was delighted that a local member had won the Championships - one who was keen on encouraging young pilots to progress.

Doug later praised the competitors and the tug pilots for their safety record in difficult conditions at times. "It was great airmanship," he said.

So ended a Comp which the organisers had struggled to make as interesting as possible in spite of a return to the "normal" English summer.



One of the many cartoons by Nomad which lifted spirits during the rain.

FINAL RESULTS
Rolex 15 Metre Class Nationals

			Day 1.16.6 227.2km ▲ Sherborne, Andoversford			Day 2.17.6 128.4km ▲ Alton, Didcot			Day 3.19.6 252.6km △ alt TPs Husbands Bosworth or Lutterworth, Towcester or Northampton			Day 4.22.6 268.6km ■ Stratford on Avon, Tormarton, Broadway			
Pos	Pilot	Glider	Dist (Speed)	Pos	Pts	Dist	Pos	Pts	Speed (Dist)	Pos	Pts	Dist (Speed)	Pos	Pts	Total Points
1	Davis, A. J.	Discus	(69.8)	1	1000	211.2	=1	830	122.60	4	972	(86.43)	1	1000	3802
2	Wills, T. J.	LS-6	(65.26)	2	980	211.2	=1	830	125.47	2	991	(80.66)	2	957	3758
3	Wells, M. D.	LS-6	(64.60)	=3	976	209.8	3	824	122.85	3	974	(71.19)	10	886	3660
4	Garton, C.	LS-6	(64.47)	=3	976	204.4	5	800	126.85	1	1000	(65.15)	16	840	3616
5	Cooper, B. L.	LS-6a	(59.94)	8	952	203.8	6	796	117.56	=6	939	(72.67)	7	897	3586
6	Metcalfe, G. E.	ASW-24	209.6	21	727	199.0	10	777	109.80	10	888	(78.37)	3	940	3332
7	Smith, D. A.	LS-4	204.6	24	706	193.9	17	755	100.65	15	828	(67.5)	15	856	3144
8	Stewart, D. R.	Ventus	181.8	=33	621	180.8	=20	698	117.63	=6	939	(70.28)	13	879	3137
9	Roberts, D. G.	ASW-20a	192.7	28	662	195.3	=14	761	91.26	18	766	(75.79)	4	920	3109
10	Scott, T. J.	ASW-20c	220.9	12	771	197.0	=11	768	77.76	22	677	(70.56)	12	881	3097
11	Parker, S.	LS-4	219.8	=13	766	123.3	=29	448	100.28	16	825	(74.63)	6	912	2951
12	Hawkins, Pam	LS-6a	211.3	=19	734	123.3	=29	448	112.4	9	903	(67.28)	14	856	2941
13	McAndrew, G. E.	ASW-20c	(58.90)	11	*896	201.3	7	787	(174.9)	=32	271	(72.56)	8	896	2850
14	Edyvean, J.	Ventus B	(62.91)	10	*917	123.3	=29	448	113.93	8	915	270.4	23	*538	2818
15	Sheard, P. G.	Discus B	198.3	27	*684	197.0	=11	768	120.77	5	960	199.3	28	385	2797
16	Throssell, M. G.	Discus	(59.66)	9	950	175.5	=22	675	(174.9)	=32	271	(70.93)	11	884	2780
17	Jeffery, P.	LS-7	(63.63)	5	917	195.3	=14	761	73.55	25	650	213.5	29	*366	2748
18	Redman, S. J.	ASW-20c	186.1	32	637	185.0	19	716	79.34	21	688	(332.0	21	670	2711
19	Cunningham, G. W.	Ventus CT	(61.3)	7	957	155.2	23	587	(177.0)	31	275	(71.53)	9	888	2707
20	Richards, E. W.	Discus	154.8	42	517	123.3	=29	448	107.46	11	873	(58.95)	18	794	2632
21	Cuming, M. F.	LS-4	219.8	=13	766	195.3	=14	761	76.44	24	669	216.3	24	422	2618
22	Morris, G.	ASW-20L	187.9	31	644	180.8	=20	698	(300.9)	26	492	(63.72)	19	*780	2614
23	Dall, R. N.	Discus	208.5	22	723	134.5	=27	497	(199.7)	27	315	(75.18)	5	916	2451
24	Payne, R. D.	Discus B	181.8	=33	621	201.0	=8	786	77.38	23	675	127.5	37	231	2313
25	Metcalfe, J.	Ventus B	181.8	=33	621	197.0	=11	768	(83.43	19	715	110.5	40	194	2298
26	Durham, M. W.	Ventus C	181.8	=33	621	185.6	18	719	106.62	=12	867	46.0	43	56	2263
27	Murphy, T. J.	ASW-20	173.5	40	589	123.3	=29	448	106.58	=12	867	183.5	32	351	2255
28	Jordy, M. J.	ASW-20L	204.3	29	*557	57.4	43	162	96.32	17	799	213.5	=25	416	2034
29	Williams, P. R.	Discus	179.8	38	613	207.0	4	812	(150.6)	38	229	185.3	31	355	2009
30	Fox, R. L.	Ventus B	211.9	18	736	123.3	=29	448	(92.7)	42	127	318.3	22	641	1952
31	Moulang, A. P.	ASW-20	181.8	=33	621	201.0	=8	786	(94.6)	=40	131	200.2	27	387	1925
32	Hutchinson, S.	Discus	(62.58)	6	968	123.3	=29	448	(174.2)	34	270	108.0	41	189	1873
33	Jefferyes, M. B.	DG-600	42.2	43	85	78.6	41	254	81.79	20	704	(59.11)	17	795	1838
34	Glossop, J. D. J.	ASW-20	214.4	15	746	153.6	24	560	(96.5)	39	134	180.1	33	344	1804
35	Cheetham, R. A.	DG-600	202.6	25	700	123.3	=29	448	(181.9)	=29	264	186.2	30	357	1789
36	Baker, R. J.	ASW-20	21.7	44	7	123.3	=29	448	102.97	14	843	213.5	=25	416	1714
37	Hartley, K. J.	ASW-20a	212.2	17	737	123.3	=29	448	(159.7)	37	245	124.4	38	224	1654
38	Johnston, E. W.	LS-3A	208.2	23	722	136.9	=25	507	(94.8)	=40	131	156.3	35	293	1653
39	Smith, R. J.	Ventus B	176.1	39	599	76.5	42	248	(88.2)	43	*120	332.7	20	671	1635
40	Lyttelton, C. C.	ASW-24	211.3	=19	734	123.3	=29	448	(190.0)	28	298	84.8	42	139	=1619
41	Eagles, T. W.	Discus	218.4	30	*653	136.7	=25	507	(166.6)	35	257	114.2	39	202	=1619
42	Nash, S. R.	Ventus B	213.8	26	*693	47.7	45	120	(160.3)	36	246	179.4	34	342	1401
43	Bromwich, B. C.	LS-4a	214.1	16	745	134.5	=27	497	(60.3)	45	71	DNF			1313
44	Ellwood-Wade, R.	LS-7	172.2	41	584	52.7	44	142	(181.9)	=29	264	151.8	36	283	1293
45	Knight, R. J. S.	LS-7	12.5	45	0	123.3	=29	448	(98.0)	44	*89	45.7	44	*5	542
Hors Concour															
37	Rollings, C. C.	Janus C	65.43	2	981	175.5	=22	675	(0.0)	46	0	0.00	45	0	1656

DNF=did not fly *=penalty BGA scoring program by Specialist Systems Ltd

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5TH EUROPEAN CHAMPIONSHIPS

Leszno, Poland, May 26-June 10

A report by the manager of the British team which comprised: Standard Class, Dave Watt (ASW-24), 10th and Leigh Hood (LS-7) 22nd; 15 Metre Class, Ted Lysakowski (Ventus) 21st and Peter Sheard (Ventus A) 26th and Open Class, John Bally (Nimbus 3) 7th and Ralph Jones (Nimbus 3) 11th

Emphasising Leszno's role as the Polish Gliding Centre, its large airfield lies on Szybownikow – "Glider Pilot Way", and former World Champion Jan Wrobleski's Orion is mounted on a plinth near the station.

The Championships opened with a parade of 17 teams (the two Germanies as one), a stunning air display and weather so perfect that Polish team members Janusz Centka (ASH-25), who broke the national 300km record the day before, and Stan Zientek (DG-600) completed 1000km triangles. A curious stork making his own unhurried fly-past seemed a further good omen.

Day 1, Sunday, May 27 – weighing the Open Class gliders caused a hitch when John Bally's broke the hired equipment and, with conditions deteriorating during the ensuing delay, a fallback task was set. Defending Standard Class Champion Janusz Trzeciak (ASW-24) shared 1st place with Polish team mate Franciszek Kepka (ASW-24) at 113.6km/h for the 346.8km triangle. In the other two Classes, flying the same 421.9km triangle, Gilbert Gerbaud (LS-6B) of Belgium and Jean-Claude Lopitaux (ASW-22B) of France achieved 104.6km/h and 112.2km/h in the 15 Metre and Open respectively.

Hopes rested on big tasks for Day 2 but it all went sour and everyone landed out

After losing the next two days' flying, hopes rested on big tasks for Day 2 (Wednesday, May 30), but it all went sour and everyone landed out. John Bally won the Open Class rounding four of the five TPs and Ted Lysakowski shared his 15th place with seven others. Swedish pilot Anders Helmersson's crew failed to find him or his ASW-24 and returned to base empty trailered. He was taken in for the night by a local family, retrieved at the second attempt next morning and rushed to the grid just in time for launching.

Chastened by the mass landout, the task setter was understandably cautious next day (Day 3, Thursday, May 31), so when it turned into a real boomer, all Classes raced round with a very thrilling finish. Unfortunately the featureless airfield was near invisible in the strong light and one or two were caught out, losing time as they searched for it. Kepka and Trzeciak again won the Standard Class at 129.8km/h over the 349.8km triangle. Borje Erikson (Ventus C) of Sweden won the 15 Metre 381.7km quadrilateral at 124.7km/h and in the Open, Lopitaux and Gerard Lherm (ASW-22B), also from France, sped round 408.6km at 131.3km/h.

Day 4 (Friday, June 1), which went from wet to hot and humid, was marred by a mid air collision between Andreas Kuhl, East Germany, and Italian Vittorio Colombo, who landed his Discus B with a shattered canopy. Andreas parachuted safely into the same field, just as the owner of his LS-4 arrived to check his progress! Riccardo Brigliadori, Italy, immediately landed his Discus to assist, and for his humanitarian action, which cost him his competition chances, he later received a special award. Dave Watt won the Standard Class at 108.6km/h over 244.1km for a speed-devalued 959pts. The 15 Metre Class flew another quadrilateral of 278.7km won by Jan Andersen, Denmark (LS-6A) at 97km/h, while in the Open, Klaus Holighaus clocked 121km/h in the new 26.4m Nimbus 4 for the 311.2km O/R to Barlinek with Bally 2nd at 116.7km/h.

The sultry heat drew clouds of insects to the airfield's wild flowers and bug-wipers came into their own. When Ralph Jones lost half a pair, he was to learn the flying characteristics of a Nimbus 3 with one clean wing and one buggy one.

The Cat's Cradle on Day 5, Saturday, June 2 (very hot, with strong, warm wind) caused much discussion. Some pilots consider them outmoded and argued the rules at length. John Bally was 3rd to Germany's Eberhard Laur (Nimbus 3T) and Holighaus, who completed 503.1 and 494.3km to his 487.8km. Mariusz Pozniak (Discus B) and Trzeciak led the Standard Class (394.5km) and the Czech Pavol Cerny (Ventus B) the 15 Metre Class (386.1km).

When rain, wind and the doldrums set in with a vengeance for the next three days I escaped on a real adventure, flying NE in the venerable Antonov 2 biplane, just a few hundred feet above undulating farmland and the many lakes to Olsztyn and Ketrzyn close to the USSR border.

In the nearby Gierwoz forest lie the remains of the "Wolf's Lair", Hitler's Abwehr HQ, the scene of an assassination attempt in 1944 by his generals. The railway which brought Mussolini to confer with Hitler runs peaceably now between banks of woodland flowers, and the old airfield is used for summer expeditions by the Aeroclub of Poznan who enjoy the empty skies. They encourage visiting pilots and welcome inquiries. Contact me *via* the BGA if interested.

Wednesday, June 6 (hot and sticky) was to be the last contest day in the Standard and 15 Metre Classes, but went so flat that those who didn't land out had a long, tiresome struggle. All credit to Leigh Hood in his first International who made it back while the reigning World Champion did not. Göran Andersson of Sweden (Discus B) won the Standard – 369.8km at only 89km/h. The 15 Metre Class toiled round a 402.5km quadrilateral won by Dutchman Robertus Looisen (LS-6). The impeccable French scored again when Lopitaux and Lherm tied 1st in the Open 448.7km quadrilateral at 104.9km/h.

Only the latter Class managed another day, a small Cat's Cradle, but in lift so scarce that everyone landed out. Germans filled the top three places, but Laur and Walter Eisele's equal 119.9km only earned 726pts, Walter flying an ASW-22BE.

As squalls washed out the last two days, the results of Days 6 and 7 decided the Championships. The standard had been very high with several World Class pilots participating and pair-flying popular and successful.

I had unstinting help from the ever patient Polish administration and office staff while trying to get press reports out and in solving our pilots' problems. My warmest appreciation to them all, and to Leszno and the Aeroclub of Poland for a happy and interesting competition.

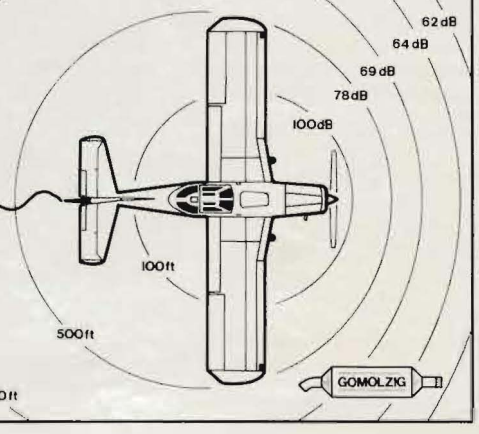
(See the last issue, p222, for leading results.)

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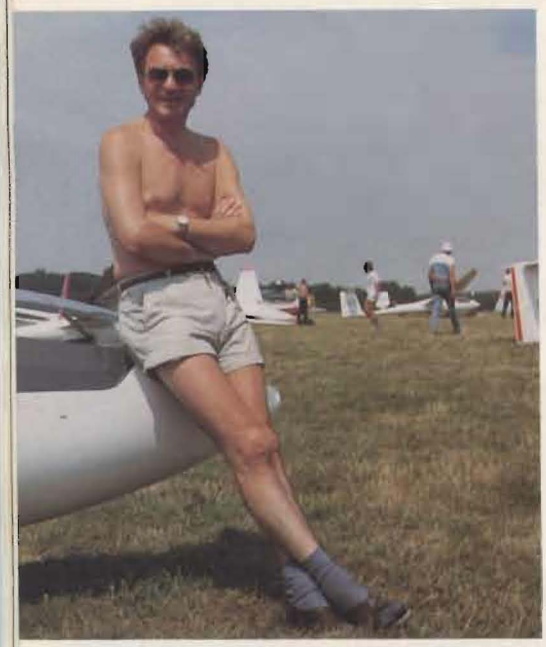
Jed Edyvean, the Standard Class Champion.

STANDARD CLASS NATIONALS

Booker from July 14-22



Warren Kay, our reporter, photographed by Robert Bryce-Smith. The other pictures are by Jo Jeffery.



Above: Ted Lysakowski getting a sun tan.
Below: Mike Cuming on the grid.

Forty-five males and one female assembled in the blister hangar for the first briefing were busy renewing old acquaintances and making new ones. The sun was shining and the outlook looked good. How were we to know that for most of us the best ever competition in the UK lay ahead.

Booker, home of fast gliders, fast cars, fast women (well Sally is an ex Nationals winner) and noisy helicopters welcomed us with somewhat dusty arms.

Basil Fairston, competition director, opened the competition with a commendable lack of ceremony, Peter Bayliss found us our first weather and Graham McAndrew chose our way through it.

Day 1, Saturday, July 14, 154km, Calvert, Hungerford, Newbury (winning distance 140km).

A weak blue day, with average climbs around 1kt, under an inversion topping out at 3500ft resulted in large gaggles on the second leg (over 30 gliders in one thermal near Hungerford), some inconsiderate behaviour and frazzled tempers. The day was dying by the time the main bunch reached Newbury International Airport (née racecourse), with some rather original holding patterns culminating in a Pegasus losing half its rudder to a hungry LS-7. Fortunately the pilots involved joined the other 15 or so at Newbury and both were flying the next day. Ducking bits of glass-fibre whilst flying is no fun! In the words of Hill Street Blues "Let's be careful out there". Ted Lysakowski (Discus B) was first to find a thermal north of Thatcham giving him 1000ft extra and the day win.

The traditional Booker 'laid back' attitude to organisation started well with a ten minute call after the startline had opened on the first day, and continued with poor quality start-line radio equipment. Liz Wells did a sterling job in the circumstances and later in the week the important things went smoothly. Photo assessing proved problematical with 45+ films often with multiple TPs to be processed daily and the assessors sited in the roof of the hangar working in 35°C temperatures. The weather forecasts were generally cautious and the tasks set for races. The normal competition moaning was restricted to the price of victuals in the bar/restaurant and the helicopters.



Day 2, Sunday, July 15, 166km, Lewknor, Olney, Goring (winning speed 59.6km/h).

Another weak blue day, until the Calvert area on the third leg when cumulus and improving conditions brought the 23 finishers home. Chris Rollings (Discus) put his day win down to realising before the rest of his gaggle that the altocumulus he saw to the south was in fact cumulus with a 5000ft base. Peter Sheard (Discus) got away from 250ft above a playing field and Steve White (LS-7) complained of flying slower than best glide speed to let others lead the way. Mike Cuming (LS-4) left a climb to join low the gaggle he had chased north to Olney only to find they had rounded the turn and were heading south. He landed.

Type	No. Competing	% Competing	No. in Top Ten	No. in Bottom ten	No. of Day Wins	% of Day Wins
Discus	17	37	4	3	3	43
LS-7	12	27	4	2	1	14
ASW-24	5	11	2	1	2	29
LS-4	5	11	-	1	1	14
Pegasus	2	4	-	1	-	-
DG-300	2	4	-	1	-	-
DG-100	2	4	-	1	-	-
Cirrus	1	2	-	-	-	-

Day 3, Tuesday, July 17, 384km Ironbridge, Pewsey (winning speed 93.7km/h).

Launched into 2km visibility and 3000ft base the prospects looked poor but from Oxford everything improved dramatically with fast climbs and good clouds to Stratford then fast climbs with no clouds to Ironbridge. Day winner Jed Edyvean (Discus) flew essentially on track while slower times were recorded by those like Martin Wells (LS-7) who followed the cumulus a long way west. The end of the day was enlivened by a heavy landing demonstration, the Discus involved surviving remarkably well. Ralph has clearly trained son Steve Jones very well since he was first on the scene by some considerable margin.

Day 4, Wednesday, July 18, 322km Melton Mowbray, Newbury (winning speed 112.5km/h).

Well how would you feel having completed a 300 at 96km/h in England to find you'd finished in 27th place? There was a general feeling of wonder after this day with strong thermals (6-8kt), high cloudbase (6500ft) and a marked lack of sink combining to give certainly for me the best soaring weather I have ever experienced in England. Day winner Phil Jeffery (LS-7) was flying Nationals in the early 1960s and even his vast experience left him short of things to say in his "How I Dunit" speech since his flight took just 2hrs 52min. The speeds achieved were within 4km/h of the UK Open Class record.

Day 5, Thursday, July 19, 394km Belvoir Castle, Calvert junction, Marlborough (winning speed 94.7km/h).

Dave Watt and Al Kay (both fly ASW-24s) had been rather quiet up to now but made up for it today by starting late and leading a fast gaggle containing Steve White, Steve Jones (Discus B) and Mike Strathern (Discus B) around into the first five places. Three-eighths cumulus around Belvoir gave lousy visibility and produced numerous photo problems for the assessors. The essentially blue conditions south of Northampton gave variable climb rates but up to 7kt was still available to 5000ft. Chris Rollings flew consistently into 6th place to retain his overall lead. Ted Lysakowski fell from a challenging position by being one of only two outlandings coming to grief at Oxford in an area where others had climbed strongly a few minutes earlier.

Day 6, Friday, July 20, 240km Thame, Olney, Calvert junction, Marlborough (fastest speed 105.5km/h).

Steve White recorded the fastest time but lost a photo argument and with it the day win to Al Kay. However, Steve's speech at briefing edged him into a small points lead in the other serious competition of the week, that of which day winner would achieve the loudest laugh during briefing. The standard of competition really was exceptional with the task setter troubled by the winner devaluing the day through completing in under 2hrs 30min and the director troubled by his speech exceeding the same time.

Thirteen of the 46 pilots entered and seven of the top ten at the end fly regularly from Booker but interestingly a Booker man didn't win. In fact Booker pilots didn't win any of this year's National Championships. Are they losing their grip? I think not, with 2nd through to 6th it's clear that the competitive edge acquired from so many top level pilots flying from one club can't in the long term be denied. However, the airfield can become very congested during a mass finish and with the density of fixed and rotary winged power traffic I personally find the safety risk unacceptable.

Day 7, Saturday, July 21, 333km Frome, Gaydon, Goring (winning distance 286.7km).

It looked like an exceptional chance to decide the competition with another race since the forecast for the next day was poor. Three-eighths cumulus with 6000ft bases led down to Devizes where a blue and slower patch resulted in the



Chris Rollings, national coach, who came 2nd.



Above: Steve Jones (left) and Phil Jeffery., Below: Eric Smith keeping cool.



field collecting in gaggles. On returning to the cumulus east of Devizes climbs of up to 8kt with cloudbase exceeding 8000ft led rapidly to Brize Norton where in the space of ten miles the cumulus disappeared as did the thermals. The pilots who were high in the Brize area glid out to the turn and staggered back south, those who were low just staggered. The last 2hrs of my flight were under 1500ft with escapes from below 500ft three times and everybody landed out. The unfortunate situation resulted in a change in the lead. Chris Rollings (1st overnight) landed in the same field as Steve White (2nd) but Jed Edyvean (3rd) had flown 28km further and the points difference was enough to take him into the lead. The day winner was Eric Smith (LS-4) whose smile at briefing was matched only by the applause that followed his speech as he easily won that competition too!

Peter and Graham tried their best but the weather did not co-operate so Day 7 became the last day and the competition ended in anti-climax. Chris Rollings was philosophical in defeat having led for so long declaring the competition his most enjoyable for a long time. Jed Edyvean, having flown consistently all week, was National Champion for the first time. We flew 82000km with racing tasks and there were many tired pilots by the last day. A very brief prizegiving ceremony gave Jed an opportunity to express all the competitors' thanks to the many people who gave up their time and holidays to make it all happen.

FINAL RESULTS

Standard Class

Pos	Pilot	Glider	Day 1.14.7 207.3km ■ Calvert Junction Hungerford, Newbury, Booker			Day 2.15.7 192km ■ Lewknor, Olney, Goring, Booker			Day 3.17.7 422.9km▲ Ironbridge, Pewsey, Booker			Day 4.18.7 329km▲ Melton Mowbray, Newbury, Booker			Day 5.19.7 401.1km ■ Belvoir, Calvert Junction, Marlborough, Booker			Day 6.20.7 245.1km Thame, Olney, Calvert Junction, Marlborough, Booker			Day 7.21.7 453.6km ■ Frome, Gaydon, Goring, Booker			Total Points
			Dist	Pos	Pts	Speed (Dist)	Pos	Pts	Speed (Dist)	Pos	Pts	Dist	Pos	Pts	Speed (Dist)	Pos	Pts	Speed (Dist)	Pos	Pts	Dist	Pos	Pts	
1	Edyvean, J.	Discus	121.4	=11	701	56.8	3	952	93.7	1	1000	106.7	8	923	90.7	=10	939	98.0	8	810	271.9	=6	934	6259
2	Rollings, C. C.	Discus	134.1	4	783	59.6	1	986	87.5	7	925	109.3	4	957	92.1	6	961	98.1	=5	812	234.2	=12	767	6191
3	White, S. A.	LS-7	116.0	=17	666	56.1	4	944	89.5	4	949	109.1	5	955	93.8	3	987	*105.5	2	860	234.2	=12	767	6128
4	Campbell, D. R.	Discus	121.0	14	699	48.3	15	852	88.4	5	933	105.2	14	902	91.6	7	953	96.0	=12	786	279.9	2	970	6097
5	Watt, D. S.	ASH-24	116.0	=17	666	51.1	14	884	87.2	9	922	106.2	11	917	94.7	=1	1000	99.6	3	830	242.3	9	803	6022
6	Cooper, B. L.	ASH-24	121.4	=11	701	47.7	17	844	78.0	27	809	101.6	18	855	90.8	9	941	94.3	16	763	271.9	=6	934	5847
7	Gaisford, P. A.	Discus	106.1	33	571	56.9	2	954	84.3	10	886	111.0	3	980	82.0	32	808	98.1	=5	812	238.2	10	785	5796
8	Hackett, N. G.	LS-7	116.0	=17	666	47.2	19	838	88.0	6	931	103.4	16	879	88.9	=15	912	97.0	10	798	234.2	=12	767	5791
9	Gorringe, J.	LS-7	116.0	=17	666	51.6	13	890	81.1	19	847	105.8	12	911	89.5	13	921	97.1	9	799	221.3	26	705	5739
10	Wells, M. D.	LS-7	116.0	=17	666	54.8	8	929	81.9	17	857	108.8	6	951	87.2	21	887	98.1	=5	812	202.3	=35	611	5713
11	Harding, R.	Discus B	116.0	=17	666	53.5	9	913	91.7	3	976	105.2	13	903	86.1	26	870	93.8	18	758	202.3	=35	611	5697
12	Kay, A. E.	ASW-24	116.0	=17	666	(145.6)	24	541	83.6	11	877	108.2	7	943	94.7	=1	1000	102.8	1	871	238.0	11	784	5682
13	Elliot, B.	Discus	119.3	16	688	47.5	18	842	79.7	23	830	98.3	23	810	89.2	14	916	91.7	=25	732	219.8	=27	698	5516
14	Smith, E. R.	LS-4	134.5	=2	786	(109.5)	32	359	80.2	22	835	103.0	17	874	87.3	20	888	92.5	21	741	286.7	1	1000	5483
15	Olender, S.	Discus B	116.0	=17	666	52.0	12	895	74.2	31	763	93.0	31	740	87.6	18	892	91.0	28	723	234.2	=12	767	5446
16	Lysakowski, E. R.	Discus B	139.3	1	817	55.3	6	934	87.4	8	923	104.7	15	896	(276.0)	44	193	93.2	20	750	264.9	8	903	5416
17	Durham, M. W.	LS-7	96.8	40	490	54.9	7	930	80.2	21	836	100.9	20	845	86.2	24	872	92.2	22	738	219.8	=27	698	5409
18	Payne, R. D.	Discus	132.2	5	771	(145.2)	25	539	69.6	33	706	95.6	29	775	86.5	23	876	92.1	23	736	279.7	3	969	5372
19	Jones, S. G.	Discus B	126.5	10	734	(136.8)	27	499	81.5	18	852	106.4	=9	919	93.8	4	986	98.4	4	816	184.9	38	526	5332
20	King, P. A.	LS-7	86.5	44	411	48.0	16	848	77.1	29	797	106.4	=9	919	84.5	30	846	87.9	32	683	234.2	=12	767	5271
21	Ashcroft, J. P.	LS-7	105.2	=34	563	55.6	5	938	79.6	24	829	96.1	27	781	76.8	38	730	91.9	24	733	208.8	32	643	5217
22	Wells, Sally	LS-7	116.0	=17	666	(71.5)	39	164	83.3	=13	873	98.5	22	814	91.2	8	947	95.3	14	776	277.2	=4	958	5198
23	Cox, T. W.	DG-100B	91.5	41	449	52.4	11	900	77.5	28	803	93.8	30	751	84.8	29	850	84.1	36	635	234.2	=12	767	5155
24	Hodge, B. J.	Discus	131.9	=6	769	(141.7)	26	523	78.6	26	817	90.2	34	703	86.2	25	871	93.6	19	755	219.8	=27	698	5136
25	Jeffery, P.	LS-7	103.0	38	541	(38.7)	43	46	82.7	=15	866	112.5	1	1000	87.1	22	886	94.0	17	761	277.2	=4	958	5058
26	Cuming, M. F.	LS-4	134.5	=2	786	(71.8)	38	166	80.6	20	841	101.2	19	849	90.7	=10	939	89.6	29	705	234.2	=12	767	5053
27	Sheard, P. G.	Discus	131.9	=6	769	45.5	20	818	82.7	=15	866	111.8	2	991	81.7	33	803	*94.8	27	725	DNF	=42	0	4972
28	Knight, R. J. S.	LS-7	*116.0	32	625	*52.9	21	710	(354.1)	=36	380	86.5	38	653	89.6	12	922	95.1	15	774	208.1	33	640	4704
29	Langrick, D. J.	LS-4	116.0	=17	666	(40.9)	42	53	83.5	12	876	97.2	25	796	85.4	27	859	91.8	=25	732	203.0	34	615	4597
30	Forrest, B. R.	Pegasus	116.0	=17	666	(114.6)	=29	385	68.0	34	688	84.2	41	623	88.9	=15	912	*86.0	38	614	219.8	=27	698	4586
31	Kay, W. M.	ASW-24	130.8	9	762	(17.4)	=45	0	83.3	=13	873	95.9	28	778	79.2	37	765	86.6	=33	667	222.9	=23	713	4558
32	Atkinson, K. R.	DG-300 Elan	116.0	=17	666	*39.6	22	699	73.4	32	753	83.2	43	609	*76.0	43	568	79.0	43	581	192.5	37	563	4439
33	Alldis, C. J.	LS-4	116.0	=17	666	(114.6)	=29	385	(181.3)	46	188	97.8	24	804	84.4	31	845	96.1	=12	786	232.8	20	761	4435
34	Strathern, M.	Discus B	121.4	=11	701	(65.0)	40	131	93.4	2	996	96.5	26	787	93.7	5	985	*91.4	35	637	42.9	41	26	4263
35	Armstrong, J.	Discus B	131.3	8	765	53.0	10	907	(271.2)	45	273	84.9	40	633	88.4	17	905	*91.7	30	686	0	=42	0	4169
36	Craig, G. W.	Std Cirrus	90.6	42	443	(91.7)	36	267	65.6	35	658	91.1	32	714	74.0	40	687	83.3	37	626	222.9	=23	713	4108
37	Walker, P. B.	DG-300	89.4	43	433	(110.9)	31	366	(354.1)	=36	380	87.6	36	668	79.9	36	776	88.1	31	685	234.2	=12	767	4075
38	Zealley, T. S.	ASW-24	119.9	15	692	(94.9)	34	284	(328.6)	42	339	85.6	39	642	73.8	41	683	79.9	42	582	221.7	25	707	3929
39	Moules, K.	Discus	105.2	=34	563	(97.4)	33	297	(304.9)	43	304	83.5	42	613	76.4	39	724	86.6	=33	667	227.9	21	737	3905
40	Pozerskis, A.	Pegasus	0	=45	0	(0)	=45	0	78.7	25	818	100.4	21	839	*88.8	19	891	*89.3	44	565	219.8	=27	698	3811
41	Stratten, P. J.	Discus	105.2	=34	563	(146.8)	23	546	(348.5)	38	371	87.2	37	663	81.4	34	799	80.9	40	596	0	=42	0	3538
42	Kingerlee, J. C.	LS-7	102.1	39	532	(45.7)	41	68	(334.1)	=40	348	90.6	33	709	85.3	28	857	96.9	11	797	66.9	40	73	3384
43	Ellwood-Wade, R. D.	LS-7	116.0	=17	666	(92.1)	35	270	(334.1)	=40	348	87.9	35	672	80.8	35	789	80.4	41	589	0	=42	0	3334
44	Farrelly, P. E.	LS-7	8.0	=45	0	(24.7)	44	1	(341.4)	39	360	78.8	44	551	69.6	42	620	81.4	39	601	227.6	22	736	2869
45	Stott, B.	DG-100	103.8	37	549	(89.1)	=37	254	(301.2)	44	301	62.1	45	328	(160.6)	45	111	(17.7)	45	0	*183.7	39	420	1963
46	Lincoln, A. K.	Discus	116.0	=17	666	(125.4)	28	440	75.1	30	773	DNF	46	0	DNF	46	0	DNF	=45	0	DNF	=42	0	1879
Hors Concours																								
	Bryce, P.	ASW-20	116.0	17	666	53.9	9	989	*70.6	35	669	94.4	30	759	848	29	850	90.3	29	713	221.3	26	705	5281

*DNF – did not fly; * – penalty. BGA Competition Scoring Program by Specialist Systems Ltd.*

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COMPETITION ENTERPRISE

North Hill, June 30-July 9, hosted by Devon & Somerset GC

Saturday morning, June 29, saw the assembled multitude of pilots, crews and hangers-on for 39 gliders congregating in North Hill's clubhouse. The entrants for competition Enterprise 1990 were welcomed by competition director Peter Hill and the ceremonial opening was then performed by Nick Goodhart. Nick confessed that although he made several noteworthy and interesting flights in his gliding career, he'd never flown in Competition Enterprise before! The combination on stage of Messrs Hill, Goodhart, Fielden and Garrod, each with their individual brand of humour, helped to pass the best part of the morning, for the weather was typical of a British summer – high winds and rain – certainly not conducive to gliding. However, Mike Garrod promised that better was to come . . .

Sunday brought hope to our hearts: Mike said that the sun would appear at 1441, and so he devised the WAEF (When All Else Fails) task. The task took full account of the range of gliders entered (from a Gull 1 with a handicap of 50, to a Nimbus 3 at 130). John was heard to mention that for "tasks like these you have to make the rules up as you go along", and that's just what happened. You flew a pilot selected task which rounded as many TPs as possible, each one at least a given distance from all the previous ones, and North Hill.

That distance being calculated from $\frac{\text{Handicap}^2}{1000}$

Thus the Gull's TPs were 2.5km apart and the Nimbus's 18km. Even so, large numbers of TPs were claimed as the ridge worked well in the strong winds, albeit some misunderstanding about the rules causing some confusion.

The idea was to launch at 3pm – to a release height decided by the tug pilot (the forecast was that convection was "doubtable"). Having been told landing out would lose you the last TP, we were assured that the tug pilots were bribable as to the launch height!

The task was a challenge and it turned out that about ten entrants followed the rules

Scoring Mike's task was a challenge. It turned out that about ten entrants followed the rules, ten half followed them and ten didn't follow them at all. However, Sunday was eventually adjudicated to have been won by Chris Nicholas (K-6E) taking 11 TPs, and John Bally (Nimbus 3) came 2nd.

Monday was a race day – either an O/R to Broadway tower, or a triangle to Halfpenny Green and Lasham. Mike Garrod promised us reasonable thermals, light winds and a sea breeze to come home with. The day started well, but most competitors ran into showers on the Cotswold hills, especially while searching around Broadway for the TP. The penetrating sea air forced most pilots inland *via* Frome/Wincanton until the sea breeze was picked up just north of the south coast to carry the finishers home. John Bally was the sole finisher from the 500km Halfpenny Green/Lasham task, flying at 85km/h, and Dave Reilly headed the ten finishers from the 300km, flying a Libelle.



Jill Burry prepared for a cross Channel attempt! Photo: Sandy Harrup.

Tuesday – the weatherman forecast the best weather in the south of the country, so an east/west line was drawn on the map and we flew along that. From North Hill you had to go west to the Quarry at Meldon, near Okehampton, before choosing either to go on to Bodmin airfield, and/or to the other TPs to the east, Salisbury Cathedral or Lasham. Depending on the number of points taken in you could fly a 100, 300, 500km or greater task.

John Bally came in a clear first today with 634km, having flown from North Hill to Meldon, Lasham, Bodmin, Salisbury and back to North Hill. Ron Perry's 500km distance in a PIK 20B took the day prize – following the Enterprise maxim that the only way to win tomorrow is not to win today.

The Bergfalke crew, airborne for 3hrs, received the wooden spoon. The score sheet showed a distance of 14km – less than 5km/h. *What* actually happened was that they found an increasing headwind near Okehampton and were not making headway – and so turned back, landing within sight of the site (and looking up at it!). The Bergfalke was one of three two-seaters competing.

This was the day that Chris Rollings, flying an ASH-25 from Booker, set the UK 750km two-seater record, flying 770km at just over 92 km/h, turning Petersfield, Welshpool and York, at a speed faster than the UK single-seater record (which he also holds at 79 km/h). The P2 was Bruce Owen who owns the glider.

Wednesday poured with rain. Being July 4, Mary Meagher tried to celebrate American Independence Day and hung a huge Stars and Stripes flag over the briefing table – John Fielden was most impressed – he thought we were joining him in celebrating his wedding anniversary!

Thursday wasn't flyable, but promises of cross Channel weather sent the competitors scurrying for passports and French airmaps. Friday dawned in a promising manner and John Bally got launched, destination Austria, at 9.30 . . . soon to be followed by the rest of the field, who wouldn't be returning to North Hill because the weather window was closing. Retrieve control had a busy day, with Dave Reilly reaching Great Yarmouth and Chris Nicholas flying to Dunstable. Ron Perry and Paul Croote (Kestrel 19) flew to Skegness and landed at the airport. When in contact with the ATC Ron inquired if he would be charged a landing fee and was told "not this time . . ."

Mary Meagher set off, destination France, and landed *aux vaches* near St Mary Bourne. No, not in France, but in a field of bullocks. Having relayed a message back to North Hill, "explaining the situation" (and received a plaintive "good luck" reply) she dragged the Pegasus into a small enclosure containing some pheasants and corn, and surrounded by an electric fence. The farmer's amazement at Mary's ability to land a glider into an area barely larger than itself can be imagined.

And finally, it transpired that John Bally had landed at Uppottery – the airfield next to North Hill! In fact, he'd visited Parham on the south coast before the weather conditions convinced him that it wasn't a cross Channel day, and he flew back towards North Hill in worsening conditions. He'd probably have made it if he hadn't been rained on. There was a suggestion that he'd launched early to entice all the other competitiors into the air in order to boost the Competition Enterprise coffers, but it really wasn't true.

The weather closed in and Saturday saw everyone sitting at cloudbase – in the briefing room, before packing up to go home. The prizes were awarded to Dave Reilly, with John Bally 2nd and Chris Nicholas 3rd.

So thus ended Competition Enterprise 1990. A week that saw the first Enterprise that was not attended by a competitor who had visited all the others – John Cadman, Bill Longstaff, Chris Simpson and Lemmy Tanner all being absent from the ranks. A week with four days of flying, over 500hrs and 22500km flow. And the first year in a long time when a pullover and anorak were mandatory equipment.

Next year, Competition Enterprise will be held somewhere in Britain from June 29-July 7.

THE L23 SUPER BLANIK

After giving this newcomer a flight test Derek Piggott is convinced it will be a useful club trainer



Everyone who has done much flying in the old L13 Blanik must agree what a nice handling machine it is. In fact when it first came out back in 1958, it must have been the best handling two-seater for its day. It was a popular trainer all over the world and 2648 were made. Recently, the first of the new model L23 Super Blanik arrived in this country and it is now flying at Bicester where it can be tested by prospective buyers.

I was interested to see that in addition to many minor modifications they had eliminated the Fowler type flaps. These must have been expensive and heavy and always made the rigging more awkward. The only real advantage of them was to lower the circling speed for thermalling and in many clubs they were not used except perhaps for landing. The characteristic wingtip shapes of the early model have also been replaced and the ailerons are now protected by the downward turned tips.

With such a low speed glider the flaps could have few advantages and probably added considerably to the drag, even in the retracted position. Presumably someone behind the Iron Curtain dictated that flaps and retractable undercarriages were going to be fitted to all future gliders and therefore the two-seater machines should have them for training purposes. Unfortunately, most flapped machines have plain flaps with upward as well as downward deflections for use to extend the efficient cruising range so that the old Blanik had very little advantage for training over a non-flapped machine.

The reduced drag of the cleaner non-flapped wing should have improved the best gliding angle from the original 28:1 and it would be an interesting exercise to measure the difference in performance between the old and the new models. My own guess is that the new one will show an advantage at all but the very lowest speeds.

It is now several years since I flew the older version and so it is difficult to be sure of the differences and to make accurate comparisons. The most striking difference externally is the new T tail which should greatly reduce the risks of damage landing in crops or long grass.

Pilots and particularly instructors often used to complain about the restricted sideways and downward view from the cockpits. This has been greatly improved by lowering the sides by several inches. The canopy shape seems to be unaltered, but the canopy is now in two pieces with the front portion opening sideways and the rear moving up and back on two stays. The canopy locks are similar to the original and although well proven, are not the easiest to operate.

The seat backs and rudder pedals are adjustable but the cockpit remains as before, just a little small for a big pilot. One very useful feature is the provision of a special 15kg (33lb) seat bottom which replaces the normal one for lightweight pilots flying in the front cockpit. This seems an excellent solution to ballasting the aircraft for early solos and lighter pilots.

The original release hooks have been replaced by standard Tost releases.

Early Blaniks had a history of corrosion problems when kept in the salt air at coastal sites. I was unable to establish whether the manufacturers have yet discovered the use of Chromate or some other material to prevent this problem or if they are still assembling them "dry". The whole structure is extremely light and yet it is still stressed for +6.3 and −3.15 and fully aerobatic when flown solo.

The very poor tailskid on the early models has been replaced with a free castoring solid tyre tail wheel of reasonable size. Over the years it has been a problem to design a suitable, stronger replacement for the original tailskid, mainly because the fuselage structure above it is so light that it will not stand much hammering around on a rough field.

No need to lift the tail to move the aircraft

A plain skid was not a good solution because with the forward position of the main wheel, the weight on the tail was too much for even a strong man to carry very far. Perhaps this did not matter much for all aerotow training, but with short winch flights the ground handling is very important. There is no tail handle for lifting but with the new tailwheel there is no need to lift the tail to move the aircraft. Time will show whether they have produced a really rugged tailwheel mounting which will survive operating on rough fields or in places where it is likely to be moved over the sharp edges of runways. I would strongly recommend it to be fitted with a guard ahead of the wheel to prevent it falling into a rut and taking the whole assembly out of the fuselage. A triangular hard rubber block just ahead of the wheel might save an expensive repair.

Because of the weak tailskid/wheel assembly, pilots were discouraged from holding off properly for the landing and this results in sloppy landing habits which often last a lifetime. It was for this reason that I would not recommend using

DENNIS JOHNSON TROPHY



The Rockpolishers League have a new trophy for the best Novice team in their section of the Inter-Club League. Dennis Johnson, who was killed flying a motor glider last summer, was Shobdon's team captain and a keen and enthusiastic supporter of the League. The trophy was the work of two Cotswold GC members - 16 year-old Russell Clarke made the Libelle in balsa wood before it was cast in stainless steel and Mike Levitt turned the base. It was presented retrospectively to Midland GC's Novice team for 1989 and has now gone to Nympsfield who also have "The Rock" trophy for the League's best team. *Details from Geralyn Macfadyen.*

the old Blanik for basic instruction, although it had nice handling and superb stalling and spinning characteristics for a trainer.

In the course of testing the new machine for the BGA, I made two aerotow flights at Bicester. One solo flight on which the cockpit load was 190lb and another flying close to the aft limit with a light lady in the front seat (153lb including 33lb seat). The tests included general handling, stalling and spinning, sideslipping and a check of the stability.

As soon as the aircraft starts to roll you are reminded of the joys of having a really effective shock absorber on the main wheel. Even the ride on rough ground is great and almost makes up for the trouble that the shock absorber can be to re-inflate if it ever starts to leak. I was surprised to see they had retained the semi-retractable main wheel, which like the flaps seem rather a nonsense since it probably causes almost as much drag as a well faired fixed wheel and must cost more.

At my weight the aircraft is stable enough to aerotow for quite long periods hands off and the elevator trim is powerful and easy to adjust.

I released at 3000ft and settled down to check the stalling characteristics. There is a definite stall break at about 28kt and a gentle wing drop unless the aircraft is exactly straight, making it ideal for training. If the stick is kept right back the wing continues to drop and autorotation sets in. This stops immediately if the stick is allowed to move forward off the rear stop.

The spin recovery is straight forward except that with the C of G forward, the stability was so strong I was conscious of a considerable push force being needed for the recovery from the spin. At this weight the aircraft is very stable and the fore and aft control felt very heavy, making it worthwhile retrimming for any significant change of speed. Of course this makes trimming and steady flight very easy for a student but could make the aircraft rather tiring to fly for long periods. Apart from this, the stiff wings and low friction in the control circuits make it a joy to fly.

The lateral handling is excellent, with a measured rate of roll from 45° to 45° of about 4 sec at 42kt and with sufficient rudder power to prevent any significant slip.

The lack of any over-balance of the rudder makes it better than most other modern machines for initial training where any over-balance causes a considerable amount of confusion for beginners.

The airbrakes are effective and have very little snatch at approach speeds and the sideslipping is excellent with no over balance of the rudder to contend with.

As I did not recollect the stability being so strong in the early model, I suspected that I was flying very near to the forward C of G limit. Unfortunately, the makers handbook did not seem to give enough information to enable me to determine the exact C of G with various cockpit loads and only gives a loading diagram which makes sure you are well within the permitted C of G range. If at my weight flying solo I am very near the forward limit, this would account for the stability and the stick forces being so high.

Certainly flying nearer to the aft limit it is a very pleasant machine, like the original. This feature alone makes me critical of the handling and a little doubtful of its suitability for training pilots who are going to convert directly on to modern single-seaters which are far less stable and have much lighter elevator controls.

The Blanik is well proven and is particularly suited to the club or private owner who does not have hangarage or does not want to be bothered with rigging or de-rigging each day. In many places I have seen Blaniks picketed out in all weathers with no apparent problems.

Being all metal, the fatigue life is of importance, but as it is rated as 6000hrs it can almost be discounted as this is more than a lifetime of club flying in our climate.

As a basic trainer it is one of the best machines still in production because of the lack of rudder over-balance and the good aileron/rudder harmony which should lead to good co-ordination habits. It should be particularly good for thermal soaring in weak lift, because the low circling speeds make centring easier and enable very small diameter circles to be made. The stalling and spinning characteristics are ideal for training and altogether it should be a useful club trainer.

I enjoyed my flights in it and am grateful to the agent, Peter Clifford, and the RAFGSA Centre at Bicester for the opportunity to fly it. ■

WHAT'S THE BGA DOING ABOUT IT?

In this second article Bill Scull, BGA director of operations, explains the role of the Development Committee

The BGA Development Committee doesn't have formal meetings but the chairman, Humfrey Chamberlain, and myself have a group of experts, such as planning consultants, lawyers etc, we can call upon as required. The expertise comes as much from people with recent experience as from specialists.

There are several areas where we might need their help.

Site Purchase is relatively rare, although in the last 11 years ten clubs have bought their sites, all with BGA involvement. Then advice is needed on finance, negotiating a lease, Sports Council aid (grants and/or loans) and maybe planning permission (see later).

The crux of a successful deal is having a motivated team of club officials and we can be part of that team if you'll let us. Two BGA publications, "Buying a Gliding Site" and "Financial Help for Clubs", will give encouragement and practical advice.

More clubs are looking for new sites for various reasons. You have to find the land yourself but it is advisable, maybe even essential, to get a BGA opinion before making a commitment. There is a risk of seeing a potential site through rose-tinted spectacles if you are desperate. It might be possible to fly from it but will it be viable if you can only do 25 launches a day?

Planning permission is an increasingly tricky area because of local opposition - the NIMBY (not in my back yard) syndrome. We have recently written a paper on the subject - "Establishing a Gliding Site" - with guidance on such essentials as choosing the size of site, making your case, approaching the planners, local PR, getting winch launch permission from the CAA, resolving airspace conflicts, dealing with noise objections, perceived risk and dealing with the loss of privacy and NIMBY syndromes.

A single issue can take several BGA man-weeks

Also an increasing number of gliding sites are threatened with various developments, industrial estates and roads (usually by-passes) which threaten to cut off a corner of the airfield, making continuing operation doubtful. Together with the club the BGA will make representations to the planners. This can be very extravagant on time and a single issue can take several BGA man-weeks in addition to club officials' time.

A planning application may end up going to appeal to the DoE and if it is a major development then the developers will hire the best solicitors and barristers. Our submissions have to stand up to critical cross-examination.

At a more basic level the development remit includes giving advice on rates, rents, leases and helping to persuade landowners to allow gliding to take place. Recently some clubs haven't asked for our help, preferring to re-invent the wheel as it were. But good advice may make the difference between success and failure. If the project fails there may be no second attempt. We will do our utmost to provide or find the advice you need.

Since we aren't telepathic it is necessary to ask for help. Occasionally we do get feedback which identifies a problem, sometimes from the club visits by Dick Stratton, BGA technical officer. But we are generally too busy with development issues to do much other club visiting, although we try to meet all requests. If you want a formal visit for advice, then a meeting with key club officials or your committee can be arranged. It is helpful to have a letter outlining any problem(s).

Apart from recent efforts such as "The Club Management Handbook" the Development ➡

Committee is working on a number of projects. Ideas have been floated on professionalism (for clubs which have grown to warrant considering employing instructors or managers), a BGA winch project to help improve club facilities and a club managers' course/seminar. The latter will probably emerge as a series of workshops sessions at the AGM.

The occasional problem we meet is apathy. By way of contrast visit such clubs as Wolds, Cotswold, Rattlesden and Southdown, to name but a few, and see the outstanding developments in winching, club facilities and overall standards. The secure, club owned sites really do get better and better.

The key to successful gliding is aiming for high standards and a steady improvement, setting targets and achieving them. Forward plans and financial viability rather than making do. Winch launches to 2000ft at a price young people can afford. The examples and the advice are there and we have a fifth publication, "Starting a Gliding Club" to help those at the very beginning of their quest.

**The papers mentioned are all available from the BGA office.*

NIMBUS 4

The Nimbus 4's maiden flight by its designer, Klaus Holighaus, was in May. At 26.4m it will be the largest production glider and, except for the Airbus and Egrett, the largest series built German aircraft.

It has taken three years to develop and while it evolved from the earlier Nimbus sailplanes, the large cockpit is a new concept. It opens forward, hinged at the instrument panel, and with a new seat pan shape there is more room. The larger canopy improves vision and the longer nose gives space for an additional large battery necessary for the motor glider versions.

Aramide, carbon and glass-fibres in its hybrid construction help to give strength and energy absorption and the undercarriage has a large telescopic sprung two-seater wheel.

Compared with the Nimbus 3, it has a larger fin and the wing plan form is similar to the Discus with a multi stage swept back leading edge. The wing aerofoil is based on a modified Ventus section to give the best handling characteristics. Small winglets and various types of turbulators are being tested.

There are spoilers on the wingtips to give a roll reversal rate from 45° to 45° in less than 6sec. An interesting feature is a linked flap/airbrake system to improve control on short field landings. The waterballast tanks have 300 litre capacity and the fin ballast tank is standard.

The basic design allows for either a turbo engine or a self-launching engine. No. 1 was built as a turbo, the next will be a self-launcher and the third off the production line a pure glider. Series production will start in 1991.

Technical details

Wing span (m)	26.4	Wing area (m²)	17.88
Aspect ratio	38.98	Length (m)	7.83
Empty weight (kg)	470	AUW (kg)	750
Stalling speed (km/h)	73	VNE (km/h)	275
Min sink (m/sec)	0.48	Best L/D at 110km/h	60 (approx)

Report by Peter Selinger

AMERIGLIDE

Ben Watson led a team to the pre-Worlds at Minden, Nevada from June 30–July 9 and came home with the 15 Metre Class winner

The International Gliding Commission thinks pre-Worlds should be abolished to save expense. That may make sense round the table but the view of the pilots and organisers is that these contests are quite necessary. At Ameriglide we all learnt a lot.

The organisers had problems because they didn't have control of the airfield and had to obey the airfield management. As a result we had to grid on one runway and launch on another. This caused much pushing and sweating in the Nevada dust. Vehicles were not allowed to leave the grid until launching finished. This resulted in a four hours' wait on one day when the launch was held and eventually cancelled.

Another problem was the lack of a central point for control and no tannoy for announcing outlandings to crews. One day we had 35 landouts. Aerotow retrieves were encouraged, and will almost certainly have to be permitted in next year's rules. One great innovation was Minden Air, a twin which took off at 1900 each evening and relayed messages from pilots struggling home.

What about the flying? Certainly it was different - with the airfield height 4700ft and never exceed height 18000ft, the pilots were nearly always on oxygen and US masks, which have little nostril protrusions, are efficient but uncomfortable to wear. Occasionally start heights were limited to 10000ft with an observed line called impeccably by Charlie Spratt.

On good days the statistics were fantastic. Janusz Centka, Poland (ASH-25), on the 5hrs POST (Pilot Option Speed Task) flew 868km at 175km/h. Newcomers found it hard to analyse the thermal sources - different from the Alps and from Rieti, Italy. Ridge running didn't seem to pay. Hot spots varied daily for no obvious reason. The Ameriglide experience should certainly be useful for Minden 1991.

And the Brits? Didn't they do well? On the final morning Justin Wills and Andy Davis were each leading their Classes, Justin by 4pts, Andy by 74. Both were chased by Americans. Eric Mozer (Ventus) started 11min behind Justin but failed to catch him, so Justin won the 15 Metre Class by 8pts.

Andy started with the first gaggle and beat them all to log 150km/h, which looked very respectable. However, Chip Garner, who with Rick Walters (Both Discus pilots) had shared the Standard Class lead on all the others days, started 38min behind Andy and stormed round the 430km course at 164km/h to beat him into 2nd place.

Justin was flying Doug Jacobs' LS-6 and Andy, John Byrd's Discus. Our thanks to Doug and John for their generosity.

Chris Garton had a frustrating time. He had hired a poor quality LS-4 from Soar Minden. His instruments never worked properly and often packed up altogether. He was lying 7th after Day 5 but slipped back in the last two days. Robin May, Martyn Wells (LS-6) and Pam Hawkins (ASW-20c) all seemed to enjoy their flying but failed to score well. Robin had an indifferent Nimbus 3. He flew several tasks at 150km/h or better, but in World Class that wasn't enough. Martyn had a Day 1 photo penalty and a bad second day. He was 6th on Day 3, 12th on Day 5 but landed out on Day 4, then 16th on Day 6 and 5th on the last day.

A musical barbecue and every pilot was sponsored by a local family

Our American hosts were marvellously friendly. The organisers were receptive to suggestions and gave us confidence that any shortcomings will be corrected next year. The township of Minden laid on a musical barbecue for us and every pilot was sponsored by a local family.

Tailpiece: The Danish pilot Curt Olle Ottosson landed out in a remote field where the gate was closed by a combination lock. With several hours to wait for his crew he got to work. Fortunately the combination was only three figures - so starting at 001 he finally released himself at 287.

Leading results: Open Class: 1. K. Holighaus, W. Germany, 6048; 2. R. Schramme, W. Germany, 5777, 3. T. Delore, New Zealand, 5761; 13. R. May, GB, 5092pts (all flying Nimbus 3s); 15 Metre Class: 1. T. J. Wills, GB (LS-6), 5700; 2. E. Mozer, USA (Ventus) 5692, 3. D. M. Paré, Holland (Ventus B) 5669; 16 M. D. Wells (LS-6) 4441; 19. Pam Hawkins, GB (ASW-20c), 3148pts; Standard Class: 1. C. Garner, USA, 6033; 2. A. J. Davis, GB, 5902; 3. R. Walters, USA, 5860 (all flying Discus); 12. C. Garton, GB (LS-4) 4563; 21. R. Fletcher, GB (DG-300), 3481pts.

OVERSEAS NEWS

Please send news and exchange copies of journals to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, England

AUSTRALIAN NATIONALS

Ingo Renner did *not* win the Australian Nationals. He was only 2nd, behind Bruce Brockhoff (LS-6). Another unusual feature - the contest started with five consecutive unflyable days.

WORLD O/R ATTEMPT

Ray Lynskey (NZ) attempted a 1700km O/R on January 3 but was forced to land by an advancing front at 1630, having flown only 1500km. His take-off point (Omarama) is a possible site for the 1995 World Championships. - *Segelflygsport.*

VINON - SWISS DOMINATION

The 23rd Mountain Gliding Competition at Vinon, France (July 4-13) was dominated by Swiss pilots who took seven of the leading places in the four Classes (Two-seater Class as well as the normal FAI Classes).

Conditions were only average: eight competition days of a possible ten; average task lengths were 434km for the Open and 333km for the Standard Class). - *Aviaport.*

FIRST WORLD MG CHAMPIONSHIPS

Thirty-three competitors from 12 nations met at Issoudon in central France from July 1-12 for the first World Motor Glider Championships. Nine contest days were achieved out of a possible 11, and there were three tasks in excess of 500km.

Ralph Jones, who finished 8th in the Open Class, having won the first day, was the only British entrant. Gerard Lherm (France), flying Holighaus's turbo-equipped Nimbus 4, became the first Class 1 Motor Glider World Champion. With 6629pts, he finished 350pts clear of Bourgard (Belgium), his nearest rival, even though he never won a day.

Consistency pays. Treiber and Huttner (FRG) took the first two places in Class 2 flying a Ventus CT and a Discus VBT respectively. - *Aviasport.*

SPANISH NATIONALS

Tim Macfadyen, of Cotswold GC, flying his ASW-20 *hors concours*, came 1st in the Spanish Open/15 Metre Class Nationals, held at Mora, 60 miles south of Madrid from July 9-13. He won three days and came 2nd on the rest.

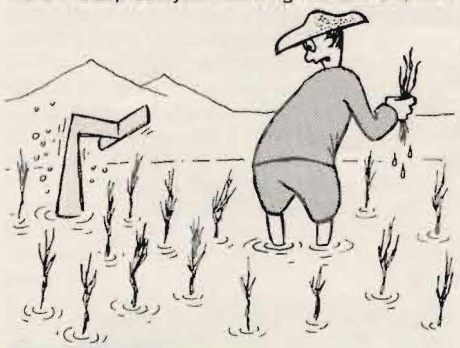
Unfortunately foreigners were only allowed to fly *hors concours* this year (Tim was 4th last year when visitors were allowed to compete fully). Antonio Lopez (ASW-20) came 1st with Marcel Soler winning the Standard Class, although he was behind the French pilot Jean-Pierre Milan who also had to fly *hors concours.*

Temperatures around 100°F gave fabulous conditions with Tim flying 6800km over 14 days. Afterwards he flew 950km from Somosierra, 50km from Fuentamilanos, in a 1000km attempt.

TAIL FEATHERS

The next generation of Champions?

I've decided to get two gliding seasons a year so long as my health holds out, and damn the expense. So last winter I spent two weeks at a site in Australia and did 56 hours. The place was swarming with Japanese, all mad keen to help out and learn. One of them showed me a map of his club's local cross-country triangle - 25km in all. The terrain was a mass of houses and rivers and paddy fields so if you landed out you really were in deep sukiyaki. Coming to Australia, with



Deep sukiyaki.

100 mile visibility and paddocks a mile long and most of the place-names on the map every 50km or so representing no more than a silo and a shed, must be a mind-blowing experience for them. They are very deferential to anyone, who has a bit more experience than they have, including a second-rater like me. "Mister Prat, you are top -crass pirate, how rong did you fry your grider yesterday?" "From ten o'crock to eight o'crock" (it is very easy to slip into their way of talking) adding with completely false modesty "About 780 kirometres." "What a fright!"

The flying of this particular intake left a lot to be desired. For a country whose artists can create 100 different shades with one brushstroke, their inability to distinguish between a thermalling turn and a full-blooded spin was remarkable. In fact I began to toy with a new theory that the so-called Kamikasis of 1945 weren't trying to commit suicide; they were trying to surrender to the American aircraft carriers, but couldn't get themselves lined up properly. So they were piling into the stern, or the bridge, or went into the deck vertically. Of course if the Yanks had known the true reason for the carnage it wouldn't have made any difference to the welcome they gave the visitors:

"... we'll have to persuade them to surrender someplace else ..."

"Jeez, here come some more would-be prisoners. I guess we'll just have to persuade them to surrender someplace else!" and then they'd have opened up with everything they had.

Nevertheless, whatever they set out to do well they end up doing with total mastery; I'm taking no bets against seeing, before AD 2000, a Japanese World Champion accept his prize in immaculate English, while our attempts to return the compliment in his (or her) language will have them all rolling on the floor.



Rolling on the floor.

CHEAP TUGS?

The Italian Aero Club report that the Italian Air Force is selling off a number of Stinson L5 and G46s. Cheap tugs? - Translated from Segelflygsport by *Max Bishop.*

SOUTH AFRICA 1000KMS

Between December 31 and January 4 no less than 14 closed circuit flights in excess of 1000km were made from Vryburg, S. Africa. - *Segelflygsport.*

WE'RE CHEAP!

The price of the East German flying magazine *Flieger-Review* has been increased from DM1-50 to DM3-50. Would you still buy *S&G* at £4 a copy? - *Max Bishop.*

Can you never find time to do all the things you want to do? Are your gliding partners always procrastinating? Is your spouse/lover hopelessly unpunctual? At work, do your boss or your staff drive you mad? Are you wondering what really useful presents to give for Christmas? Would you like to support a truly worthwhile charity at this time of year?

If your answer to any of these questions is "Yes!" then send £3.95 to the BGA for a copy of

The Time-Effective Manager
by Mike Bird

(pilot ordinary, writer and business-guru extraordinary, currently lecturing at London Business School and Henley Management College)

"We know the Platypus column is one of the most popular features in S&G. Here Mike Bird writes in his marvellously accessible way about a subject which affects us all. Now I know how he is able to put in so many hours gliding: he must have managed his own time very effectively!"
(Roger Barrett, BGA vice-president)

Mike is donating the entire proceeds from these books to the Princess Alice Hospice, Esher, which provided priceless help to Veronica Bird (better known to *S&G* readers as Mrs Platypus) who died of cancer in 1986, and to whom the book is dedicated.

The BGA will deduct only 30p for UK postage (some foreign destinations will cost rather more) and will send the entire balance to the Hospice

WINDS ALOFT AND THE WEATHER BELOW

Tom Bradbury suggests why winds aloft are not always what one might expect and how the changes can affect the weather

Most of us look at surface charts to estimate what the winds aloft are likely to be. Unfortunately there can sometimes be a surprising difference between the well known "geostrophic wind" and the real wind. During the summer there were several days when the geostrophic wind, measured from the isobars, showed a 20 plus knot easterly but a radar tracked balloon found it almost calm at 3000ft. This article suggests why winds aloft are not always what one might expect and how the changes can affect the weather.

Introducing contours

Most people are familiar with isobars and many can measure a "geostrophic wind" by laying a scale across the isobars to find the wind speed. Although isobars still appear on surface charts, meteorologists use "upper air contours" to depict the winds aloft. These contours show the level of a particular isobaric surface.

Pilots keeping to a constant altimeter reading are actually flying along a surface of constant pressure. Books on aviation often warn pilots that the height given by the altimeter will be different from the true height if there is a change of pressure during the flight. For example if a powered aircraft flies at an indicated altitude of 3000ft its actual height will decrease by about 280ft for every ten millibars drop in surface pressure.

Text books often show this state of affairs ending when the aircraft flies into a cloud capped hill whose height is below the assumed 3000ft flight path. The altimeter error occurred because this isobaric surface (equivalent to about 908mb on a QNH of 1013mb) sloped downwards far enough to intersect high ground. (Fig 1 illustrates this invisible pressure surface.)

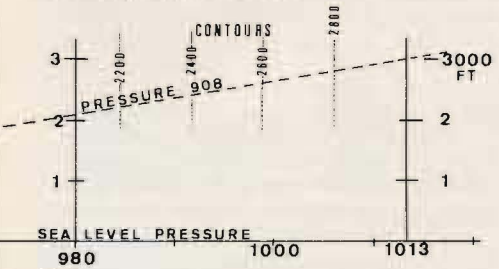


Fig 1

One can draw a chart showing contours of the height of any pressure surface just as one can draw contours of the terrain. Such contours look the same as isobars and they can be used like isobars, to find the wind speed and direction. (They also show altimeter errors.) Contours have a technical advantage over isobars in that one no longer has to bother with the air density in the formula for calculating wind velocity. A single set of scales fits all pressures. Met computers use contours rather than isobars for much of their calculations.

Finding winds from contours

Fig 2 illustrates the principle. The top diagram gives the cross section showing how the pressure surface slopes down. In the lower diagram the plan view shows a series of straight contours representing the slope seen from above. Suppose the air was initially at rest at "A" when some outside power tilted the whole surface and produced the slope. At first the air begins to move straight down the slope, obeying the pull of gravity. However, as it gathers speed it travels over an earth which is rotating underneath it. The result is similar to rolling a marble across a rotating turntable. The marble apparently runs straight but its actual track over the turntable will be curved (when viewed by someone on the turntable). The term for this turning effect is the "CORIOLIS FORCE".

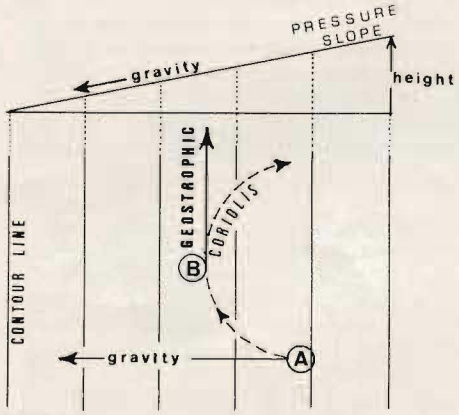


Fig 2

The Coriolis force varies with the latitude. At the North Pole it produces a maximum turning to the right. The effect decreases to zero at the equator and then becomes a left hand turning effect which increases to a maximum at the South Pole. Thus in the northern hemisphere winds blow clockwise round a high. In the southern hemisphere a clockwise circulation occurs round a low.

In the diagram for the northern hemisphere the coriolis force is indicated by the curved dotted line showing how the downward flowing air is slowly turned to the right as it moves over the earth. Eventually, at point "B", the air has been turned through a right angle and is now flowing parallel to the contours.

Any further turning by the Coriolis force would take the air up the slope again. A balanced flow is achieved when the wind blows parallel to the contours with a speed proportional to the slope. A steep slope means the effect of gravity is greater and the air moves faster to reach a balanced flow. This ideal wind is called the "geostrophic wind"; it is only true when the contour lines are parallel and straight but it gives a very useful approximation much of the time.

The effect of hot and cold air

When a column of air is heated it expands like the column of mercury in a thermometer. The effect of warming the air is to raise the level of a pressure surface. This is particularly noticeable with high flying aircraft. Flying over the ocean at a pressure of 300mb on the standard subscale setting of 1013mb the altimeter would read 30 066ft or 9164m. Over the tropics where the mean temperature is always high the true height (found from a radar altimeter) might be over 32 000 while in polar regions the true height in cold air could be nearer 28 000ft. Thus an airliner flying at a constant altimeter height from tropical to polar regions could lose some 4000ft.

Fig 3 shows how the real wind is made up from two factors. First there is the change of pressure at the surface which produces a slope to the contours at (say) 1000mb. In the standard atmosphere the 1000mb surface goes from zero where

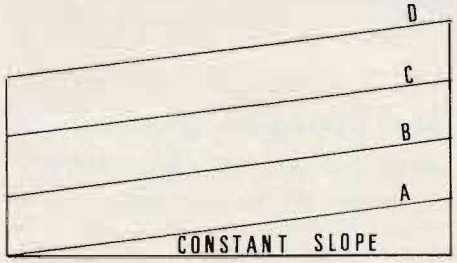


Fig 3(a)

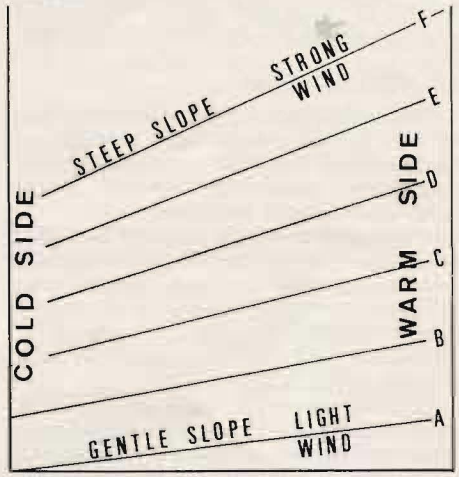


Fig 3(b)

the surface pressure is 1000 to 364ft where the pressure is 1013.2mb. If there was no temperature change all the other surfaces higher up would have the same slope. This is shown in Fig 3(a).

Next there is the effect of varying temperatures. There is nearly always a change in temperature in the horizontal plane, and if we include this we find that the slope often increases with height. 3(b) shows cold air on the left and warm air on the right. The warm air has expanded and lifted the pressure surfaces so that the slope becomes steeper the higher you go. Steep slopes mean strong winds and when the slope is very steep winds can reach speeds of 200kt (sometimes more). This is the reason why there is usually a jet stream associated with a front which separates warm and cold air.

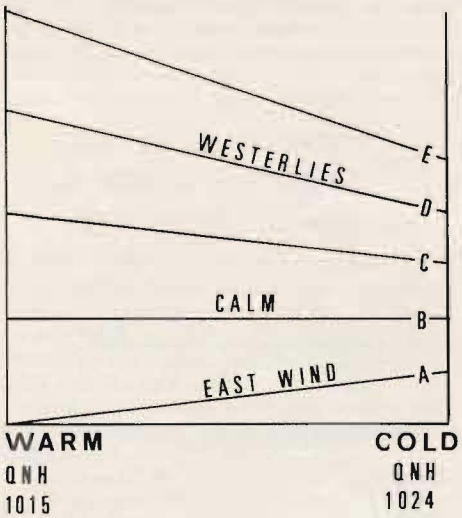


Fig 4

Sometimes the temperature effect works in the opposite direction to that shown by sea level isobars. Fig 4 shows what happens when the warm air is on the low pressure side. This happened several times last summer when there was a cool easterly wind at sea level near the south coast but much hotter air aloft over France and the Channel. The lowest surface marked (a) shows the slope which produced the east wind. Levels b,c,d,e, show how the warm air over France raised the contours there so that at (b) the surface was level and (e) and (d) were tilted the other way.

This was the situation described in the opening paragraph. One day the RNAS station at Culdrose reported a surface wind of 090/18kt gusting to 26. Seeing this report and looking at the surface chart, whose isobars confirmed the fresh easterly flow, one would have expected to find an easterly wind of some 25kt at 3000ft. Actually the radiosonde station at Camborne, not far away, showed that the winds had dropped off to almost nothing at 3000ft.

Contours with curves

Fig 2 showed the simplest case with straight and parallel contours. In real life contours are rarely either straight or parallel for long distances. If the contours are curved a new force comes in: the centrifugal acceleration which acts on anything following a curved path. (Met text books use the less familiar word "centripetal acceleration". I believe more people are familiar with the word centrifugal which means flying out from the centre of curvature.)

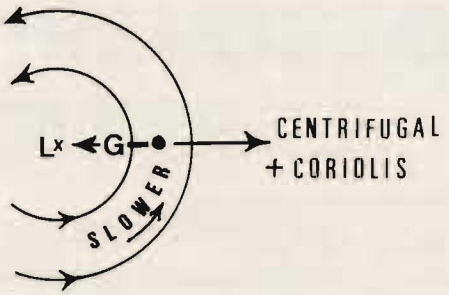


Fig 5

The effect on the wind speed depends on which way the contours curve.

1. Cyclonic curvature: Fig 5 illustrates contours curving round a low. As before gravity acts down the slope and the Coriolis force tries to turn the air off to the right but now the centrifugal force is also pulling the air off to the right. This additional force combined with the Coriolis force effectively weakens the pull of gravity and the air, feeling the reduction, moves slower than on the straight. Hence when contours curve sharply round a low the wind speed is much less than it is for the same slope and straight contours. The steeper the turn the more the air slows down. The speed may be much less than half the value for straight contours.
2. Anticyclonic curvature: When the air curves round a high the effect is reversed. Fig 6 shows that the centrifugal force is now acting with the pull of gravity instead of against it. In these circumstances the poor old Coriolis force has its work cut out to keep the air following the contours. Since gravity is aided by the centrifugal force it makes the slope feel much steeper than it really is, so the air travels faster round an anticyclonic curve. The wind can blow at up to twice the "geostrophic" speed round such curves. If it tries to go faster than that the flow becomes unstable because the air can no longer follow a tight anticyclonic curve. It tends to slide outwards and this limits the gradient round the centre of a high. Hence one only finds very tightly packed contours round a deep depression, never near the centre of an anticyclone.

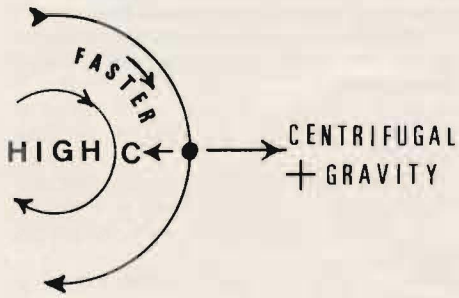


Fig 6

Acceleration effects

A pilot puts the nose down to increase speed, trading height for speed (or potential energy for kinetic energy). To lose speed one pulls the nose up and reverses the process. When air flowing parallel to the contours meets a steeper slope and has to accelerate it does so by moving across the contours in a down hill direction, trading height for speed just like a pilot. Fig 7 shows the entrance to a jet stream where the contours are coming closer together (the slope is steepening). (a) is the plan view, 7(b) is a 3D sketch. The air starting at "A" moves down the slope to acclerate; in other words the wind has to blow across the contour lines for a time until it reaches full speed.

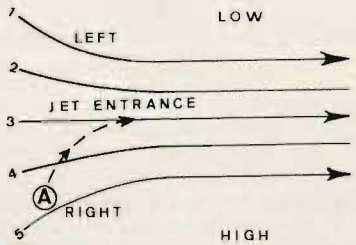


Fig 7(a)

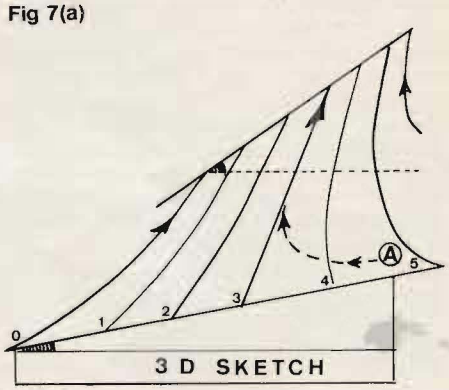


Fig 7(b)

Fig 8 shows the deceleration at the jet exit. To slow down the air trades speed for height and it gets the extra height by climbing back up the slope. Seen in plan view it turns right and may sometimes end up making a complete loop. This is not just theoretical; observations confirm the effect. Constant pressure balloons released into jet entrances follow similar curved tracks across the contours. Some came out at the right hand exit and made a complete loop. The winds found by high flying aircraft also show this effect; they blow across the contours at an angle towards the low near the jet entrance and then out towards the high at the jet exit. Sometimes the angle is as much as 30° across the contours.

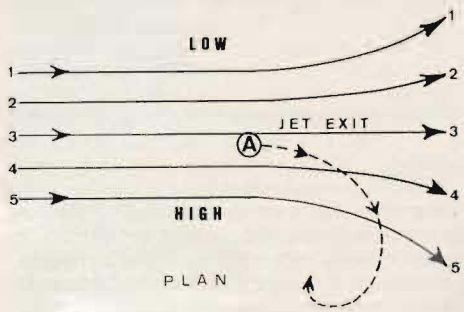


Fig 8

Fronts and jet streams

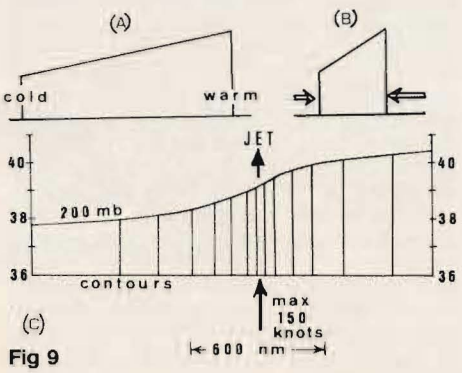


Fig 9

Fronts separate air masses of different temperatures. If cold and warm air masses are drawn together the slope of the pressure surface becomes steeper. Fig 9 shows (a) the two air masses far apart and only a gentle slope to the contours; (b) shows how by drawing the two air masses together the slope is steepened; (c) shows a more realistic condition with the slope fairly gentle either side and much steeper high up where the frontal surface, which separates the two air masses, approaches the tropopause. (The tropopause is the surface separating the stratosphere, where temperatures change little as you climb higher, from the troposphere where the temperature usually decreases with height.)

The jet stream is found where the pressure surface gives a sudden dip.

Interaction between fronts and jets

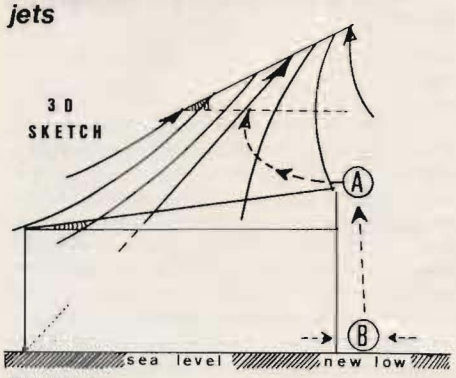


Fig 10(a)

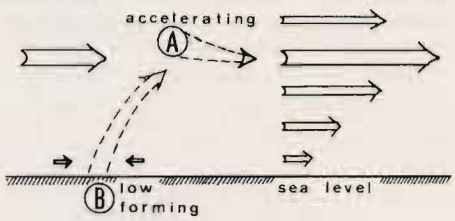


Fig 10(b)

Fig 10(a) shows a simplified 3D diagram of a jet entrance. (It may be compared with Fig 7.) The air at "A" moves down the slope and across the contours as it accelerates. This would tend to leave a gap at "A". It is a little like cars accelerating out of a roundabout, they become more widely spaced as they gather speed. In the atmosphere air from lower down is often drawn in to fill the gap. The rising air then leaves a gap at "B" near the ground. This can cause a fall of pressure and may be the start of a new low or frontal wave. A 2D side view is shown in 10(b). The region of acceleration into the jet is shown at "A" and "B" marks where there may be a pressure fall at the surface.

Where lows form

The "right entrance" to a jet is a favourable position for new lows to form. Conversely the left side of the jet entrance is where the surface pressure often starts to rise.

If conditions are just right and the surface low starts to deepen, the lowest layer of air starts to rotate round the new centre while the jet stream aloft acts like an extractor fan sucking air out of the low. The ascending air cools and cloud forms releasing vast amounts of latent heat which adds to the energy available.

A similar process operates at the other end of the jet where the left exit has a similar ascent of air to replace that which turns across the contours.

Where highs form

At the right exit the process is reversed. As the air turns out of the jet and slows down there is an excess piled up near the right exit. The air aloft starts sinking and pressure builds up at the surface to form a new high. A similar process acts near the left entrance to the jet where highs can also appear.

This account is (as usual) vastly over simplified. When real data is put into a numerical model the computer has to calculate how the accelerations at many different levels interact. However, the simple diagrams serve to illustrate a general principle. The points to remember are that:

(a) Any flow which brings cold and warm air masses nearer together will increase the wind speeds aloft.

(b) When billions of tons of air are forced to accelerate, the flow is seldom perfectly balanced.

(c) Out of balance flows produce large scale vertical motions of air between ground level and the base of the stratosphere (and sometimes higher).

(d) Surface lows and highs are often a result of this activity aloft.

(e) As those surface lows and highs develop they in turn alter the flow aloft, first boosting the process but later damping things down.

Waves and the winds aloft

For most kinds of soaring the approach of a jet stream is bad news; it often means the weather will become unsettled with too much cloud and often rain as well. There is one feature which often improves with the arrival of a jet. That is the development of lee waves.

For powerful waves to develop it is usually necessary for the wave energy initiated by air bouncing over the mountains to be trapped at some level high up and reflected back. When energy is reflected in the right phase a feeble wave system is amplified into a powerful oscillation of air. It usually takes some time for the atmosphere to find a resonant frequency at which the wave starts to amplify. One of the best ways of trapping the outgoing rays of wave energy is to have a jet stream high above. The fast moving air aloft can act as a reflector of wave energy. The greater the proportion of energy trapped beneath the jet the longer the train of lee waves. On most wave days the energy "leaks out" and the wave train weakens downstream. Some technical authors refer to this as the "leaky mode", as a distinction from the "trapped mode" which usually gives the longest wave train.

Good regions for lee waves

The region directly below the jet core should trap waves very effectively but unfortunately jets often lie above unstable air which breaks up low level wave. This makes it very hard to contact wave flow. Satellite pictures near jet streams sometimes show waves extending up to cirrus levels where they have an extremely long wavelength.

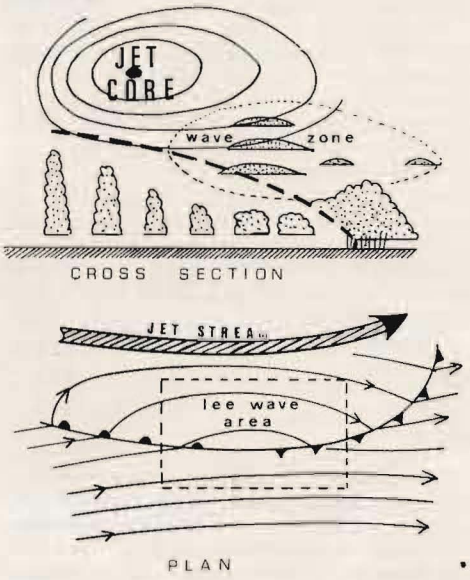


Fig 11

There is a region between the core of the jet stream aloft and the position of the front at the surface where the winds aloft are still strong enough to trap most of the wave energy, but the depth of cumulus is too shallow to spoil the waves low down. (See Fig 11.) Jet streams are often found lying almost parallel to fronts with the jet core several hundred miles on the cold side. If you see a cold front trailing almost parallel to the isobars, there may well be a jet stream too. The most usable waves occur if there is also a little ridge across the front to reduce the cloud tops. The frontal surface supplies a stable layer, one of the commonest features of wave days, and the jet provides a reflecting layer higher up to trap the energy. The two combined have produced some of the most spectacular lee wave patterns. In such situations satellites sometimes show wave bars extending from the west coast of Ireland, across much of Scotland half way on to Norway. Gliding clubs then report waves from Usk in the south to Aboyne in the north and then high level flights in excess of 500km may be possible.

THE ULTIMATE IN T-21s

Jack Elliott and his T-21 syndicate members emulated another group by fitting a microlight engine to their two-seater and had a great time with the glider known as the Spruce Goose. But this is the story of what happened when he moved to Strubby GC and bought the club T-21 with another syndicate

The old girl hadn't flown for a number of years and been subjected to the usual "borrowing". She was *sans* just about everything except for a damaged and uncovered fuselage and one uncovered wing, both in need of repair, and a tailplane.

However, in a way she was just what our new syndicate were looking for because while we enjoyed flying the Spruce Goose, there were several alterations we would have liked to have made but didn't simply because it was so much fun to fly.

As this one virtually needed rebuilding we decided to incorporate as many of our ideas as possible. Most notable was the engine, a FUJI Robin 330 twin-cylinder two-stroke, which we had used before with 100% reliability. The canopy has been redesigned and made of stainless steel, glazed with polycarbonate. The two halves are hinged and when fully open swing back under the wings and over the wing struts to lie alongside the fuselage.

Its angular movement is approximately the same as the rudder

The skid has been replaced by a nose wheel, ex go-cart, fitted with a moped hub complete with a brake. This is mounted in a substantial housing bolted between the twin front keels. The wheel is pivoted in the mounting and connected *via* a universal jointed linkage to the rudder pedals and its angular movement is approximately the same as the rudder.

The Ottfur is also secured to this housing and is approximately 12in further forward than standard. A completely new instrument panel was made of ⅜ ply and given numerous coats of varnish. It now looks very impressive. The addition of wingtip wheels completes the more obvious of our ideas.

The glider's performance is very satisfactory with an endurance of about two hours. The stalling speed has increased to 30+kt but is still quite mushy with no vicious tendencies. The normal flying speed is quite surprising - anything from 40 to 70mph, subject of course to conditions. It is quite something to be in a T-21 clipping along at 70mph with the vario at zero.



The four active members of the syndicate - Ron Cousins at the back with, l to r, Dave Woolerton, Jack Elliott and Bernie Skelton wearing matching overalls with Spruce Goose embroidered on the right and their names over wings on the left, the work of a member who runs an embroidery service. Jack says when they aren't flying they are "the usual airfield scruffs."

Ground handling is no trouble - you simply land as normal and after allowing the speed to drop away you lower a wingtip wheel, apply full rudder and therefore front wheel, give a burst of power and round she comes. You then trundle back to the launch point, another burst of power and full rudder and round she swings on to the line ready for the next launch.

The launch is either by winch or car. After starting the engine (electric starter) we wait until "all out" is given then steadily but fairly quickly give the engine full throttle. After releasing the cable one can throttle back to three-quarters power and potter off. We have launched with cars of various makes and engine sizes and all have got us off the ground with ease.

Anyone or a club with a T-21 who wants to really get the most out of it should seriously think about fitting an engine. It took four of our seven-man syndicate (three are sleeping partners) 14 months to complete the rebuild - we hoped it would take six. The cost of fitting an engine only is approximately £1300-£1400, but could be rather more depending on what you can do yourself and the extent of extras included. Our rebuild with all our extras cost considerably more but then we did start from scratch.

We would like to thank our members, from the CFI down, for all their help and Cranwell RAFGSA for their kindness when we were marooned there by bad weather after the weighing tests.

If any reader is interested, please come along, have a look and maybe a flight. But ring 0509 852411 before coming - if not you might find the Spruce Goose 2 has flown away.

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BAROGRAPH PRINT-OUT

Modern electronics make it possible to record our soaring flights in greater detail than has been generally available. A new area of opportunity is opening to cross-country pilots where we can monitor performance to see where improvements in technique can be made. The familiar barograph record can be enhanced by expanding the scales and adding time and TP information. Also, when an electronic compass is fitted, a trace of the actual ground-track of the glider is possible.

An example of a Varcom Sailplane Computer barograph print-out is shown. The barograph function is incorporated in the Varcom instrument (see "The Varcom Variometer" in the December 1988 issue, p288). The print-out is of similar size as current barographs, but more of the area is utilised. Rates of climb and altitudes can be directly measured off the trace. The flight was a 320km O/R from Shobdon to the A303/A34 junction south of Whitchurch in an LS-4 on May 26.

All production units include the clock, which forms the basis of the barograph security system. To obtain the record a portable dot-matrix printer is plugged into the Varcom instrument after the glider has landed. It takes about 10min to print-out the trace and all flight statistics; meanwhile you can be washing-down the glider! The barograph is also auto-scaling depending on the maximum height achieved during the flight. There are three scales: 0-6500ft; 0-13000ft; and 0-26000ft.

A number of features have been incorporated to ensure the validity of each barograph record. I do not claim that they are the only way of achieving security, but I will outline them briefly:

1. There is an internal calendar-clock in the computer which, when altered, destroys the barograph record. A valid barograph print-out shows the time and date of printing, the date, the number of flights and flying hours since the clock was last reset, as well as the time throughout the flight. As long as the record is printed out on the same day as the flight there is insufficient time to simulate a flight.

2. Each Varcom has a unique serial number which can be printed out. This ensures that the trace comes from the correct glider.

The software that produces the print-out resides in the flight instrument. This design-philosophy means that there is no need for an additional computer for post-flight processing.



SINCE 17.07.89
FIG: 6 HR: 16.1
LEG: 1 05.05.90
AVE SPEED 73 kph
TIME CLIMB 28 %
AVE CLIMB 2.8 kt
S-ALT. 3800 ft
S-TIME 12.31.20
F-TIME 14.42.17

LEG: 2 05.05.90
AVE SPEED117 kph
TIME CLIMB 17 %
AVE CLIMB 3.4 kt
S-ALT. 2500 ft
S-TIME 14.42.17
F-TIME 16.04.48

TOT STATS FOLLOW-
LAST FLT FIRST-
F-STATS 05.05.90
AVE SPEED 90 kph
TIME CLIME 24 %
AVE CLIMB 2.9 kt
S-ALT. 3800 ft
S-TIME 12.31.20
F-TIME 16.04.49
km FLOWN 320 km
A'BORNE 12.14.10
LANDED 16.04.48

Varcom Sailplane Computer barograph print-out of Andy's flight.

TWITTERINGS

Some ramblings by Sparrow

Where are all the writers?

A spell of enforced idleness following an eventful meeting with men in green gowns wielding sharp instruments left me sitting in the garden, grounded and bored. In the interests of her own fast diminishing patience, my wife agreed to transport me to our local library in the hope that something on gliding could be found to assuage my withdrawal symptoms.

Apart from a tome about military gliders by an apparently knowledgeable gentleman with an unpronounceable name I drew a complete blank.

I duly checked the index and found some ten titles listed, all but one being from the old firm of Welch, Wills and Piggott. Having already avidly read the entire works of the latter, I was left with ordering the titles written by the former two that the library could procure.

Now happily returned to fitness and, less happily, to gainful employment I am pondering the fact that a sport/pastime/belief like gliding has inspired the lyrical muse in so very few. It is a consolation that the quality of that few's efforts goes a long way in making up for lack of quantity but where, I wonder, are the Saint-Exupéry of soaring?

Are we all so busy flying that pen only meets paper long enough to write a cheque for flying fees or to compose brief epistles to light the pages of this journal? Shame on us!

Philosophical ramblings

In a rare moment of reduced pressure of work (well that's my story anyway) I sat at my desk pondering such arcane subjects as the identity of the man on the Clapham omnibus and why fluffy white cloud streets in a deep blue sky so successfully avoid the days I manage to escape to the airfield.

In such spiritual, meaningful moments, the mind is given to seize on and contemplate all manner of hypotheses concerned with our continued existence on this planet. Why, for instance, does a perfectly good flying day go begging because you have to take the cat to be "done". What proportion of our number get the opportunity of flying nkm triangles to here or there as demonstrated by our betters in these pages?

Had René Descartes been a sailplane pilot, would he have opined "I soar therefore I am?" If there is any dominant philosophical ideology in soaring, it would seem to centre on the principle of "go do it and to hell with those who would distract you" - possibly better put as "I came, I soar, I conquered."

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Mike Maufe's Kite 1.



The Rhönsperber owned by "Lofty" Russell and C



Above: Adam Downey's Prefect. Below: The L0100 from Lasham in which Lionel Sole gave an aerobatic display.



Photographs by Tony Hutchings w

LONDON GC'S D JUBILEE

This summer London GC celebrated its 60th year. Past and were invited to attend the Jubilee weekend, June 30-July 1.

The first event was a dawn patrol: pilots from neighbouring fast without being identified by a home team of airborne "spot ded with a free breakfast.

The club had planned a parade of gliders that had flown at t ending with the ASW-22. Unfortunately strong winds preclude aerobatic display from the LO100 flown by Lionel Sole, and

The open hangar held an exhibition of early photographs Primary and Mike Russell's Slingsby Falcon replica.

In the evening the club and guests, dressed in 'thirties style, excellent Rod Blake Big Band in the tug hangar.

The strong conditions continued on the Sunday but visitors Special and by Jerry Beringer in a club K-21.

It was a thoroughly enjoyable weekend.

Below: The Falcon belonging to Mike Russell.







nd Carol Taylor.

Above: Susy Mooring's Olympia 2B. Below: The London GC syndicate owned Olympia 260 which was flown by Vic Marshall and Ian Smith at the Jubilee weekend.

s with the report by Susy Mooring.

DIAMOND

t and present members and friends from the UK and overseas
ly 1.
ring clubs were challenged to fly into Dunstable before break-
'spotters". Three gliders from Booker made it and were rewar-

n at the LGC through the ages, beginning with the SG-38 and
cluded the earlier machines from taking part. There followed an
, and from Stewart Goldspink in his Pitt Special.
aphs and the history of the club together with Geoff Moore's

style, ate, drank and danced to Glen Miller music played by the

sitors were treated to another display of aerobatics by the Pitt





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GLIDING IN THE KARAKORAMS

Brennig James has been given permission to take an expedition to northern Pakistan where he expects to find the best flying in the world

Flying over the highest mountain in the western hemisphere is relatively easy. You just buy a ticket to Santiago in Chile and take a taxi to the gliding club at Las Condes which is fully equipped with the 23000ft Aconcague mountain only 70 miles away. (See also Brennig's article in the June 1987 issue, p128.)

You may have to wait many days for the right weather, but if you have the skill, luck and experience you have a good chance of spectacular flying.

If you want to fly over Everest there are a lot of snags. (See Brennig's article in the August 1979 issue, "The Most Useless Journey in the World", when he wrote about his frustrating expedition in the Himalayas.) Getting the equipment to Kathmandu overland is a big job and when you get there they may turn around and say "Yes we gave you permission to fly but it wasn't in writing". No, next time I have my sights fixed on K2, mount Godwin Austen in the Karakorams. This is in northern Pakistan, a country which has a much more benevolent attitude to gliding and sport in general.

I have been given outline permission to take an expedition to Gilgit which is within reasonable range of some fantastic mountains like K2 and Nanga Parbat, not to mention the Baltoro glacier. The weather is better than the Himalayas as by the time the monsoon gets in much of its humidity has been lost so there is less chance of being clouded in or flooded out.

The problems as I see them are first getting permission in detail and in writing from the authorities. It may be necessary to go out there and live on site for many months or years. It took us ten years in Spain to discover the Sierra de Gredos so exploration may take a long time. The second is to raise enough cash.

The main expense is getting the gear to Pakistan which probably means shipping it in a container to Karachi, buying a Bedford 3 tonner out there and towing the glider to Gilgit.

It remains to see how we will launch the glider - possibly by autotowing along the runway. Aerotowing is the most attractive prospect and perhaps by buying a tug we may discover where the local thermals live and find an easy way of aerotowing to them.

I expect the flying to be the best in the world. The scope for thermals and wave must be terrific, so that setting up a permanent operation there must be a good possibility. For the initial exploration I think a high performance ship is desirable as this is the safest aircraft to fly. We may well find that conditions are so good that cheaper and more robust gliders which are less costly to operate are quite adequate.

On the question of sponsorship, it never ceases to amaze me how some people raise enormous sums to finance sports which to my mind are really quite boring to watch. Still many people say the same about gliding. The only sponsorship I got to go to Nepal was a handful of ballpoints and a few packets of milk tablets. I ended up £4000 out of pocket and got no flying. I hope that next time my luck is a bit better.

18th INTERNATIONAL VINTAGE RALLY



The unique 1944 Hungarian prototype Futár and in the background Ernst Walter's Mü 13D-1 being prepared for flight.

Keiheuvel Airfield, Belgium, July 16-26

This was tremendously successful with weather improving until the end of the Rally. The flying and organisation were superb and with 65 gliders entered, we had record Rally statistics with 920 flights.

With 870hrs 18min logged this averaged out at over 56min/flight. There were 621 aerotows, 261 winch launches, ten bungy launches and 16 autogyro launches.

Werner Tschorn (W. Germany) won again this year by flying his Weihe for 6hrs 53min. In fact the Weihe's dominated the Rally - David Kahn (Britain) flew his for 6hrs 18min to come 2nd and George Slot (Holland), with the French Weihe, was 3rd with 6hrs 3min. There were many other commendable performances including Heinz Scheidhauer flying the Fauvel AV 22 flying wing to 4500ft.

The prize for the best restoration went to Frank Konsek's Grunau Baby 2B. However, we were horrified that having been rigged for its first flight it was hit by a landing glider. We hope both aircraft will soon be repaired. - *Photograph and report by Chris Wills.*

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POINTERS FOR NEXT SEASON

Charles Day gives some extracts from his logbook to entice the British pilot to winter in Australia

This is not about the prospect of huddling yet again under the wing on a freezing launch grid at Splasham or Damphill. For those who have not yet done the right thing for their sanity by escaping the dank, unsoarable, British winter to come over here and do some real gliding, the following 1989/90 logbook excerpts will give some idea of the variety of what you might expect over an Australian summer.

You might even consider financing next year's poll tax (is there a thermal tax yet?) by selling your current machine here. We are very short of good used gliders that are free of the dreaded gel coat cancer. Popular wisdom here has it that the German Schwabellack is the only original gel coat surface that lasts.

Not every day here is booming, of course, but as a guide we normally plan on losing only two to three task days during a fortnight's Nationals period in January. Some of our non-contest days would in fact be considered suitable for tasks in a British Nationals, but we generally scrub a day if there is not a good chance of completing at least a 200km task. We are not interested in trifles.

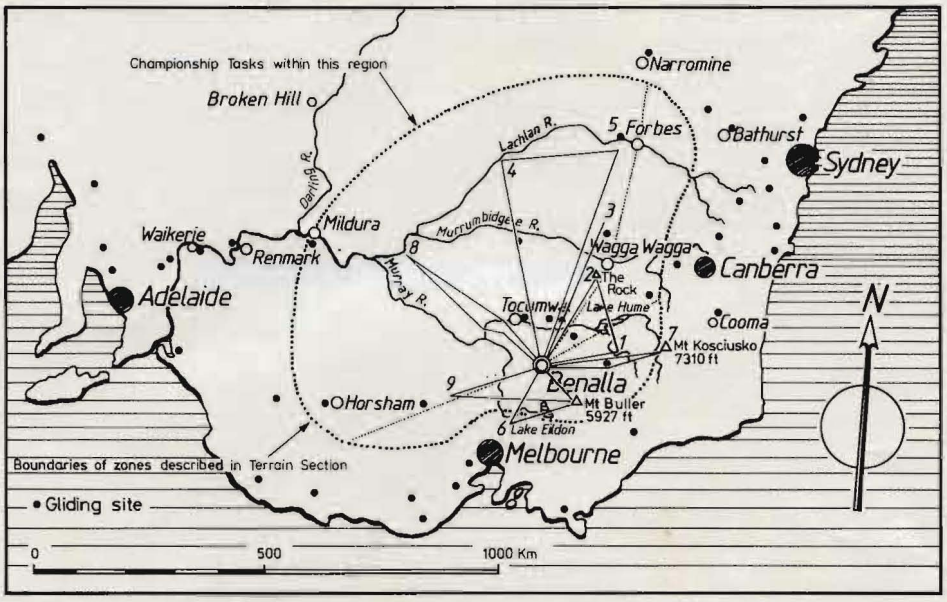
Impeccable background

My own gliding started in England in the early 1960s at Camphill and Dunstable. I have fond memories of both: if you can survive at either, outlandings should pose no terrors anywhere. I will be eternally grateful for the patience of Bernard Thomas, the CFI at Camphill at the time, in guiding my early efforts. I hope that he is still airworthy and enjoying life. My Silver badge from Camphill to just short of Dunstable is still engraved in my brain as a triumph of innocence over prudence. With the vast total of 50hrs experience, I recall the first 50km of the flight being almost totally in or above cloud. Chatsworth House was the only bit of ground sighted until Derby. I instantly warmed to the landed gentry by observing the generous outlanding fields His Lordship had thoughtfully provided amongst the otherwise unfriendly north Derbyshire countryside.

Since emigrating to Australia soon afterwards, I have done a further 2500hrs, mostly from Benalla. My mount since 1976 has been that most desirable of machines, a Kestrel 17.

Benalla region

The accompanying map, which was prepared as part of Benalla's successful bid to host the World Championships, illustrates the vast size of our soaring region and how little of it is exploited by an individual in a typical season. There is endless scope for the enterprising pilot. Detailed terrain notes were developed for the Championships but, in summary, it is flat in the NNE to SW sector and hilly over the remainder, the Melbourne-Sydney highway following the edge of the hills. Peaks rise to over 6000ft about 100km east of Benalla and to over 7000 in the Snowy Mountains a further 100km east. Much of this mountain country is forested, but most major valleys are cleared and quite landable, some with airfields. Often this area has the best soaring, with high cumulus on days when the plains have inversions and blue thermals, but it is unfortunately not much used for competitions due to politics in the national competitions bureaucracy,



The World Championships' map of the area redrawn by Steve Longland.

which tries to perpetuate a flat earth mentality.

Cross-country flying at Benalla has been greatly stimulated over the last few seasons since the appointment of John Williamson as operations director, particularly from a visitor's viewpoint. For example, competition-standard task briefings with temperature traces and on-site satellite images are provided every day during the summer months. John's Strine is developing quite nicely, too: he is already fairly adept in translating the simpler insults.

Dampness underfoot

The 89/90 Benalla season had to shake off the effect of an extremely wet spring, the influence of which hung around in the mountains about six weeks longer than usual. We enjoyed excellent cross-country skiing well into October, a time when we are usually inspecting the last of the snow from the cockpit. I had a very varied 400km flight with Roger Threlfall (also ex-Dunstable) on November 26. It took us 100km east to the Kiewa valley (1) *via* Mt Buffalo (5500ft), then north to The Rock, an isolated hill usually visible for 100km, and back to Benalla over the plains. The northbound leg was markedly slower than the others due to the wet ground: indeed, it was virtually impossible to stay afloat any further east. We had some very prolonged inspections of landing areas, particularly in the Murray valley east of lake Hume. On rounding The Rock, however, the effects of wet ground vanished immediately, giving a fast run home. Interestingly enough, the cumulus looked uniformly good right round the course. A week later things had dried out completely and there was no problem going further into the hills.

1000km troughs?

Early December brought the week of the year when Peter Trotter did his sterling 1000km in his DG-200 back and forth along a weak trough line to the NNE, the first local pilot to do a 1000 from Benalla. I fully agree with his recommendation of this direction as one giving a very good chance for completing heroic tasks. The trough line is a fairly regular feature when the wind is in the E to NE sector and gives the instability necessary for an early start and cumulus *en route*. If the instability builds up too much during the day and produces large showers, one can often deviate to the west away from the trough to where the cumulus is nicely spread out. Peter was successful more because of a very early start than particularly strong conditions; he got away at 0940, rather than the usual earliest time of 1030.

Even without a trough, this track is more likely

to have cumulus than further west because of a large source of moisture not far upwind - the Tasman sea. From competition task setting experience, I normally reckon on about 15% higher speeds with cumulus, even more with cloud streets. Although theory suggests that the first leg should be downwind, which would be to the W or SW on most potential closed circuit 1000km days at Benalla, we haven't had much success with his approach so far because of delays due to irrigation about 50km west. It is essential to avoid all irrigation areas in the first and last hour or so of very long tasks.

In general, I would estimate there to be two to four potential 1000km days per season for a good Nationals standard pilot at Benalla. Top international pilots or those with 25m wings would have perhaps four to six chances. Experience so far has shown that 1000km success has gone to those who have tried every day over an extended period.

I attempted the NNE strategy during the Nationals period this year when the threat of thunderstorms caused that blight of competition flying - delay of the task. The organisation decided to wait for the trough to move off east a little and then set a task within a new airmass approaching from the west. One look at the enticing cumulus caused me to declare a 1000km and press off north at 1030 along the trough. Out of the west it looked as dead as mutton with an inversion you could grow trees on.

The 1000km was worth the try because, whilst the trough dried out too fast for a serious attempt, at least it yielded a very enjoyable 540km O/R to Temora (3). Cumulus started at about 3000ft asl and rose to 8000 or so later, drying out completely south of the Murray river and west of track. Having left one lot of competitors scratching themselves at Benalla, it was with some surprise that a second tribe was observed still on their launch grid at Temora some 3hrs later. Perhaps they were waiting for the council of elders to declare it soarable?

Homily for the sweaty-palmed

Perhaps all this says something about the utilisation of weather conditions at competitions. Whilst dragooning a mob of malcontents into action must take a significant time and thus a competition cannot ever have the flexibility available to an individual pilot, the present system of setting a fixed task well ahead of launch time is the greatest single cause of wasted kilometres and unnecessary outlandings. Short of always setting flexible tasks (which are unpopular with some because of the lack of gaggles and direct eyeball-to-eyeball racing, and amongst top pilots because of their terror lest a random element creep into the scoring), the simplest improvement to competitions is to set the task on the grid at the last possible moment.

This achieves virtually unlimited task, setting flexibility, the only restraint being the need for all Classes to finish from the same general direction. Ten minutes is plenty of time for even the most sweaty-palmed to mark three or four lines on a map and move a TP camera from the right to left side of the cockpit. For a small consideration I will reveal the ingenious design of my 50 cent camera mount which allows the camera to be easily moved, even in the air if necessary.

1000km by 21st century?

At my present rate of progress (from 770km to 865km in the last eight years) it could take me that long. My best ever effort (4, 5) a few days after Peter Trotter's successful 1000 was on a day that offered a fighting chance. I blundered badly at the beginning, taking 90min to complete the first 50km and having to drop the water at 7000ft over Yarrawonga airfield. It was another hour before there was any cloud to mark the lift. Paul Mander and Graham Garlick (ex-Yorkshire GC) held on to their water and managed 900km, the latter landing out. If nothing else, this shows that the advantage of waterballast is much less than many people imagine. An English visitor also did 750km in the club Kestrel. One of the great pleasures in trying these long flights is the marvellous feeling of space, as on my return to Benalla from SW of Forbes on this occasion - 170km out at The Rock seemed like being almost home.

Where there's muck, there's brass

(Or at least continuous lift.) January 6 had a light north-easter and looked most promising for an initial downwind run towards Melbourne along the hills, the northern plains being bare of



A self-portrait

cumulus. It transpired that there was no chance of getting past Seymour (6) because the way was blocked by a mass of Melbourne murk pouring through the Kilmore gap, obviously propelled by a southerly sea breeze. Closer inspection revealed transient wisps of cloud forming along the edge of the smog. This allowed a straight run without loss of height as far as lake Eildon, after which normal cumulus resumed for the remainder of the 300km round trip *via* Mt Buller.

It's unlikely that a soarable sea breeze front ever extends east of the west end of lake Eildon, being blocked by 5000ft hills, but a possibility for the future might be to run west along the front towards the Grampians or Horsham. British sea breeze experts might find it interesting following a front marked only by a haze line.

Corryong camp hangovers?

This could have explained the tardiness of those at the club mountain soaring camp on March 11 in getting across the mere 50km or so to the main range of the Snowy Mountains. I had a good run there on the 200km from Benalla and had been established above cloudbase at 8000ft on the main ridge near Mt Kosciusko (7) a good 10min before the Corryong pilots arrived. The really outstanding part of the day, however, was the magnificent cloud streets which developed on the way back to Benalla *via* Mts Bogong (6500ft) and Buffalo (5500ft). Despite heavy overdevelopment and a 25kt headwind, there was no trouble in returning in not much more than 2hrs.

Magic weekend

This wasn't in the peak of the season, but at the end of March. Both days had fabulous cu's at about 7000ft in all directions. Despite hanging around for an hour for convection to become reliable and for my friends to be launched, the Saturday yielded a 600km O/R NW to Balranald (8) over some remote country, running the gauntlet of the Goulburn-Murray irrigation closer to home. Past experience of this irrigation area was recalled to get me back right on sunset. I diverted east almost to Tocumwal to the last remaining cloud which took me right across the dead irrigation to the late evening thermal over dry country 30km out.

Sunday gave a most relaxed 400km triangle *via* Mt Buller and west to Bendigo (9). It was notable for the best run ever to Buller, where we had five machines together over the ski lifts. Lift was continuous from its usual starting point over the hills just SE of Benalla all the way to Buller. On the east-bound final leg, a cloud street perhaps 100km long streamed away to the SW from the edge of the irrigation, probably a quasi sea breeze effect.

Final tally

Despite the impression that lingered after the wet spring that it was an ordinary season, I was surprised to find that my kilometres and speed were 10% or so up on the 88/89 season (to 9500km and 84km/h, take-offs to landings, *ie* waiting times included). There seemed to be more than the usual proportion of cumulus days, thank goodness.

Next season: who knows? If you get tired of waiting for 1000km opportunities, the following trailer-less, crew-less tour is a realistic alternative in December, January or February as a large high moves across from the west. Similar odysseys have been done before. The idea would be to utilise the SW to SE winds after a front on Day 1, the easterly wind component on Day 2 and a NW component on Day 3 ahead of the next front. Overseas pilots showed us the way with the first 1000km flights from Benalla, so they might demonstrate more enterprise than the locals with these types of grand tour.

Day 1 Benalla-Narromine 510km; **Day 2** Narromine-Waikerie 760km and **Day 3** Waikerie-Benalla 660km.

Hans-Werner Grosse could probably do it with a day to spare.

WELL MIKE?

Mike Cuming found nothing to choose between the LS-7 and ASW-24 (see the August issue, p194). In Switzerland, the LS-7, Discus and SZD-55 were tested in a 30km straight glide in still air. The LS-7 and Discus were level-pegging, but the SZD-55 came out slightly better. Can the Booker Test Group please corroborate? - *Max Bishop.*

1991 BGA EVENTS

I am delighted to confirm that our dinner-dance and annual prizegiving will be held on March 23 at the Airport Hotel, Norwich in conjunction with Norfolk GC's own dinner-dance. It promises to be an exciting evening and overnight accommodation will be available at the hotel with gliding at Tibenham the next day. The event will be organised by Norfolk GC and details will be circulated to all clubs as soon as available.

Our AGM will be on February 23 at the Posthouse Hotel on the M1 motorway at Crick. Don't forget to let me know in advance if there are any proposals you would like to submit for the agenda as we hope for a good turn-out and some lively discussion at the meeting.
Barry Rolfe, *BGA administrator*

TWO FATALITIES

Angelos Yorkas, CFI of South Wales GC, was killed on August 4 at Usk, when the Puchacz he was flying from Usk spun in from about 1400ft. The P2, Bill Mills, has serious head and leg injuries.

Three days later Harry Lowe of the Midland GC died when his ASW-20L crashed into pine trees one mile south of the Long Mynd. The elevator locking pin was found to be disconnected.

Both accidents are under investigation.

LILIENTHAL MEMORIAL COMPETITION

A world-wide competition in honour of Otto Lilienthal, whose successful flights a 100 years ago inaugurated the age of aeronautics and astronautics, is being run by the International Gliding Commission, the Deutscher Aero Club and the Deutscher Hängegleiterverband for gliding, hang gliding and paragliding.

There are three sections for gliding –straight distance, goal distance, O/R or a triangle; the best speed over a triangle of at least 300km and absolute altitude. There will be a trophy for the winner of each category and certificates for those finishing 2nd to 6th.

The competition started on August 15 and closes on August 14, 1991. The flight documentation must be sent to the Deutscher Aero Club, Referat Segelflug, PO Box 71 02 43, D-6000 Frankfurt 71, W. Germany.

Contact the BGA office for further details.

CLUBS MUST HAVE NOTAMs

Operational Regulation 6.26 states:

To ensure that all pilots can comply with the law, clubs must receive or have access to Series B Class II NOTAMs; these are to be made available to all pilots. Under Article 32 of the Air Navigation Order 1985 the pilot of an aircraft must satisfy himself that the flight can be safely made taking into account the latest information available as to the route and the aerodromes to be used.

The reference is now Article 35 of the Air Navigation Order 1989 but, more importantly, Series B Class II NOTAMs have been replaced by Pre-Flight Bulletin (Navigational Warnings) which are published twice weekly. The full title is Temporary Navigational Warning (TNW) Information Bulletin.

This new service is rather more concise and, with events in date order, is much easier to use. Each new edition completely replaces the preceding version. Any current Class II NOTAM subscriptions will have been replaced with the new format of TNWs.

The annual cost is £50 and TNWs are ordered from the Civil Aviation Authority, Printing and Publication Services, Greville House, 37 Gratton Road, Cheltenham Glos GL50 2BN.
Bill Scull, *BGA director of operations*

OPEN CLASS NATIONALS

Robin May is the new Open Class Champion with Alister Kay 81pts behind in 2nd place (both flying ASH-25s) and Steve Jones (Nimbus 3DT) 3rd. A report will be in the next issue.

OBITUARIES

TIM HERVEY (November 6 1895-May 30 1990)



Tim Hervey was one of my heroes. The dictionary defines "hero" as "a man of exceptional quality who wins admiration by notable deeds, especially of courage". Tim's 94 years were lived to the full and they were of extraordinary quality.

Hamilton Elliott "Tim" Hervey was one of the founder members of the Gliding Club of Victoria, Australia (before any British clubs started) and he was the first CFI and manager of the London GC, appointed in 1936. He helped form the London Balloon Club in 1968 at the age of 73 and he was flying balloons until his legs told him he ought to stop in his 90th year.

Tim's pre-WWII gliding years at Dunstable coincided with those of a remarkable bunch including Eric Collins, Ann Edmonds (Welch), John Furlong, Dudley Hiscox, Kit Nicholson, Joan Price, Stanley Sproule, Geoffrey Stephenson and Philip Wills. Whilst these soaring pathfinders were showing what was possible, Tim Hervey was teaching *ab-initios* in Dagling primaries: you started with a slide, graduated to a hop and then were bungyed off the lower slopes of the Downs. If you showed promise, after perhaps three or four minutes total time in the air, you were launched from the very top – all of this solo of course. There were a lot of breakages.

Tim Hervey organised the first gliding courses in Britain and these included one for some visiting Hitler Youth who were accompanied by Hanna Reitsch: tiny, not conventionally beautiful, but extremely attractive to all males in the vicinity according to Tim. These were the years when Amy Johnson converted from power flying to gliding under Hervey's watchful eye; notwithstanding his attentions she went on to break a few gliders.

On "The day war broke out" Tim took the official phone call grounding all aircraft forthwith. Sunday, September 3, 1939 happened to be a very good soaring day and somehow or other LGC pilots never got the instruction until nightfall.

During WWII Hervey was seconded to the newly created Airborne Forces as the first commander of No. 1 Glider Training School at Haddenham, Bucks. He also advised M19, the unit set up to encourage and help our forces escape from PoW camps. His expertise in escaping techniques came from his experience in the 1914-18 war.

Tim Hervey's flying started in 1914. After joining the Bristol Aeroplane Company he enlisted in the Royal Flying Corps and served as a rigger, observer/air-gunner and scout-pilot.

He flew with Albert Ball VC, and as a pilot under Billy Bishop VC. In November 1916, while flying as an observer/air gunner, he shot up a German Albatross fighter which was forced to land on the British side of the lines, thus giving the RFC a virtually intact Albatross for evaluation. Tim was awarded the MC.

In March 1917 Hervey qualified as a scout-pilot and just a few weeks later found himself in an airborne duel with the Red Baron, Manfred von Richthofen. Despite having the top of this joystick and his rudder control shot away Tim managed to land safely, only to be downed by anti-aircraft fire the following day when he was taken prisoner.

The Germans found it difficult to keep Sqn Ldr Hervey behind bars: he escaped three times, accompanied on different occasions by Lt Leefe-Robinson (of Zeppelin fame) and Lt Horrocks (later Lt-Gen Sir Brian, of WWII fame). Tim was mentioned in dispatches for his escapes. He described them in his book **Cage Birds,** published by Penguin in 1940.

After the war Hervey tried his luck in Australia, barnstorming and flying anything that would earn him a living. He returned to England in 1936.

Tim who had two more claims to fame: as a designer of model aircraft (one of his designs was published in *Flight* as early as October 1914) and as a miniature artist. His pictures took the eye of the royal family and for many years they placed their Christmas orders with this astonishingly versatile man.

Tim was born a Victorian; he died very much a 21st-century man in spirit. Despite his rather

shy nature he was as determined as a beaver and he achieved more in his 94 years than most of us have dreamt about.
ROGER BARRETT
(With thanks to Bob White for his research)

ROBIN BULL (1918-1990)

Robin, who was well known as the Canopy Doctor, died on June 13 at his home in Shropshire.

He flew Lancasters during the war and joined the Midland GC in the 1950s, though did most of his gliding from 1963 after joining an Olympia 463 syndicate.

Robin's enthusiasm was supported by his wife Rosemary and their three daughters. He became an instructor in 1965 and held an inspector's ticket.

In an appreciation to Robin, Chris Ellis writes: "His speciality was in perspex and many will remember the Canopy Doctor with gratitude for immaculate repairs to their aircraft. Fortunately he was able to carry on with this work after he became ill in 1975 with muscular dystrophy. With great determination and support from Rosemary, he continued to fly dual and maintained his contact with gliding.

"We remember him as a respected instructor and a generous friend. Our deepest sympathy is extended to Rosemary and their family.

"Robin was essentially a happy man with a great sense of fun and I am sure would see the humour of what must be included in the book of famous last words - Glider Pilots' Section. On the day before he died Robin awoke briefly and on being told what the time was, he quietly said "Blast! Missed the weather forecast."

GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	*Name*	*Club*	*1990*
300	Dawson, V. S. W.	Bicester	24.5
301	Smith, S. M.	Cambridge Univ	25.4
302	Aspland, W.	Booker	26.5
303	Smith, I.	Bicester	26.5
304	Stammell, P.	London	26.5
305	Reed, J. R.	London	26.5
306	Sharman, R. C.	Bicester	27.5
307	Morris, C.	Avon	27.5
308	Fairclough, M. J.	Devon & Somerset	28.4
309	Burry, Jill	Lasham	5.12.89
310	Kingerlee, J. C.	Booker	26.5

DIAMOND DISTANCE

No.	*Name*	*Club*	*1990*
1/438	Dawson, V. S. W.	Bicester	24.5
1/439	Aspland, W.	Booker	26.5
1/440	Smith, I.	Bicester	26.5
1/441	Hawkins, R. W.	Southdown	26.5
1/442	Palmer, R.	Avon	26.5
1/443	Stammell, P.	London	26.5
1/444	Marsh, B. C.	Stratford on Avon	26.5
1/445	Reed, J. R.	London	26.5
1/446	Sharman, R. C.	Bicester	27.5
1/447	Morris, C.	Avon	27.5
1/448	Spiller, R. W.	Bicester	27.5
1/449	Kirschner, P. M.	Bicester	27.5
1/450	Reading, P. T.	Surrey & Hants	27.5
1/451	Burry, Jill	Lasham (in Australia)	5.12.89
1/452	Crisp, F.	Surrey & Hants (in Australia)	20.2
1/453	Garner, D. A.	Vale of Neath (in Australia)	5.12.89
1/454	Kalin, R.	York (in Australia)	20.2
1/455	Davidson, R.	Coventry (in Australia)	5.12.89
1/456	Williams, P. R.	Bicester	25.5
1/457	Giddins, J. B.	Bicester	25.5
1/458	Kingerlee, J. C.	Booker	26.5

DIAMOND GOAL

No.	*Name*	*Club*	*1990*
2/1815	Moorehead, P. A.	Bicester	25.4
2/1816	Cunningham, A. J.	Bristol & Glos	22.5
2/1817	Pitchfork, G. R.	Chilterns	24.5
2/1818	Lipscombe, T. M.	Lasham	24.5
2/1819	Burston, P. J.	Fenland	25.5
2/1820	Browne, R. A.	Humber	25.5
2/1821	Tyler, R. M.	Lasham (in S. Africa)	2.1
2/1822	Brown, S.	Lasham	24.5
2/1823	Francis, D. P.	Bicester	26.5
2/1824	Raper, A. M.	Rattlesden	26.5
2/1825	Rice, R. A.	Midland	27.5
2/1826	Hamblin, P. R.	Surrey & Hants	24.5
2/1827	Claughton, N. I.	Clevelands	25.5
2/1828	Naegeli, P. C.	Lasham	26.5
2/1829	Parker, R. G.	Trent Valley	26.5
2/1830	Sharp, D. J.	Four Counties	26.5
2/1831	Lawley, G.	Marchington	27.5
2/1832	Fordyce, A. W.	Lasham	27.5
2/1833	Yates, R. A.	Avon	27.5
2/1834	Garner, D. A.	Vale of Neath (in Australia)	10.11.89
2/1835	Kalin, R.	York (in Australia)	15.2
2/1836	Kerry, T. F.	Surrey & Hants (in Australia)	1.3
2/1837	Fisher, R. B.	RAE (in Australia)	13.2
2/1838	Jenkinson, T. P.	Booker	24.5
2/1839	Ash, J. A.	Surrey & Hants	24.5
2/1840	Bailey, P. A.	Enstone (in Australia)	21.12.89
2/1941	Hatwell, R. S.	Essex & Suffolk	26.5
2/1942	Hazell, F. L.	London	26.5
2/1943	Pepper, R. E.	Bicester	26.5

DIAMOND HEIGHT

No.	*Name*	*Club*	*1990*
3/956	Smith, S. M.	Cambridge Univ	25.4
3/957	Hodgson, Karina (in Spain)	Booker	19.4
3/958	Fairclough, M. J.	Devon & Somerset	28.4

GOLD BADGE

No.	*Name*	*Club*	*1990*
1442	Danbury, A. J.	London	7.5
1443	Moorehead, P. A.	Bicester	25.4
1444	Pitchfork, G. R.	Chilterns	24.5
1445	Lipscombe, T. M.	Lasham	24.5
1446	Burston, P. J.	Fenland	25.5
1447	Brown, R. A.	Humber	25.5
1448	Rice, R. A.	Midland	27.5
1449	Hamblin, P. R.	Surrey & Hants	24.5
1450	Claughton, N. I.	Clevelands	25.5
1451	Naegeli, P.	Lasham	26.5
1452	Parker, R. G.	Trent Valley	26.5
1453	Yates, R. A.	Avon	27.5
1454	Kalin, R.	York	15.2
1455	Bailey, P. A.	Enstone	21.12.89
1456	Labouchere, C. M.	Black Mountains	19.6

GOLD DISTANCE

Name	*Club*	*1990*
Danbury, A. J.	London	7.5
Moorehead, P. A.	Bicester	25.4
Cunningham, A. J.	Bristol & Glos	22.5
Pitchfork, G. R.	Chilterns	24.5
Lipscombe, T. M.	Lasham	24.5
Burston, P. J.	Fenland	25.5
Browne, R. A.	Humber	25.5
Tyler, R. M.	Lasham (in S. Africa)	2.1
Brown, S.	Lasham	24.5
Francis, D. P.	Bicester	26.5
Raper, A. M.	Rattlesden	26.5
Rice, R. A.	Midland	27.5
Hamblin, P. R.	Surrey & Hants	24.5
Claughton, N. I.	Clevelands	25.5
Clowes, N. L.	Norfolk	26.5
Naegeli, P.	Lasham	26.5
Parker, R. G.	Trent Valley	26.5
Sharp, D. J.	Four Counties	26.5
Lawley, G.	Marchington	27.5
Fordyce, A. W.	Lasham	27.5
Yates, R. A.	Avon	27.5
Garner, D. A.	Vale of Neath (in Australia)	10.11.89
Kalin, R.	York (in Australia)	15.2
Kerry, T. F.	Surrey & Hants (in Australia)	1.3
Fisher, R. B.	RAE (in Australia)	13.2
Jenkinson, T. P.	Booker	24.5
Ash, J. A.	Surrey & Hants	24.5
Bailey, P. A.	Enstone (in Australia)	21.12.89
Hatwell, R. S.	Essex & Suffolk	26.5
Hazell, F. L.	London	26.5
Pepper, R. E.	Bicester	26.5
Labouchere, C. M.	Black Mountains	19.6

GOLD HEIGHT

Name	*Club*	*1990*
Burgoyne, R. S.	Cotswold	26.10.89
Marshall, J.	London	16.9

SILVER BADGE

No.	*Name*	*Club*	*1990*
8340	Middleton, R. J.	SGU	27.5
8341	Northover, R. J.	Bicester	28.5
8342	Harwood, J.	Buckminster	26.5
8343	Parsons, C. M.	Avon	27.5
8344	Harper, S. J.	Clevelands	22.5
8345	Bruinsma, R. J.	Phoenix	24.5
8346	Maddocks, R. P.	Enstone	27.5
8347	Barker, H. H.	Strubby	27.5
8348	Cook, S.	Cotswold	26.5
8349	Tolson, P. N.	Sackville	27.5
8350	Williams, S. J.	Coventry	28.5
8351	Court, J. A.	Lasham	27.5
8352	Jones, W.	Blackpool	26.5
8353	Parker, W. H.	Booker	26.5
8354	Newbery, M. J.	Yorkshire	28.5
8355	Lovegrove, R. A.	Phoenix	30.4
8356	Clark, G. R.	Portsmouth Naval	26.5
8357	Bennett, G.	Fenland	24.5
8358	McCurdie, M.	Midland	20.5
8359	Crosse, J. R.	P'boro & Spalding	26.5
8360	Randle, Alison	Cotswolds	28.5
8361	Evans, G.	Coventry	27.5
8362	Jones, Jane	Buckminster	31.5
8363	Stephens, P. A.	RAE	27.5
8364	Taunton, C. J.	London	28.5
8365	Harris, T. D.	Bicester	25.5
8366	Wearing, G.	Blackpool & Fylde	27.5
8367	Grey, W. L.	North Wales	17.5
8368	Warner, P. J.	Cranfield	27.5
8369	Barnes, R.	Bristol & Glos	26.5
8370	Johnstone, D.	Rattlesden	27.5
8371	Browning, T. P.	Lasham	28.5
8372	Coupe, G.	Cambridge Univ	27.5
8373	Shaw, J. S.	Cornish	14.6
8374	Angell, Julie	SGU	16.6
8375	Dale, M. P.	Yorkshire	8.4
8376	Allen, M. J.	Cambridge Univ	16.6
8377	Heide, C. J.	Devon & Somerset	16.6
8378	Churcher, N. J.	Portsmouth Naval	10.6
8379	Attwood, Jayne	Essex	6.10.89
8380	Lamb, C. A.	London	27.5
8381	Decloux, Ariane	Cambridge Univ	28.5
8382	Lamb, D. E.	Booker	26.5
8383	Morrice, Tynna	Lasham	24.5
8384	Chernecki, E. A.	Booker	17.5
8385	Hawkey, P.	Cornish	8.4
8386	Gazzard, M. L.	Two Rivers	24.5
8387	Owen, B. H.	Booker	24.5
8388	Moore, D. J.	Cotswolds	28.5
8389	Bassett, T. P.	Avon	3.7
8390	Jowett, A.	Yorkshire	3.7
8391	Davie, A. A.	SGU	23.6
8392	Ley, D. R.	Phoenix	24.6
8393	Pryor, S.	Booker	26.5
8394	Holland, M.	Burn	6.7
8395	Sweet, A. E.	Mendip	28.5
8396	Buffery, T. J.	Midland	12.7
8397	Felks, G. A.	Phoenix	27.5
8398	Gait, A.	London	3.7
8399	Galbraith, A. I.	Upward Bound	18.7
8400	Collins, R. S.	Cambridge Univ	3.7
8401	Vincent K. G.	Kent	23.5
8402	Uren, D. J.	Cornish	10.6

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8403	Ariss, G. M.	Avon	27.5
8404	Porter, A. J.	Avon	20.7
8405	Ell, S. R.	Essex	16.7
8406	McLean, J.	Clevelands	21.7
8407	Reeves, G. W.	Derby & Lancs	20.4

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Complete

Name	*Club*	*1990*
Bennett, G.	Fenland	28.5
Barter, S.	East Sussex	26.5

Part 1

Sinclair, D. A.	Lasham	7.5
Lambert, J. E.	Kent	24.5
Prater, G. V.	Lasham	27.5
Law, C. S. D.	Avon	28.5
Kitchen, P.	Bannerdown	26.5
Robinson, A.	Anglia	26.5
Swoffer, Lorraine	Lasham	26.5
Underwood, G. J. T.	Midland	27.5
Hobson, A.	Burn	31.5
Moxham, Meryl	Cranwell	26.5
Brake, R. J.	Fenland	26.5
Clack, F. J.	Fenland	27.5
Hugill, P. A.	Lasham	27.5
Trevethick, P. J.	Strubby	26.5
Glazebrook, G. R.	Glyndwr	17.5
Middleton, R. J.	SGU	26.5
Grant, R.	Newark & Notts	31.5

NASTY ACCIDENT

A woman on a gliding course caught her wedding ring on the wingtip of the K-7/13 she was helping to launch, severing her finger. The cable was released immediately and the launch abandoned. It is thought her ring was trapped by the metal skid plate on the wingtip block.

Dick Stratton, BGA chief technical officer, warns that rings can be equally dangerous when swinging propellers.

OSTIV PAPERS

Anyone wanting to submit papers for the 22nd OSTIV Congress at Minden, Nevada, USA from July 3-12 should send an outline to the secretariate by January 31, 1991. For further details, contact OSTIV- Secretariate c/o DLR-Inst Atm Physics, D-8031 Wessling/Obb, West Germany.

VINTAGE NEWS

A 1943 Weihe (SE-STN) was extensively restored by an Essex GC syndicate. Andrew Coates has restored the last Swedish built Weihe which Paul MacCready flew in the 1950 World Championships. Mike Beach has built a Hols der Teufel (Schleicher Anfänger) and is now restoring the Scud 2 while Michael Maufe has restored a BAC-7. Tony Maufe built it a closed trailer in four days.

Two Hütter H-17As are being built by John Lee and one by Paul Bibby. Mike Challinor of Dunstable has bought the ex Rodi Morgan 1947 Hawkridge built Grunau Baby 2B-2 and Mike Beach an immaculate K-1. The Slingsby Sky in which Jock Forbes came 3rd in the 1952 World Championships in Spain is at Dunstable and an EoN Olympia has been restored and is owned by Susy Blair Mooring and Ken Maynard.

The Easter Rally at Lasham was poorly attended due to bad weather but there were 17 entries for the Spring Bank Holiday weekend at Rufforth and for the National Rally at the Long Mynd (May 26-June 3). The best height at the Mynd was 6400ft by John Smoker (Grunau Baby 2A).

REVIEW

GLIDE ON - A computerised final glide calculator

This machine is an interesting alternative to both the plastic rotary calculator and the fully plumbed-in glider computer. It is based on the CASIO FX-730P BASIC portable computer and is about the size of a scientific calculator.

Two handbooks accompany the machine; the original CASIO manual and a manual dedicated to its GLIDE ON program. This uses one of the ten program areas in the CASIO and has password protection which both prevents you from listing the program and, unfortunately, using the other nine program areas for your own program storage.

After a simple signing-on procedure you are presented with an option selection. Your first action is the selection of P(olar) which permits the essential task of entering the glider's characteristics. All the other menu options are concerned with its real-time use, either for practice on the ground or, more usefully, in the air. For the latter it is essential that it is secured since use of it is otherwise a two-handed operation. There are few glider panels that could easily accommodate it and the best alternative may be knee-mounting which anyway allows you to take it away and practice with it at home.

The major difference between GLIDE ON and the much more expensive computers is that it has no way of automatically sensing the speed, height and climb rate of the glider. All these have to be entered manually. However it does have a Time function which, when started, continually infers your height and time-to-goal from initial height, thermal strength and wing-loading values entered. It does, of course, assume that the sink and lift encountered cancel out but allows you to enter new information if they do not.

Operation is easy but response to key presses is slow. The display is a single line by 24 characters and, with a degree of adjustment over its optimum viewing angle, is easy to read. Some of the screens are a little cryptic due to the character limitation but no worse than on many other glide computers.

There were some unusual operational "features" in the review machine but it is understood that the software has been upgraded to remove these.

In summary: There is a yawning gap in price between a plastic calculator and a plumbed-in glider computer. The GLIDE ON computer has many of the attributes of the latter but is much nearer the price of the former. It represents good value for the average glider pilot but is unlikely to appeal to the competition pilot who could not tolerate the higher work load required to manually enter his flight conditions.

BALANCE IT - Calculate the C of G and wing loading of your glider

This product uses exactly the same basic computer as the GLIDE ON computer. Its purpose is to allow the glider pilot to calculate the C of G and wing loading of his glider under a wide range of operating conditions.

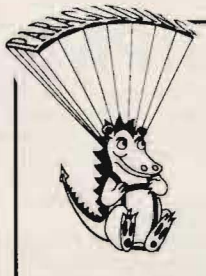
The well-produced manual describes in detail how up to ten variable weight factors like Pilot 1, Pilot 2, the amount of water in the wings, that in the tail, etc can be entered. The computer then calculates those parameters.

Again, there were a few operational "features" on the review machine which were probably not what the program's author intended but, like GLIDE ON, the program has since been upgraded.

This product is unlikely to sell to a K-6 pilot who can probably do the required sums in his head. However the Nimbus 3DT pilot would find this a very useful accessory at a very small proportion of the cost of his glider.

The supplier of these two products, Desk Top Studio, has now introduced a single CASIO FX-730P computer with both programs resident in it. (See the advertisement in this issue for prices.)

RICHARD BAKER



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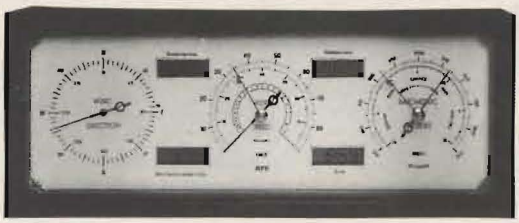
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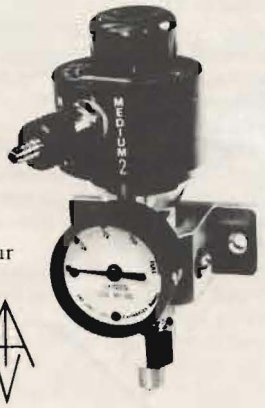
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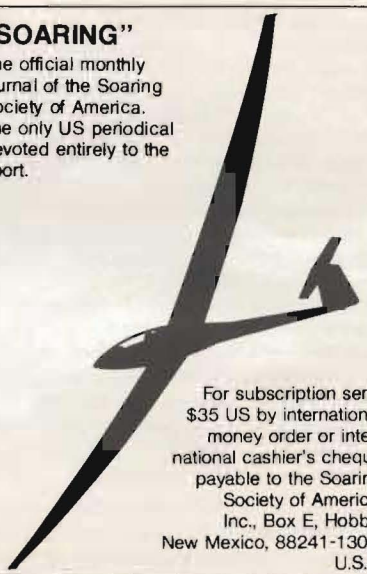
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CLUB NEWS

Copy and photographs for the December-January issue of *S&G* should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 0223 247725, to arrive not later than October 9 and for the February-March issue to arrive not later than December 4. The fax number is also 0223 247725.

ANGUS (Arbroath)
A busy season with a lot of soaring resulted in Bronze legs for Bob Welch, Drew Nairn, Jim Forbes, Steve Ingram, Alex McInnes and Malcolm Watson. Les Horribine and Guy Davidson had a relight from the Grampian GC and landed back at Arbroath the day Francis Webster (Swallow) flew Silver distance.

Martin Clarke, Malcolm Watson and Derek and Frank Cruickshank went solo, brothers Derek and Frank on the same day.

We held a very successful barbecue at the end of the flying week. Another expedition is planned for the autumn.

Visiting pilots are always welcome but when possible please contact the secretary first.
P.E.

AQUILA (Hinton in the Hedges)
We have been promised help from the BGA Executive in trying to develop the club. We are suffering from the familiar problems of not enough staff – are there any instructors looking for more flying? – and member recruitment/retention. We are still taking a critical look at our fleet.

Congratulations to Bernard Bateman on going solo.
J.R.

AVON (Bidford on Avon)
Recently there has been a dramatic growth in the size of the club and the level of activity. Clair Thorne went solo on her 16th birthday; Norman Britton, a Concorde pilot, went solo after three flights; two gained all three Silver legs in one flight; five flew Diamond goals; we have two new instructors and Chris Morris has all three Diamonds.

Richard Palmer flew a 300km and two 500kms in three consecutive days followed by landing out in an LS-7, 1km away from home, whilst local soaring. Guess which he is best remembered for?
R.A.Y.

Another 16th birthday solo. Alex Jones of Glyndwr GC receiving his solo award from Tony Knight, CFI.





Ray Arentsen of Bristol GC with his instructor, John Patchett, after going solo four months short of his 69th birthday.

Obituaries – Pat Light and Jim Dallaway
Sadly Pat Light, wife of Peter, died on March 28. She was a long term member and proved a very proficient pilot over many years. She will be sorely missed in helping us with the cross-country competitions as she was an absolute stalwart at running the start/finish line and calculating the averages.

Pat showed tremendous courage throughout her illness and we offer Peter our deepest sympathy and hope he will continue to fly amongst all his friends at Bidford.

It is with great regret we report the death of Jim Dallaway on July 2 from a heart attack. He has flown regularly at Bidford since 1980 and became a very respected member and air experience instructor. James, or Gentleman Jim, always had a kind and gentle way with him and will be missed a great deal.
Mo Leonard and Barry Meeks

BANNERDOWN (RAF Hullavington)
We emerged just in the lead from the Inter-Club meeting at Keevil and go into the final for the third time.

Andy Jones went solo during Ben Bennett's soaring week in July and Brian Ashcroft and Keith Willingdale gained their 5hrs. Jim Addison went solo and gained Bronze legs and Silver height.

Simon Hutchinson equalled the UK 15 Metre 500km goal and return record in the Ventus, held by Ben Benoist at 79.1km/h.

We now enjoy the vintage pleasures of the Kirby Kite on quiet summer evenings.
D.C.F.

Below: Steve Hymers of Bicester being congratulated by Peter Saundby who cleared him to resolo in May nearly two years after an accident in the Inter-Services Regionals at Roanne left him paraplegic. He now flies a Janus which has been modified with hand controls. Photo: Lynn Norman.





Damian Mann, of Burn GC, with his instructor, Austin Craw, having soloed on his 16th birthday.

BICESTER (RAFGSA Centre)
Our successes include a 750km by Barrie Elliott; Jed Edyvean has won the Standard Class Nationals; Peter Atkinson and Mark Critchlow have flown 500kms; Roger Crouch flew the Grunau Baby to Lasham; Robin Barnes and Peter Ralf have Silver distances and Margaret Maynard and Paul Farrelly have gone solo.
M.H.

BLACK MOUNTAINS (Talgarth)
We had some superb spring distance and wave flying. Fred Bishop reached 16 100ft in east wave for Gold height which enticed JJ from Dunstable in ½ to 1kt thermals to join him. Expeditions from East Sussex, Devon & Somerset, Southdown, Dublin, Kent and Oxford GCs enjoyed soaring our mountains and a change of scenery.

We are adding a K-13 to our two-seater fleet to help our busy courses and Martin Brockington has a new Discus. Congratulations to Mark Fisher, Tom Colbert and Peter Eggleston on going solo.
J.G.

BLACKPOOL & FYLDE (Chipping)
Congratulations to Barrie Purslow and Reg Wooller on their full Cat ratings and to Barrie on becoming DCFI. Also to Martin Moss and John Richardson (on becoming instructors); Ian Ashton, John Mitchell and John Wood (AEI ratings); Alison Myers, Bill Jones and George Wearing (Silver badges); Steve Robinson (going solo) and Dave Teasdel (resoloing).

Sadly we have lost another very valued member, John Todd who died on May 16. He joined us in 1966 and although contracting multiple sclerosis ten years ago which stopped him instructing he continued to fly solo and drive the JCB. He refused to let the disability slow him





Above: Carol Townend of Mendip GC with her instructor husband Dave. Left: Highland GC hosted five blind and four sighted people on a sponsored glide which raised several thousand pounds for the Guide Dogs for the Blind. A group are photographed with Angela Veitch, the instructor.

down and the present good state of the field is due to John's tireless efforts.

He was an adventurous pilot, a witty and highly individual character and good family man. We shall all miss him.
V.H.

BORDERS (Galewood)
Cross-countries have been limited by strong inversions and poor visability but Robin Johnson achieved 280km on a 500km attempt.

In July 2500 international Scouts and Guides camped near the club and had nearly 100 trial instruction flights.

High pressure also restricted our July task week but we flew tasks in wave, David Ince, from Lasham, reaching 8500ft. And Richard Horan gained both Bronze legs and the K-6E and Eagle completed 108km triangles, taking around 5hrs due to strong winds.

A forward plan puts the priority on improving the club fleet and site. The revenue needed can only come from increased flying and we have published a brochure to attract more members and visitors. We also aim to have more flying weeks with wave weeks planned from October 6-21. Diamond hunters take note.
A.J.B.

Below: Evening flight at North Weald, home of Essex GC. Colin Whittington photographed their Super Cub towing a K-13.

BRISTOL & GLOUCESTERSHIRE (Nympsfield)
As well as the 15 Metre Class Nationals (see report in this issue) we hosted a most successful Inter-University task week.

August sees the first flight since 1975 of the Grunau Baby lovingly rebuilt by Sid Smith and helpers from a pile of bits.
J.S.W.

BUCKMINSTER (Saltby Airfield)
While summer course numbers have been disappointing, midweek flying (Wednesday's throughout the year) continues to gain in popularity. Our weekend mini courses, when students have the same instructor and glider until 1pm, are a great success.

Congratulations to Garry Keall, Richard Kilham and Phil Walsh (assistant instructor's rating); Roger Keay and David Housley (AEI rating) and Alison Jones and Bill Kirton (Silver badges).

Roy Henderson and Bill Kirton have three trailers and one glider – two being built a few feet short to hold a glider!

Our thanks to Rob Cook who has served us well as CFI and to Frank Cox for taking over.
D.H.

BURN (Burn Airfield)
We have had many good soaring days. The members' courses have been a great success with the newly introduced cross-country week bringing some good distances including two 300kms for M. White and P. Shaw, the latter gaining a Diamond.

Congratulations to M. Smith who went solo in



Above: Sigfrid Neumann, Cambridge University GC's retiring secretary, was photographed by Gillian Foreman cutting the cake to celebrate the 40th anniversary of Bluebell, their T-21. Anthony Edwards is on the left next to his wife Catharina.

➡





Peter Coward, chairman of Deeside GC, explaining the controls of the Puchacz to Convenor (Provost) McKenzie and councillors during their visit to Aboyne.

41 flights and achieved a Bronze leg on the same day; also to D. Smethurst, A. Burkinshaw, D. Mann, J. Gaffigan, K. Scothern and M. Basu on going solo and B. Wilson for Gold height.

A lecture by the CAA on air safety was well attended. Our volunteer caterers work hard to enhance our social events.
D.G.K.

CAIRNGORM (Feshiebridge)
Bob Armour spent a cramped 5hrs in the Swallow; Ray Lambert went solo and Gillian Wyatt has both Bronze legs.

We welcome a new Skylark 4 syndicate - Alistair Morrison, Bob Wyatt and Ray Lambert.
S.M.

CAMBRIDGE UNIVERSITY (Duxford)
After nearly nine months of negotiation and frustration we have planning permission from the two district councils involved to develop Gransden Lodge, a disused airfield, as our new site.

We now have a year's work to get the runways seeded and the necessary buildings erected before we can leave Duxford. We must thank Bill Scull and Humfrey Chamberlain for their help. The site, which is 12 miles west of Cambridge near the A14, has enormous potential.

Peter Baker (ASW-20), who with Graham Falcke is now a full Cat, flew the first 600km from Duxford on July 3 with his brother Richard doing the same on August 7 in their ASW-20; we reached the final of the Inter-Club League and flew from dawn to dusk on the "longest day", starting at 0407.

Congratulations to Mike Smith (Diamond height at Aboyne); Geoff Brown (Gold distance/ Diamond goal in a K-6E); Mick Allan (Silver badge); Robert Amand and Roy Collins (Silver distance); Andy Barron, Brian Davies and Terry Willis (Silver height) and David Greest, George Metzger, Colin Skyrme, Paul Winder, Ryoichi Nakahashi and Eddie Baker on going solo.
B.H.B-S. and J.L.B.

CLEVELANDS (RAF Dishforth)
Congratulations to Martin Clegg on going solo; to both Cleggs on Bronze legs; to Steve Harper, Dave Gauntlett and Terry Lacey on Gold heights and to Jim McLean and Robin Sinton on Silver distances. Commiserations to Derek Smith for his 4hrs 57min!

Our longest day attempt was rained off, but we had a successful partial re-run a fortnight later.
J.P.

CORNISH (Perranporth)
The weather was mediocre but we had an enjoyable Mynd expedition.

Members sponsored flights for disabled and the experience was thoroughly enjoyed by our visitors.

Congratulations to Terry Edwards (going solo); Derek Taylor (resoloing after a 23 years' break); Martin Keer (5hrs) and John Shaw (distance leg to complete his Silver badge).
G.A.H.

COTSWOLD (Aston Down)
Several 500kms and many 300kms have been flown. Congratulations to Tony Parker on his 300km to complete his Gold badge.

Alan Roseberry, who is disabled and flies a K-2 with a specially adapted hand-operated rudder, flew a duration of 5¾hrs and Dave Reynolds a 200km while completing his 5hrs.

Congratulations to Tim Macfadyen on winning the Spanish Open/15 Metre Nationals (see report in this issue) and on his "near miss" 950km in Spain.

New solo pilots are Ann Benton, Chris Marsh and Peter Ward and Dave Moore has his Silver badge.
G.M.

COVENTRY (Husbands Bosworth)
There have been numerous badge claims during July with Silver distances for Glen Rainey and Bob Cobley; 5hrs for Carl Buzzard and Malc Guard (Libelle), Dave Booth (Carman) and Steve Crabb (Cirrus) flew 500kms from Sutton Bank.

The National Ladder is again dominated by a Coventry Tutor - this year a different one flown by Keith Nurcombe. A new Puchacz joins our two-seater fleet.
D.L.S.

CRUSADERS (Cyprus)
Congratulations to Ennis Suleyman on going solo. We have converted our old diesel winch to 5.6 litre V8 using LPG. Ian Pettman is leaving for Chilterns GC *via* Belize.
I.P.

DARTMOOR (Brentor)
A well co-ordinated (free) publicity campaign using handbills, the local radio station and the biggest circulation local newspaper increased our fully flying membership by a third. Tourists have also helped swell our funds with trial instruction flights. In view of all this we are now planning to buy another two-seater.

We had wonderful wave in May and July was our best month so far. We have flown underprivileged children sponsored by our club, had a barbecue and a fun flying week with a fancy dress day at the end. We have enjoyed the strong easterlies which create wave on the west side.

In spite of much longer flights, we are already near to last year's total of 1500 launches. We thank Alan Holland and Don Puttock, visiting instructors, who have been a tremendous help.
F.G.M.

DEESIDE (Aboyne Airfield)
Congratulations to chairman, Peter Coward, on winning the Northern Regionals and our thanks to Ian Donnelly who was tugging with our Cub and acting as Peter's crew.

The wave has been good throughout the year with over 18000ft in July and over 23000ft in August. When there wasn't wave we had 6 to 8kt thermals. We are flying virtually from dawn to dusk and have a new AMF trailer for retrieves.

We had wide coverage of a visit from the Scottish Tourist Board and local district and regional councillors who enjoyed some soaring.

Congratulations to Bob Henderson on his 10hrs 18mins in EBR. His syndicate members are buying him a watch!

John Douglas, Dave Pirie and Bob Dunthorn have gone solo, Bob getting a Bronze leg on his solo flight - he would have had Silver height if he had a barograph.

We now have 30 plus visiting gliders per week hunting for Gold and Diamond heights in the autumn wave.
G.D.

DEVON & SOMERSET (North Hill)
Our cross-country logbook has been in regular use since April with the sad exception of the BGA week. Competition Enterprise gave us 25000km (see report in this issue).

Rex Greyling (K-6) flew 320km and congratulations also to Dav Reilly, Simon Minson and Ian Mitchell who demosntrated that an O/R to Lasham will be tomorrow's milkrun; Chris Heide (Silver badge); Chris Banting, Bob Wilson, Rod Ward and Ian Snelling (Silver distance); Frank Bertonelli and Alan Davidson (Silver height); Rex Taylor, Phil Whithead and Chris Banting (duration); Ian Snelling (Bronze badge) and Ken Daniels and Doug Roy (going solo).
G.P.

DORSET (Old Sarum)
Our clubhouse, still minus a roof, suffered the June rains but is about to be repaired. After superb soaring in May we had little flying in June.

We are still searching for a new site and a number of fields have been inspected.
D.N.

EAST SUSSEX (Ringmer)
We have a replacement K-7 and the ground equipment is being upgraded. The racy new-look newsletter edited by Trina Reason is attracting a wide readership.

Congratulations to Steve Barter (UK Cross-country diploma); and Teresa Dimond, Glyn Barnett, Carol Penbury and Carol Head (going solo).
L.M.

ESSEX & SUFFOLK (Wormingford)
We have moved from Whatfield - our home for over two decades - to Wormingford and christened the first full weekend by hosting the East Anglian Inter-Club League. We were blessed with fine weather and the Comp went smoothly.

Scott Kennedy, Tony Brown, Geoff Landberg, Mike Friend, John Gilbert Jnr and Chris Robinson have Bronze badges and John Massey, Bob Adams and Robbie Hatwell have flown 300kms.

Our thanks to members who gave their time and energy dismantling the old site and constructing the new.
C.J.P.

GLYNDWR (Denbigh)
Nine pilots have qualified for a ridge run trophy. We are also offering plaques for those exceeding 50km on the way. Unclaimed are 100 and 300km awards, together with the 10 000ft climb. On July 7 we launched directly into wave for most of the day, allowing a quick dash to 4000ft and a full brake descent to change crews - we had a 15min limit on gliders for the one day.

Ian Gilbert and Alex Jones have gone solo, Alex on his 16th birthday. Twenty-three gliders have flown from here and numerous visitors have been impressed with our site.
T.K.

GRAMPIAN (Laurencekirk)
As a result of taking the Capstan to an air show, several people came for trial lessons and some joined the club.

It's good to see members encouraging their families to come with them for the day. Derigging every night is now down to a fine art.
R.J.S.

LASHAM (Lasham Airfield)
Two of our most respected members, Peter Davis and Ray Rideout, have died. They will be sadly missed and we send our condolences. Obituaries will be in the next issue.

We had many impressive cross-countries in July. Our courses are full, including the advanced soaring courses run by Gee Dale and Josef Solski's aerobatic courses.

We had a major barbecue party to celebrate the marriage of CFI Terry Joint to Cathy Heaney.

Our K-13 has arrived and we are considering a satellite field operation.
M.T.C.

MENDIP (Halesland Airfield)
Congratulations to Pete Turner on regaining his full instructor rating after several years doing other things, and to Dave Townend (the older) on his assistant rating. They ran a successful *ab-initio* course in June with Dave Townend (the younger) going solo.

Congratulations also to Tim Hogarth (Oly 2B) on completing the first UK Cross-country diploma from Halesland and to Derek Simpson on his Silver distance.

John Boley has ploughed, levelled and re-seeded half our airfield which will be a vast improvement.

Dartmoor GC enjoyed their recent visit. Mid-week flying is being well supported and we have a Skylark 4 owned by the Hogarth family.

It is with great sadness we learnt of the death of Angelos Yorkas in a gliding accident at Usk (see BGA News). Angelos learnt to fly at Mendip and had many friends at Halesland. Our heartfelt sympathy goes out to Sue.
T.A.D.H.

MIDLAND (Long Mynd)
Simon Adlard and Roy Dalling flew 500kms on July 3, landing back on top of the hill, and Harry Lowe did the same on July 31. (See the BGA News for the sad report of Harry's fatal accident.) Julian Fack came just short of his 300km on July 3 and on July 6 Roger Andrews rigged his Ventus at 1830hrs and took it to 12 200ft asl in wave, almost dragging a course member to Gold height in the K-23. Graham Underwood got his Gold height by taking his new DG to 17 000ft at Aboyne in July.

We learnt a lot when Chris Rollings ran a BGA soaring course at the Mynd in June and a fortnight later John Stuart impressed his advanced students with the capabilities of the BGA Janus.

We have exceeded last year's kilometres for the same months by 30%.
R.D.

NEWARK & NOTTS (Winthorpe)
Due to a rogue section of runway leaping up twice in quick succession just as club aircraft were over it, refurbishing took longer than expected.

Congratulations to Eric Boyle on completing 3000hrs; also to John Maddison and Keith Dykes (AEI rating); Kevin Clayton, Dave Kasube and Andy Roe (on going solo) and Barry Patterson (Bronze badge).

Many thanks to Cranwell for taking us in for the two weekends we had to close the site.
M.A.

NORTHUMBRIA (Currock Hill)
We've had another busy summer with courses and evening trial instruction lessons.

Roy Mitcheson is training as a helicopter pilot with Bristow Helicopters; Dave Moss is flying Hawks at RAF Valley and Ron Davis has his full Cat rating. Some younger members visited Steve Knox at Le Blanc where he is tugging and Martin Fellis flew our old IS-28B2, now resident at the French site.

We have an expedition this month to Brunton airfield on the Northumberland coast and our usual trip to Portmoak in September. We are fund raising to replace one of our K-7s with a glass-fibre two-seater.

Members cleaning up the site have already sold three skip loads of scrap and we are installing an anemometer and wind direction indicator.
R.D.

NORTH WALES (Rhuallt)
Our new committee, with Dick Moore as chairman and Ray Ball as CFI, has been busy since the departure of the previous committee to form the nucleus of Glyndwr GC, building upon the sound position they left behind.

We have a spacious clubhouse caravan, by courtesy of the Salisbury Arms, Tremeirchion, and have extended the flying field by some 200 yards by buryng the west end power lines. This is safer and we are regularly getting 1600ft winch launches.

There are plans for a hangar and then, as finances permit, improvements to our elderly winch.
N.D.J.C.

OXFORD (Weston on the Green)
Richard Hall, our CFI for many years, has stood down. A man of apparently limitless enthusiasm, he has done an enormous amount for the club in many ways. We thank him and wish him well in the future. Colin White has taken over for the time being.
F.B.

PORTSMOUTH NAVAL (Lee-on-Solent)
Ben Bennett has taken over as DCFI from Harvey Clarke who has joined Tony Sabino in the USA on furlough - temporarily we hope.

Congratulations to Graham Hibberd (Diamond distance and Gold badge); Alan Clark (Diamond goal); Geoff Clark and Neville Churcher (Silver badges); Peter Dixon (Bronze badge) and Martin Heneghan and Chris Joly (300kms).

Our first club expedition abroad was to Saumur, France and during the good second week Dave Hocking, Paul Rogers and Fred Stephenson achieved 5hrs and several flew Silver heights and Bronze legs. Well done to Mike Moore and Tony World on their 300kms. We hope the expedition will become an annual event. The club has ordered a SZD Junior.
Y.C.

RAE (Farnborough)
With good soaring conditions we have had 48 enthusiastic and ambitious cross-countries this season.

Congratulations to Paul Stephens (Silver badge); Ken Hansell (resoloing) and Ian Rule, Richard Derham and Derrick Percival (going solo with a Bronze leg for Richard and Derrick).

The K-13 and three syndicate gliders are going to La Motte, France. We thank Lasham for their help in harbouring our gliders and relighting wayward cross-country pilots.
M.T.D.

RATTLESDEN (Rattlesden Airfield)
The visit by the veterans, families and friends of the USAF 447th Bomber Group in June was a great success. We thank those involved in giving flights to 65 visitors and to the padre of RAF Honington for dedicating the memorial plaque on the side of our control tower.

Our thanks to North Hill for their hospitality during our enjoyable expedition. Our second K-7 ➡



PHOTOGRAPHY BY TIM CISLO

THE 1991 SOARING CALENDAR

Delivery of the 1991 Soaring Calendar from the SSA is expected this month. This year features a new design layout with a functional 11″×14″ horizontal format. Great photography makes a calendar and you won't be disappointed at the latest effort. Ring the BGA Shop and take this opportunity to place your order now.

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has been refurbished, thanks to Dave King and Alan Towse.

Congratulations to Michael Elmer on going solo and Martin Raper on his 300km but commiserations to Mark Taylor whose camera again let him down on a second 300km.
R.W.

SCOTTISH GLIDING UNION (Portmoak)
We have ordered a Supacat winch. John Riley has finished three years as CFI, for which many thanks, and Brian Scougall is filling the gap until we can appoint a professional.

Congratulations to Allan Davie and Dick Middleton on their Silver badges (Dick is our first pilot to claim the 100km Cross-country diploma); John Ferguson (Bronze badge); Brian Kennoway, Peter Griffiths and David St Pierre (going solo) and James Deas on resoloing after 32 years.

Our first longest day for some years was a success with 141hrs flown by 27 aircraft, and at least one aircraft in the air from 0400 to 1835hrs.
M.J.R.

SHALBOURNE (Rivar Hill)
We had another extremely successful open day with Alan Sparshatt-Potter's T-21 a great attraction. It resulted in an increase of casual visitors and new members.

Work on one of our K-7's wings is almost complete thanks to many hours put in by Alan Pettit, Alan and Andy Brind and Dave Maleham.

John Parsons, Richard Dann and Stephen Ottner gained their AEI ratings on our first course. Congratulations also to Steve Glassett (Silver badge); Dennis Maynard, John Hogbin, John Hewitt and Neil Lloyd (Silver height); John Hogbin (Bronze badge) and Matthew Grote and Tom Glen (going solo).
S.C.O.

SOUTHDOWN (Parham Airfield)
May and June were disappointing soaring months for us but we do have six new solo pilots - Sue Morley, Richard Appletree, Tim Brewer, Eric Brown, Bill Rowlands and Ray Sharpe.

Congratulations to them and to Nick Bowers on gaining his Bronze badge.
C.M.R.

SOUTH WALES (Usk)
Our thanks to resident instructor, Peter France, and our new tug pilot, Alastair Powney, for their efforts this season and congratulations to Mike Dunlop, Tim Joyce and Ian Evans on their Silver badges.

Our task week was very enjoyable and we thank Peter France and family for the barbecue at their home for the pilots.

We had several noteworthy flights recently with Mike Dunlop (L-Spatz) completing 238 of a 300km O/R, CFI Angelos Yorkas 680 of a 750km attempt (see details in BGA News of Angelos's tragic death) and Graham Bailey (Vega) 500km.
N.P.

STRATFORD ON AVON (Snitterfield Airfield)
A large Portakabin serves as the clubhouse with the original resited for toilets and showers. Vic Berry and Stan Smith have been redecorating and refurbishing with plumbing by Martin Greenwood and Jeff Gale - our thanks to all. Refreshments will be available at the weekends and during flying weeks.

The May expedition to Sutton Bank was very successful with two durations and much thermal experience. The hospitality was much appreciated.

John Berry, Bob Hill, Josephine O'Brien and Malcolm Ratcliffe have gone solo and congratulations also to Brian Marsh on his Diamond distance.
H.G.W.

THRUXTON (Thruxton Airfield)
In terms of launches, this season is likely to be one of our best in recent years. Special congratulations to Chris Walker on going solo - all three members of her family have now soloed at the club. Also to Alistair Caie on going solo and to Barry Lovett on his assistant instructor rating.
J.B.

TRENT VALLEY (Kirton in Lindsey)
Congratulations to John Rice on a 500km triangle, Burgley House, Durham Cathedral, on April 9, and to Roy Dell, Andrew Cullum and Steve Slater on 300km triangles.

The Inter-Club League produced four triangles for us. Carol Baker, Duncan McNaught and Mark Horton have gone solo, Mark on his 16th birthday. Well done.

We had an enjoyable weekend with the BGA Discus and Janus and a further AEI course has been completed.
M.P.G.

TWO RIVERS (RAF Laarbruch)
Our CFI, John Sullivan, and his family have a new posting and will be sorely missed. Farewell also to Colin and Janet James and Tim and Lynda Doye and our thanks for their contribution to the club. We wlecome Ian and Alison Smith, Ian taking over as CFI.

Congratulations to Tom Doye and Chris Gilbert (Gold distances, Chris completing his Gold badge); Mike Gazzard (distance to complete his Silver badge); Mick Ferguson and Ski (assistant Cat rating) and Kev Morley, Kev Berry and Simon Cattle (Silver heights and 5hrs).

We were unfortunate with the weather for our June mini Comp when we had lots of competitors including pilots from Germany, Holland and Luxembourg. Mike Foreman (ASW-20) was 2nd and Tim Doyle (DG-300) 3rd. Phil Jones was 2nd and John Norman 5th in the Asperden Comp.

We have had some very good days with 8000ft cloudbase on one occasion. Thanks to Chris Gilbert and helpers we will soon have a superb newly serviced winch.
L.F.

VALE OF WHITE HORSE (Swindon)
Our Enterprise style task week at the end of May had creditable performances in not the best of weather. One task was a treasure hunt with clues to various well known TPs in a sealed envelope with a second sealed envelope (which no one opened) giving the answers. Everyone completed the task.

Dave Foster had problems with his photos and barograph on his Silver distance and height attempts but got it right the second time.

We recently had an EGM, plus a clubhouse opening ceremony since we now have H&C in all rooms.
E.J.W.

VECTIS (Sandown Airport, Isle of Wight)
Our June open day was a success - we welcome several new members. The recently arrived club K-8 is proving very popular.

The Shanklin to Ventnor cliffs' wave has been working well giving Lesley Tuppen (ASW-15) her 5hrs and Mike Chambers (K-8) his first Bronze leg, though the summer has generally been better for barbecues than for soaring.

Congratulations to Andy Taylor and John Leonard on their Bronze badges and to John Kenny on his 1000hrs.
L.T.

WELLAND (Lyveden)
Our move to Lyveden has been very successful - we have 70 members and a Std Jantar and IS-29D has increased the fleet to 16. Work has started on the hangar and clubhouse, the latter being a new facility for us.

The flying week went well with good weather, 20 gliders, visitors from five other clubs and plenty of cross-countries. Our thanks to Newark & Notts GC for the loan of a K-7 and to Coventry GC for a Bocian, a T-21 trailer and a day's aerotowing.

Congratulations to Gerard O'Callaghan (assistant instructor); Dick Goodband (Silver distance

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and 5hrs to complete his badge); Ken Payne (5hrs to complete his Silver badge); Peter Strong (AEI rating) and Brian Neal, Bob Rowlands and Bob Jackson (going solo).
R.H.S.

WOLDS (Pocklington)
Despite long bouts of high winds and rain we have had some commendable cross-countries with 300kms for Steve Malcolm, Dave Bowes and Pete Wilson. Tom Dale (a new tug pilot), Alan McWhirter and Melonie Malcolm have AEI ratings, Melonie being our first Wolds' female AEI.
N.R.A.

WREKIN (RAF Cosford)
Sue Gordon, Jane Croshaw and Mark Judd have gone solo, Mark on his 16th birthday, and Mick Davis has reached 2000hrs.
R.J.

YORKSHIRE (Sutton Bank)
On July 8 wave gave one flight of 628km, two of over 500km and two in excess of 400km.

The Northern Regionals was a great success with nine competition days and soaring in wave, thermals to over 8000ft, ridge lift and sea breeze fronts. July 31 was the best day with 14 of the Open Class completing a 512km task and two of the Standard Class competitors continuing to soar to gain Diamond distances after completing their task. There were over 30 badge claims during the week and over 59723km flown.

Our CFI Henryk Doktor will be retiring at the end of the year and we are holding a dinner-dance in the new year at the Old Swan Hotel, Harrogate. More details will be sent to clubs later.
C.L.

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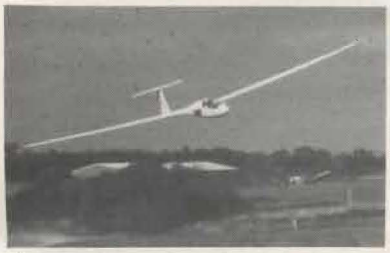
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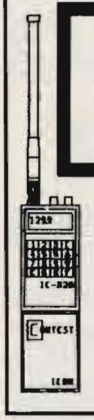
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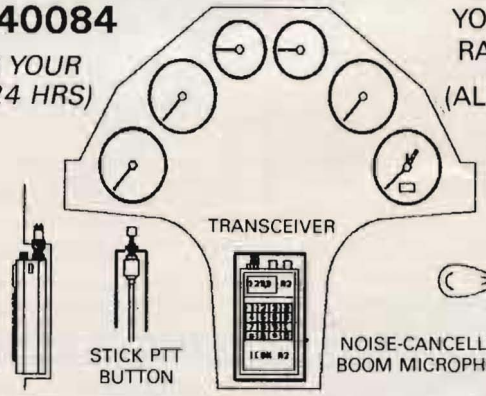
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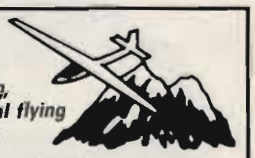
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Misnomer

I was dismayed to see the silly and wholly inaccurate practice of calling K-7 conversions K-10s – simply on the basis, one assumes, of splitting the difference between K-7 and the K-13 which the conversion is meant to represent – has been given quasi-official backing by its use in the latest BGA Accident Summary, reference 128 (see June issue, p149).

Those who've been in gliding more than a year or three know, of course, that Schleicher K-10s were being built long before the K-7 conversion first saw the light of day. For the unknowing, the K-10 – of which about ten were built – was Schleicher's last wholly wooden single-seater, basically a K-6E fuselage and empennage with 17-metre wings of different aerofoil section and remarkably close rib spacing.

Such, *amigos*, is the real K-10. Beware of two-seat re-jigged impersonations. Penguin was on the point of importing what would have been the UK's first and only K-10 sometime in the early 1970s but his bank manager started breathing heavily and all those arduous negotiations with a club near Hanover came to nought.

But now that a *real* K-10 is at last flying in the UK, under its correct and legitimate designation, shouldn't the BGA, to prevent confusion, issue an edict forbidding reworked K-7s posing as something they quite distinctly ain't? It should insist on a different and more accurate moniker, such as K-7 *bis*, K-7 Mk2 or even K-7/13.

Got a rule book 'andy?

I hadn't seen the excellent *Liftin' the Blues* video of the 1988 Standard Class Nationals until it was shown, at full length, on Channel 4 recently.

I loved it and so did Hen Penguin. But she snorted in disgust, even returning to the subject the following day, over Andy Davis's brutally frank admission that he sometimes lures leeches a few miles down track, to slip away unnoticed for a re-start in stronger conditions.

"How unsporting. If he was really good he wouldn't need to resort to cheap tricks like that", she snapped with holier-than-thou Corinthian rectitude. "I think he's done gliding harm in the minds of many lay people who might be watching."

Tough one, Andy, for she has the smile of an angel but the memory of an elephant. So you'll now compete with the perpetual handicap of Hen Penguin's disapproval – something which has blighted my gliding for years.

CLASSIFIED SECTION

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