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EDITOR
Gillian Bryce-Smith
281 Queen Edith's Way
Cambridge, CB1 4NH
Tel 0223 247725
Fax 0223 413793

ADVERTISING
Debbie Carr
BGA Office
Tel 0533 531051
Fax 0533 515939

SUBSCRIPTIONS
Bev Russell
BGA Office
Tel 0533 531051
Fax 0533 515939

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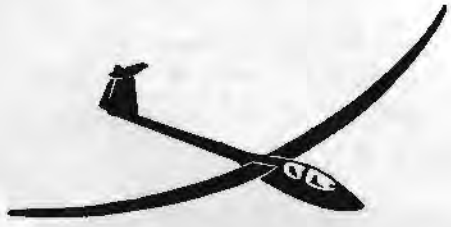

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YOUR LETTERS

NEAT TOUCH ON LANDING OUT

Dear Editor,

As the South Wales GC's most frequent out lander (16 times last year) I have never been treated badly. The secret is to be mentally and physically prepared for the first few seconds at the farmhouse door. My usual opening is: "Er, excuse me but I'm afraid I'm a bit of a trespasser. I've landed my glider in your field."

You have to adopt a fairly contrite attitude and I always offer to help out around the place whilst I'm waiting. I'm pretty handy - I've built walls, shifted bales, repaired tractors, welded machinery and repaired electrical wiring. It also helps the time pass and in return I've been feted like a king - instant parties in my honour and tours of the locality and relatives.

I have never parted on bad terms but I have a final solution - chocolates. On competitions and tasks I always take with me a box of Milk Tray , wrapped in gold foil and decorated with a card with a glider silhouette. This is a guaranteed miracle worker with the farmers' wives.

HAROLD ARMITAGE, *Pontypool, Gwent*

PLANNING GONE MAD

Dear Editor,

My sympathy to John Mitchell of Bowland Forest GC (see the last issue, p125). Planning inspectors regularly make totally inexplicable decisions, as we in the Derbyshire Soaring Club can attest, to our cost.

Yup, we're those "hang glider chappies", as Plat called us in that issue (p134). For 12 years we've been minding our own business, soaring around at Bradwell, just a gnat's whisker down the ridge from Camphill, where we've had a long standing and generally harmonious relationship with the Derby & Lancs GC.

Recently the Peak Park Planning Board decided that we needed planning permission to fly, even though we use no winches (foot launch only), erect no buildings, make no mechanical noise and assemble erratically at one of six or so different sites, depending on the wind direction.

In vain we queried why we should be singled out as requiring planning permission, even though we are far fewer in number than the hordes of mountain bikers, walkers, rock climbers etc.

We appealed to the DoE and at an inquiry the inspector decided that we did need planning permission to fly because we were organised into a club. We paid site fees to the farmers, put up site regulation notices and instituted voluntary traffic control measures on access roads to minimise nuisance to the locals.

If, apparently, we had done none of these things, and each just turned up on the hills as a member of the public with a hang glider on his back and anarchy in his heart, we would not have been an organised activity and therefore would not have needed planning permission!

Having decided that we, as a club, needed planning permission to fly, he then decided that no, he wouldn't grant it as there were too many of us! The appeal has cost us over £15 000 to fight which has just about wiped out the club financially. The result is that our club has relinquished control of the site at Bradwell and advises its members not to fly there. Indeed, it would be logical if we now disbanded the club completely to protect our other sites from similar action by the planning authority!

Guess what? We're now all turning up individually at Bradwell to fly there as members of the public - and a right of way passes through the take-off area!

It just goes to show the blind prejudice of planning authorities against any form of aviation. Perhaps it's time all us pilots got together to fight this attitude before we're all picked off separately.

ROD BUCK, *Sheffield*

ANTI-SPIN TRAINING

Dear Editor,

Having read John Dobson's letter in the last issue, p125, I am moved to cry "Hear! Hear!

Whilst not completely on the same theme and fully appreciating the necessity for in depth training in spin recovery, I ask why the obsession with spinning exercises at lower and lower heights? There is an old saying that "it's not the fall that hurts, it's the sudden stop" and therefore I can understand the rationale behind low exercises, but surely the emphasis must be on recognition of an approaching problem. You don't need to see "ground-rush" to be convinced that several hundred feet can be lost in a spin.

Entry and recovery from different situations can be practised, *ad nauseam*, at a safer height, but in addition there should be concentration on training in instinctive reaction to any approaching stall. After all new solo pilots should be completely current in this respect or should not be solo. On going supervision should ensure they remain safe.

I realise the subject may be emotive, but why not reduce this pre-occupation with low spins and place more emphasis on "anti-spin training?" I certainly regard prevention as better than cure.

LAURENCE McKELVIE, *Ulster GC*

Dear Editor,

I think John Dobson makes a very valid point. As the exercises relating to stalling and spinning have proliferated, in spite of the intention behind them there is a tendency to see them as an end in themselves.

In the December 1963 issue, p443, Ann Welch argued that the main difference between teaching stalling and spinning and the other exercises was that we were teaching how **not** to do something, not how to do something.

In the August 1975 issue, p147, Derek Piggott questioned spin recovery techniques and emphasised the role of the elevators. I would recommend both these articles to those who haven't read them.

The fact is that a spin can only develop from stalled flight and stalled flight can only develop if what the glider is saying is ignored by the pilot.

In almost 30 years of gliding I have never had an inadvertent spin, so I don't know how I would react, but what I have had on numerous occasions when thermalling is the start of a stall. When concentrating on improving the climb and looking out, the triggers that alert me that something is amiss are that the airflow becomes quieter and the controls become "soft." A slight easing forward of the stick puts matters right and we carry on thermalling - no drama, no spin. Most, if not all, of the other stall warnings don't seem to be very evident in this situation.

I am not suggesting, nor I think is John, that we should not show pupils the situations that can lead to a stall/spin, or the way to recover with minimum loss of height. We should, however, put equal or even more emphasis on not getting into the situation in the first place. After all we don't demonstrate all the things pilots shouldn't do; we assume that having been warned not to exceed VNE they won't do it.

DAVE SALMON, *CFI, Derby & Lancs GC*

SPINNING MODERN SAILPLANES

Dear Editor,

I realise that to take issue with the chairman of the BGA Technical Committee will probably cause a plague of boils and showers of frogs in Cornwall **but**...

There are a few mistakes in Howard Torode's article, "Spinning Modern Sailplanes", in the last issue, p131. *S&G* is studied by glider pilots of different levels of practical and theoretical knowledge of flying, so it is important that authoritative articles are accurate.

I do not agree with the implication of the opening paragraph that the mechanics of a spin are so complex as to make it difficult to explain. There is a simple diagram which can be used to explain how and why autorotation occurs. There is no great mystery about spinning and to imply otherwise does nothing to dispel the aura of fear of spinning which lingers among some pilots. Having opened with an opinion, I will point out a few errors of fact in the article.

The illustrations with the article show the outside world apparently rotating from right to left. This does not mean that the aircraft is spinning to the left, as stated. It means that it is *probably* spinning to the right.

While discussing **The steep spin and disorientation** the author writes "Actually the side of the nose that is advancing most rapidly and covering, rather than revealing the scenery, is the side on which rudder should be applied". Not so! Besides having a mental boggle at the idea that one side of the nose travels faster than the other while in a spin, the side which is apparently "advancing" is probably the direction of the spin. The rudder should be applied to counteract the yaw, so if the nose is advancing to the left one needs **right** rudder to recover from a spin.

It is my opinion that we need much more understanding of, and training on, spinning, spin recovery and spin avoidance in the world of gliding. There is already a wealth of myth, half-truths and downright nonsense passed about by word of mouth on this subject.

I will now order a large supply of antibiotic ointment and check the slates on the clubhouse roof, while waiting for the boils and frogs.

JOHN STEWART-SMITH, *Crantock, Cornwall*

Howard Torode replies: My assertion that spinning is a complex issue was intended from a technical standpoint, if you will, as a justification that gliders cannot be designed with spin ➡

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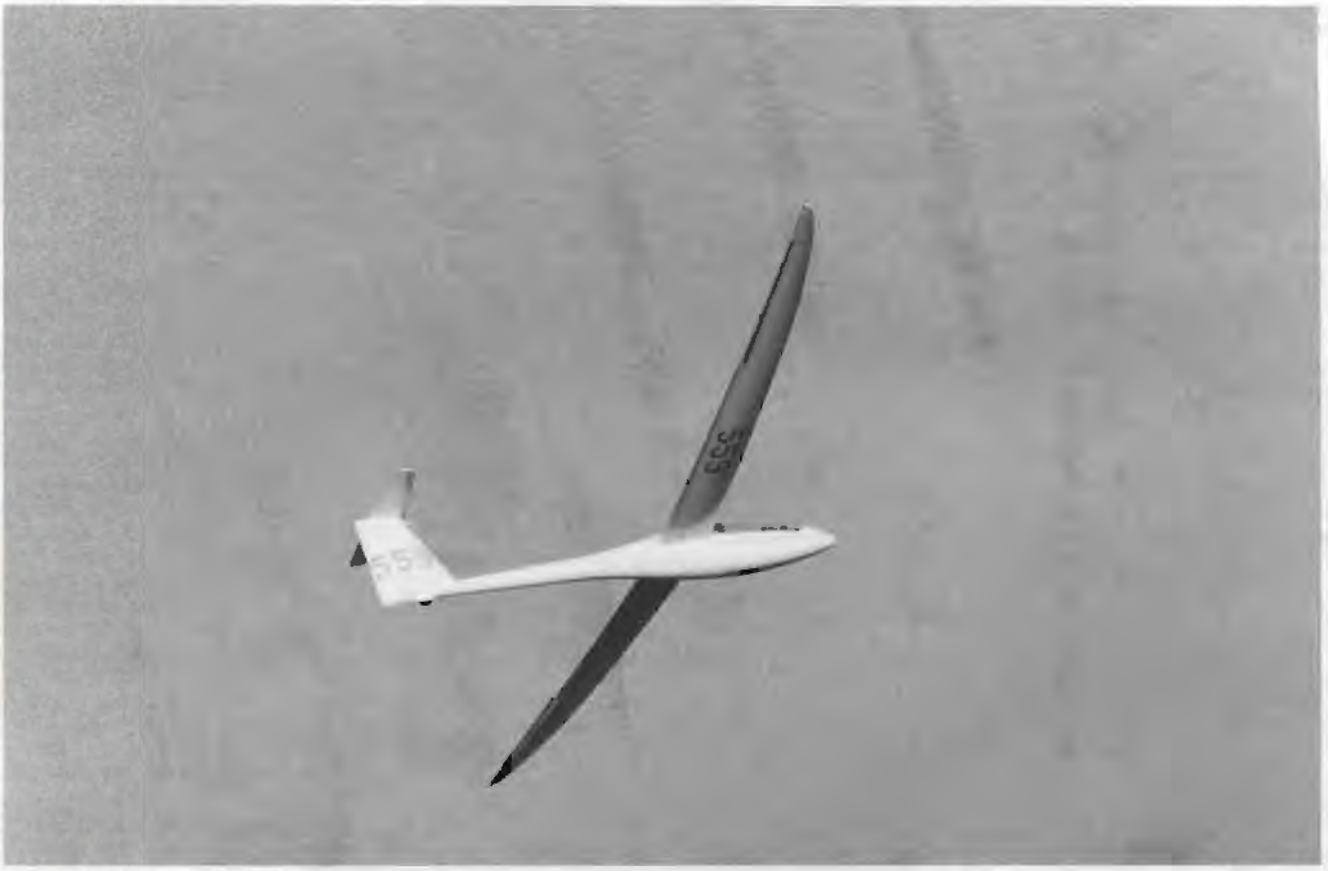

Sailplane design is always a compromise; most modern Standard Class gliders seem to go very well at high speed, but need vertical winglets added to climb well in weak thermals. With an empty weight well below 500lbs the SZD 55 climbs much better than the rest without needing any modification. To leave the others standing at high speeds – just add water.

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characteristics to order and that some variation between types must be expected. I fully accept that the basics of autorotation can be simply represented and taught.

In my diagram the arrows show the nose is moving left, and thus the world is going the other way! I felt both sets of arrows could be confusing but clearly you can't please everyone. This representation is consistent with my quoted remark concerning the steep spin where the perceived rolling motion dominates the yaw. In such a rotating field the features on periphery (such as the cockpit sides) move faster that features in the centre for the same rotation speed.

I regret any misinterpretation of my words but do not accept the accusation of "mistakes".

NOT SO NEW

Dear Editor,

The "new" circuit planning idea (April issue, p78) is virtually identical to the standard RAF "forced landing after engine failure" procedure as taught in the University Air Squadrons at least from 1970-1972.

As an emergency procedure it worked fairly well in Chipmunk aircraft in spite of the limited scope for drag control. As a routine procedure in a glider with airbrakes it should be a doddle.

Actually, if you watch, most experienced pilots have done something similar for years. It is just that we pretended we were aiming for the "approved" square circuit. My version was to do a continuous gentle turn, started early, from downwind to base leg. It was then a strain to teach the square circuit and so not be able to see the landing area.

CHARLES BAKER, *Winchester*

Dear Editor,

As a recycled novice I was both interested and surprised to read two of the articles in the April issue.

When I first started gliding nearly 30 years ago I was taught the rectangular circuit and, I suspect like most beginners, I can remember finding it difficult to judge the last bit of the downwind leg when the landing area was to all intents and purposes invisible. It was a long time ago but I am sure that one consciously or subconsciously picked out various landmarks around the field as aids to locating the position for a turn on to the crosswind leg. I went solo but not much further and after about two years gave up.

Last autumn I started all over again with The Gliding Centre and quickly achieved my Bronze. I was taught to do what they described as a "threepenny bit circuit" almost exactly as outlined in the article by Chris Rollings. As the student is concentrating on angles and the land area as reference there is no temptation to look for other markers. This in turn leaves more time to look out for other traffic and leads naturally on to learning about field landing.

Once again, the article "Field Landing Training" by Graham McAndrew, p83, mirrors my training at The Gliding Centre - taught in the Falke by one instructor and checked out by another. (And yet another check in the Falke at the start of the year to make sure you haven't forgotten!) It seemed to me that the one omission from that article was the link to the "new" circuit planning approach. Going into my first field for real a few weeks ago was not, therefore, the nerve racking experience I had read it would be - although I do realise that this is the easiest time of year and I was able to choose a **big** field.

My surprise is that these two techniques are described as "new". I am sure that both ideas have been in consistent use at The Gliding Centre for the last two years.

RALPH BOWSFIELD, *Cheltenham, Glos*

Chris Rollings, BGA senior national coach, replies: Oh dear! I seem to have re-invented the wheel. I was aware of the military method of teaching forced landings and that knowledge played its part in developing the "new" idea. The Gliding Centre's early adoption of the idea was probably due to Mike Cuming having worked with me on an instructors' course early in 1993 when the method was first tried out.

GLIDING AT JURBY

Dear Editor,

Reading the article by Tim Wilkinson in your April issue, p85, took me back 44 years to my first experience of gliding at RAF Jurby. I wonder if members of the new Islanders GC have any knowledge of that period?

After all these years my memory is suffering from 7/8th cloud but the events as I recall them are as follows. Jurby was an initial training school for cadet pilots and navigators and used for a four month course of pre flying training. The instructors were all ex WW2 pilots. I have never met a more interesting bunch of characters and it was a privilege to be with them. I was one of the four 18 year-old National Service cadets on the course of about 30, the others being mainly fitters and riggers who wanted to retrain as aircrew after the war.

The airfield wasn't active and the only aircraft I remember being based there was an elderly Tiger Moth. Then an Air Ministry boffin decided it would be a spiffing idea if some cadets did a bit of gliding to find out whether they would go solo faster when they got to the flying training school. A T-21 and winch appeared and I was one of the four lucky cadets to be chosen for Wednesday afternoon gliding.

The weather in the autumn of 1950 seemed to consist entirely of 40kt winds. My first flight in the T-21 was with an ex pathfinder as P1. We released at 600ft and half way round the circuit he asked if I had ever been in a glider before. When I said no, he answered "Neither have I". But he learned fast. The sum total of my gliding was probably not more than six to eight flights and as far as I know the Air Ministry did not pursue the idea.

My best wishes to the Islanders GC and may all their gales be little ones.

MALCOLM CEDAR, *London*

TOO MUCH SALT MAY BE HARMFUL

Dear Editor,

I am writing to comment on one aspect of the otherwise excellent article by Lisa Pearce in the April issue, p72 ("Nutrition for the Glider Pilot"). I am concerned that the recommendation to take 1.3gm of salt per 100ml of fluid is in fact too high and if taken in large quantities may be harmful.

Normal human blood plasma contains roughly 140mMols/litre of sodium, which is equivalent to approximately 9gm of salt. Sweat contains roughly half this amount of salt (≈70mMols/litre of sodium). Since the pilot loses fluid by sweating, the replacement fluid should contain less than half the salt recommended in this article.

The need for salt replacement is small relative to the need for water. Excessive salt intake in the face of fluid depletion can be very dangerous, and hence large fluid intakes are needed. Pilots should be recommended to drink adequate water without additional salt and a diet with a normal salt content. Salt tablets are dangerous and to be avoided.

MIKE PASCOE (DR), *South Africa*

IT IS PEOPLE WHO MAKE A CLUB

Dear Editor,

Mr Youngman appears to have missed the point of the word "club" when he complains of the "amateurism" of gliding in the last issue, p125. My dictionary suggests the following as a definition; a group or association of people with common aims or interests.

A gliding club does not consist of gliders, winches, tugs and trailers. It does not exist because of the clubhouse, the bar or the accounts. There is no God-given law preventing the airfield from becoming a housing estate, a farm or a factory.

It is only people who make a club.

The more effort people put into a club the more active, stimulating and successful it will be. So if he wants to see, as I believe most of us do, a higher level of professionalism in the way clubs are run, may I make a suggestion?

Why not be one of the people at his club who takes an active role in achieving that professionalism, rather than just complaining. How about turning up early to get the aircraft out and DI them. Maybe washing a glider from time to time. Helping at the launch point. Driving the cable retrieve truck. Doing a stint in the office.

But if Mr Youngman wants to be able to slot his sport into convenient windows in his diary he should find himself a commercial venture that will fit in with his every whim...and charge him well for the privilege!

PHIL SWALLOW, *Pitlochry, Scotland*

Dear Editor,

I (and I suspect thousands of other gliding club members) would like to reply to Neil Youngman's letter. Our club has a dedicated group of members, some of whom drive 1hr 30min to 2hrs to get to the club. They arrive early, get the aircraft out and DI them. They put batteries and fuel in tractors and winches, get out the control and refreshment caravans and set up the signals square and launch point. If they remember, with all this activity, they even put their names on the flying list!

This is all done so that people like Neil can arrive after a tiring 1hr drive and not have to tire themselves out before starting their training.

We would have a mobile phone at the launch point, but if we aren't flying we are repairing aircraft, doing Cs of A, painting and repairing ➡

our numerous pieces of ageing equipment etc so that members like Neil aren't inconvenienced too much when they arrive by everything not being ready for them.

We do actually have members at the launch point who will lift Neil in and out of the glider and wave goodbye as he starts out on his long drive home, happy with the thought that the same dedicated members will still be there to put everything away when flying ends.

Oh, did I forget to mention the name of our club? Yes, so I did!

COLIN WEYMAN, *Walkford, Dorset*

UNE PETITE HISTOIRE DE FRANCE

Dear Editor,

We had been having an idyllic holiday touring in Provence in our campervan when the whole thing was completely shattered by a sneak thief who stole a purse containing not only our entire supply of French francs but also our credit cards. Morale sank instantly to a very low ebb as we grappled with reporting to the police. Forty francs, all our small change, disappeared on the purchase of a telephone card to report the loss of the credit cards and there we were on a Saturday afternoon 600 miles from the ferry with no money, no cards and no way of changing what little English money we had into francs.

Facilities for changing money do not exist at the weekend or even on Mondays in the smaller French towns and villages so, with about 70 miles of fuel available, we set off for a larger town which just might have a "change" on a Monday.

As we drove along I became aware of a following car towing a glider trailer and even more surprising the car had UK plates, so we did our best to ask it to stop which it did. The driver turned out to be Brian Spreckley and after quick introductions he said to follow him to St Auban where all would be sorted out. On arrival he immediately provided that universal panacea for low morale - a nice hot cup - of tea while at the same time talking on the radio to his wife Gillian who was local soaring. She landed at once and immediately produced a good supply of francs to lend us. Suddenly our prospects changed completely. Not only could we now afford to buy enough fuel to get back to the ferry but we could eat as well. Our luck may have been out earlier in the day but it was certainly well and truly in now.

And the morale of the story? Gliding people are rather special aren't they! And the Spreckleys special among them.

NICK GOODHART, *Cullompton, Devon*

THE GREEK INVOLVEMENT

Dear Editor,

John McCullagh's article in the April issue, p79, recounts the history of gliding back to the ancient Egyptians. There is also an extremely well documented account of gliding activity in Greek mythology.

It concerns a single event during a task week at the Crete GC and which ended in both success and disaster. The CFI, a chap called Daedalus, set a very ambitious task, a straight cross-country, or more particularly cross sea, flight from Crete to mainland Greece. Daedalus must have had a good forecast and the records show that he gave a very thorough and sound briefing which would still hold good today.

He knew that cloud would continue to form throughout the day and therefore instructed the pilots to gain as much height as possible by staying in the thermals which they would find under the clouds. I expect it was a downwind dash and he preferred these early solo pilots to drift with the wind rather than go for speed, or perhaps he understood the principle of dolphining.

We don't know how many attempted the task other than Daedalus and his son Icarus, a wilful youth whose name is recorded because of the ensuing tragedy. They appear to have got away without incident but at some point Icarus forgot, or chose to ignore the advice of the CFI, and went looking for thermals in the blue.

Or was he trying wave lift, having attended a lecture on the subject without paying attention as usual? However, the inevitable happened. He ran out of lift and finished up in the sea where sadly he perished. Daedalus completed the task.

The contemporary account clearly attributes the accident to pilot error. Not staying with the lift as instructed by the CFI must have been the primary cause but a technical failure is strongly implicated. The gliders were home built but we are not told what standards and regulations were in force. The records give us some clues to the materials used and Dick Stratton may wish to comment on the quality and properties of the adhesive used as this seems to be suspect.

I understand a retrieve wasn't required as there was some problem with the authorities on Crete. Perhaps the quality of adhesive used in glider construction may have been one of the reasons he didn't wish to return.

That evening Daedalus, in sad and pensive mood, stood on the cliffs looking out to sea towards Crete, The evening sun shone on the water making the sea gleam like silver and to this day, in memory of that epic flight, the first cross-country glider flight has always been known as a "Silver Sea" flight.

SYD BRIXTON, *Lichfield, Staffs*

FROM BUZZARDS TO VULTURES

Dear Editor,

Harold Armitage's letter in the last issue, p125, reminded me of an incident in 1986 when working in South Africa. Every year a group of us went to the NW Transvaal to fly around the western end of the Waterberg mountain range,which was home to 1500 pairs of breeding vultures.

I was concentrating on thermalling after getting too low for comfort over the bush. I looked up in horror to see the flapping wings and outstretched talons of a vulture which seemed as though it was about to come through the canopy. I shoved the stick forward and waited for the impact on the tail, which never came. I tightened up my turn and saw him turning in the opposite direction to me, and shortly afterwards he left the thermal.

I discussed this with my friends but nobody had experienced anything like it. Harold's letter makes me think that I was attacked because I can't believe a bird as vigilant as a vulture would risk a head on collision, and the fact that he missed my tail meant he must have started to pull up just before hitting the canopy.

I believe the attack was a rare event as vultures joined us, and we joined them, in thermals many times over the years. I particularly remember the day I was able to admire the beauty and skill of a vulture as he positioned himself a metre from my wingtip as seven gliders and at least 20 vultures enjoyed the same thermal.

STEVE HICKINGBOTTOM, *Derby*

Dear Editor,

Harold was very lucky. He nearly suffered a fate worse than death. In early spring buzzards display near crags or tree nest sites. The birds spiral upwards, the male being the lighter outclimbs the heavier female and then dives at the female. I would suggest Harold changes his aftershave.

If he had looked closely he would have observed the bird was smiling.

HOWARD JOHNS, *Nailsworth*

We welcome your letters but please keep them as concise as possible and include your full name and address. We reserve the right to edit and select. The final deadline for letters is August 8 but we appreciate contributions before this date.

BILL SCULL'S STORY

Bill has worked for the BGA since 1969 as national coach, senior coach and director of operations. At the end of June he retired but is continuing as a consultant on a part-time basis. In this article he looks at some of the developments both in coaching and gliding in general

For me the road to full-time employment in gliding started in 1964, ten years after my first flight.I started with the Avro Gliding Club at Woodford, Cheshire. By 1965 I was CFI and, becoming increasingly disenchanted with the aircraft industry, I sought employment as an instructor. I was unsuccessful in my application to join the staff at the London GC but got an offer from Midland GC. However, the salary of £800 a year wasn't enough to tempt me but two years later I gained a six month contract with Yorkshire GC at £750 pa.

The next logical career step, or so I thought, was to qualify as an aeroplane instructor. This was achieved through a course at Cranfield followed by part-time employment at Liverpool Aero Club. Then I was offered a job at Lasham. My future was decided. Instructing in aeroplanes can't compare with gliding and from that point the possibility of following the self-improver route to commercial flying was abandoned. In a mere ten months I had risen through the ranks to become CFI (in truth most of the "ranks" had departed!) and the future looked good.

Towards the end of 1968 the post of national coach was vacant. Following a discussion with Vic Carr at Portmoak I was interviewed by Roger Neaves, then chairman of the Instructors' Committee, and offered the job. The die was cast. My expectations and aspirations had been to rise to a post of, say, CFI/manager of one of the older full-time clubs. And now this.

The coaching job had evolved over five or six years but there was scope for development. The main task was already the training of instructors with club visits the next priority. The coaching aircraft was a Slingsby T-49, the Capstan. This had its disadvantages, certainly in terms of trailing around the country and getting it launched.

In 1970 the BGA acquired its first motor glider, a Scheibe SF-25B. The independence from clubs' launching systems was the first benefit and on an open trailer it was much more mobile. Instead of the Wolseley 6/110 it could be towed by a Renault 16. The other main change arising from the use of the Falke was the loss of involvement of course members - no waiting around on the airfield, no pushing and shoving. The waiting time was often wasted time and there was clearly a need for training aids.

The training aids took the form of synchronised slide/tape lectures, also provided in note form, and in simplified style as talking books. With that task completed we turned our attention to "patter tapes." A trainee instructor spends a great deal of time and effort learning the words of the patter for demonstrations.

There had to be a better way of getting this information across than writing on a blackboard, transcribing it to notebooks and then burning the midnight oil to learn it. The first student instructor wasn't too keen on the method but he gave a word perfect demonstration of the effects of controls. He was less confident about turning so I gave him a demonstration. During his subsequent attempt he twice said "You missed that bit out." Not only could he give the demonstration, he could fault find. Eureka! A breakthrough which has stood the test of time.

By this time, 1972, Don Spottiswood - the present BGA chairman, was chairman of the Instructors' Committee and there was a second national coach, John Heath. Coaching was well established and generally accepted for obvious reasons - it was the part of the BGA the club members saw. It also had the benefit of increasingly standardised instructor training because there was a steady reduction in the number of other courses.

Bill on one of the many airfields he has visited during his years with the BGA.

In 1973 Brian Spreckley had become the second national coach, a choice which proved to be significant. He had a considerable influence on the provision of soaring training, now very firmly established as part of the coaching programme.

But there were other changes, not just in the coaching scheme. Almost imperceptibly, although easy to see with hindsight, I was getting involved with airspace and safety. I suppose the basic reason was the need for some staff provision in these areas.

Although strictly sub-committees, they depended for the most part on the individual efforts of the respective chairman and they needed some back-up. And so the role of senior coach gradually evolved into what would eventually become the new post - director of operations.

Airspace is worth a particular mention. The steady rise in commercial traffic has led to ever-increasing controlled airspace. Negotiating with the airspace designers - the policy directorate of NATS - needs a good understanding of the system. Suffice to say that with one exception in the last 25 years the Airspace Committee chairmen have been airline pilots. However, they do need a particular attribute - to have a slightly cynical view of the regulators that allows them to challenge a proposal.

There are other critical aspects to the airspace business. One is that we are always losing. Winning generally means losing less, a philosophical point picked up by John Holland who became our Political Committee chairman.

The other philosophical point concerns the relationship between the BGA and its member clubs. The representatives of a club threatened with restriction will feel that we should attack the regulators on the general as well as the specific issue.

The difficulty is making the case against the inexorable progress of ever-increasing controlled airspace. It is now deemed that the protection of public transport is paramount, whatever the detriment to other airspace users. Developments in Scotland, Birmingham, East Midlands, London City, Stansted and Upper Heyford, to name a few, have an inevitability about them. The BGA team does its absolute best, a point sometimes not acknowledged or accepted by an aggrieved club.

Occasionally, as in Scotland, a challenge may be successful. We managed to get an airway directly over Portmoak (base at 2500ft) shifted. It took a considerable effort to mount the lobby which resulted in an Early Day Motion and an Adjournment Debate in the House of Commons.

This was only possible through Bill Walker MP, our parliamentary spokesman and now a BGA vice-president, who fought tooth and nail on our behalf. It took the best part of 18 months of my time which in turn imposed a considerable extra workload, and certainly beyond the call of duty, on the two national coaches, Ken Stewart and John Williamson.

As well as NATS the BGA interfaces with the CAA. For the most part they only maintain a watching brief, as long as we keep our house in

order. An increase in the number of accidents, airspace infringement or incidents with tugs and questions will be asked. Generally they are satisfied with our action. It is quite likely that a club will take a very serious view of any particular incident and impose retraining or disciplinary measures, generally much more so than the CAA could take. A high standard of discipline within gliding enables us to keep the freedom we enjoy.

On safety matters the BGA has a remarkable degree of autonomy. Since 1974 we have produced a detailed annual report; it now includes a breakdown of accidents by category and glider type. The detail of the report has meant that gliders are no longer included in the CAA's own annual report.

A task that doesn't get any better

Another reflection on the BGA's status is that for the last 20 years or so the Air Accidents Investigation Branch (AAIB) have delegated the investigation of fatal glider accidents. It is a depressing thought but I have investigated more than 50 of the 60 fatal accidents in that time. It's a task that doesn't get any easier.

The accident prevention efforts only seem to stop the accident rate getting worse. One can't afford the experiment of stopping the efforts to establish whether or not it is effective. For 20 years I have chaired an international training and safety committee, now a part of OSTIV, and it has proved to be a source of many new ideas - a continuing need in accident prevention.

Sometimes the national view is parochial - "What can these other countries teach us?" is the question. A pilot who thinks he has nothing to learn may well be at risk. Might the same be true of a national organisation?

Another aspect of the role as director of operations falls broadly under the heading of government liaison. This is mostly dealing with the CAA on matters of pilot licensing, aviation regulation enforcement, winch launch permissions etc. It is usually quite straightforward except where policy changes might threaten our freedom to operate, such as, for example, the possibility of aerotowing being deemed aerial work.

Sometimes the CAA can act as honest broker if, say, we are getting opposition from other aviation interests to setting up a new gliding site. On the other hand they may circumscribe an area which they regard as unsuitable for the location of a new site - a recent trend.

In the same context we are now faced with the harmonisation for the aviation rules within Europe. This applies to the requirement for pilot licences - glider pilots in the UK are out of step with other countries in not having to have a pilot licence. In this respect, it is some advantage to be the licence co-ordinator for the European Gliding Union, another extension to the job role.

One aspect of the job, and perhaps the most difficult, has been development. This was incorporated in the director of operations' job when Naomi Christy retired. It is increasingly difficult to get planning permission and, more often than not, applications go to appeal. This is not only times-taking but also expensive, as much as £20 000, and we have not had many successes.

Appeals warrant a feature of their own. Roger Coote, the new development officer taking over this part of my job (see BGA & General News), brings some useful experience, appropriate qualifications and good ideas; he is already well established.

One of the problems arising from this broad involvement is the occasional difficulty of resolving priorities. Also there may not be enough time to devote to a particular task, which leads to a feeling of dissatisfaction, especially if more time would have meant a better result.

Another important factor is the involvement of the volunteer chairmen and committee members. Some, particularly the former, are making an amazing contribution - the new **BGA Instructors' Manual** is a case in point.

Some contribute a day or two's work each week - free for the BGA, as the problem in finding such people to become chairmen of our various committees testifies. This doesn't auger well for the future and is a problem I suspect that is also evident for many club managements.

So what of the future? The effects of the recession have and are being felt. Both clubs and the Association will have to pay a lot of attention to their financial affairs. Will it get better? I suspect there is quite a lag between the economy improving and it being reflected in a club's finances, and the weather doesn't help.

Perhaps more important is the distribution of wealth - about 80% of the civilian gliders are privately owned. This, and other competing sports such as hang and para gliding, plus the economy, have seen a decline in the overall membership, despite the fact that our sport has changed from gliding to soaring.

Not enough young people in gliding

The average age of members is in excess of 40 years and despite some good youth recruitment/cadet schemes, clubs aren't getting enough young people. More needs to be done in this respect if gliding isn't to atrophy. The trouble is that the changes are imperceptible and taking the appropriate action problematical.

At my retirement dinner after the June Executive meeting I expressed the view that the success of the BGA depended to a great extent on the remarkable people who voluntarily contribute so much ability and time. We need to find more of them. People are busier at work and so value their private time highly.

Too often the prevailing attitude is what can I get out of the club rather than what can I put in. I also said that it has been a pleasure to work in gliding, the only trouble being the demarcation between the official working time and the rest.

For the future we need to be watchful of development in Europe. In this context the definition of a bureaucrat is someone with a solution looking for a problem; there's quite a lot of them about! Finally, after three books, numerous articles and papers I expect to continue writing for this magazine. Watch this space!

BGA INSTRUCTORS' MANUAL

The Instructors' Committee has published a comprehensive reference manual for gliding instructors. The manual, which is produced in loose leaf style in a hardback four-ring binder, will be sent to club CFIs in sufficient numbers for each current full and assistant rating instructor to be given a copy. The cost is £4 and will be recouped by the BGA with a one off addition to the 1995 instructor's renewal fee. Thereafter assistant instructor candidates will be given a copy as part of the course. Additional copies will be available from the BGA at £10 plus £3.50 p&p.

The manual is the work of a number of different authors and has taken some years to compile. My predecessor Bernie Morris launched the initiative soon after taking office in the mid 1980s and handed over to me in 1991. Since then I have received help from many of the senior members of the Instructors' Committee but when Chris Pullen agreed to take over the role as co-ordinator in 1993 it soon became clear that at last we were getting within sight of publication.

A great problem was that with the number of different authors involved, each chapter was written in a different style. I am tremendously indebted to Steve Longland who readily agreed to take on the job as master editor. Not only did he virtually rewrite the whole manual but also formatted and illustrated each chapter. One of the last tasks was to examine the whole manual once more in the light of recent innovations, for example the new circuit pattern, and when this was done we were at last ready to publish.

The manual comprises the very latest thinking on instructional techniques. It provides advice and explanations with regard to the exercises in the BGA *ab-initio* syllabus - from effects of controls, through to further stalling and spinning and teaching thermal centring.

I am convinced that the BGA Instructors' Manual will be a helpful and authoritive source of reference to instructors and indeed to all who are concerned with improving safety and flying skills. My grateful thanks to all those who have given so freely of their time to make the manual a reality.

DICK DIXON, chairman of the BGA Instructors' Committee

GLIDING IN SOUTH AFRICA

John Ellis has written an update following his piece in the June issue, p156.

Our elections were peacable and seemingly accepted by the majority. As a result there seems to be little or no political violence. The Soaring Society have been able to extend their indemnity against Customs' duties for foreign visiting gliders to two years. However, the details must still be cleared with the Soaring Society/Aero Club before the glider arrives.

The Nationals are being held at Jan Kempdorf (Gaanspan Airfield), between Kimberley and Vryburgh (the site for 20 years) just N of the Vaal river, from December 27. Visitors are but there is a lack of gliders for hire. However, we understand Brian Spreckley may be moving part of his operation to SA for the summer, so if interested contact Brian on Tel/fax 0270 759246.

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APPROACHES IN STRONG WINDS

Chris, BGA senior national coach, says there have been a fair number of undershoot and strong wind related accidents this season which is the reason for this article

The late winter and early spring of this year generally produced poor flying weather across the UK, but there were an unusually large number of days with strong winds and vigorous convection - often accompanied by showers. The result of this was a fair number of undershoot accidents and other strong wind related accidents. I actually witnessed two of these and had prolonged discussions with the pilots involved in four others.

From this, and from observations of others flying throughout this period, I realised that most pilots do not modify their circuit pattern anything like enough for extreme conditions.

To illustrate this, let's consider the changes in approach angle in different circumstances. I will take figures for a typical training glider.

First the "normal" day, 10kt of wind at the surface and perhaps 15kt at the final turn height of 300ft. The approach speed 55kt with 2/3 airbrakes and a descent rate of 7kt. The average ground speed 42kt, the effect of wind gradient negligible and an approach angle of 1:6 (7:42). The reference point for the approach is 100 yards into a landable area with a final turn 500 yards back from the landable area (it looks less - **everyone** underestimates distances and overestimates angles). The approach is normal.

Secondly, what happens in a flat calm? The approach speed is 50kt and the descent rate with 2/3 airbrakes is 5 1/2kts. Approach angle should be 1:9 (5.5:50). The reference point stays 100 yards into the field and the final turn needs to be 800 yards from the landable part of the airfield. What usually happens is the pilot goes 600 yards back instead of 800 and uses more brake (perhaps the speed goes up a little) and usually overshoots by a small amount which is no real problem.

Now comes the crunch - the very windy day. The surface wind is 25kt and the wind at the final turn height is 40 kt. The approach speed is 65kt, descent rate with 2/3 airbrake 12 kt (descent rate increases very rapidly with speed with the brakes open) and about 50ft extra is lost for no gain in distance due to the wind gradient.

The average ground speed is about 30kt, the descent rate 12kt and the approach angle about 1:2.5 (12:30). The reference point is still only 100 yards into the field and the glider should be only 150 yards back from the landable area. Most pilots still go back about 200 - 300 yards, open the normal amount of brake and then reduce the brake setting a few seconds later when they perceive the undershoot starting.

The main problem here is that the roundout now occurs with a very small amount of brake open (or none at all) increasing the risk of a pilot induced oscillation on landing considerably and also increasing the period in which the glider is vulnerable to gusts near the ground. In this circumstance a late recognition of the developing undershoot can easily result in an undershoot accident if the glider is only a little too far back.

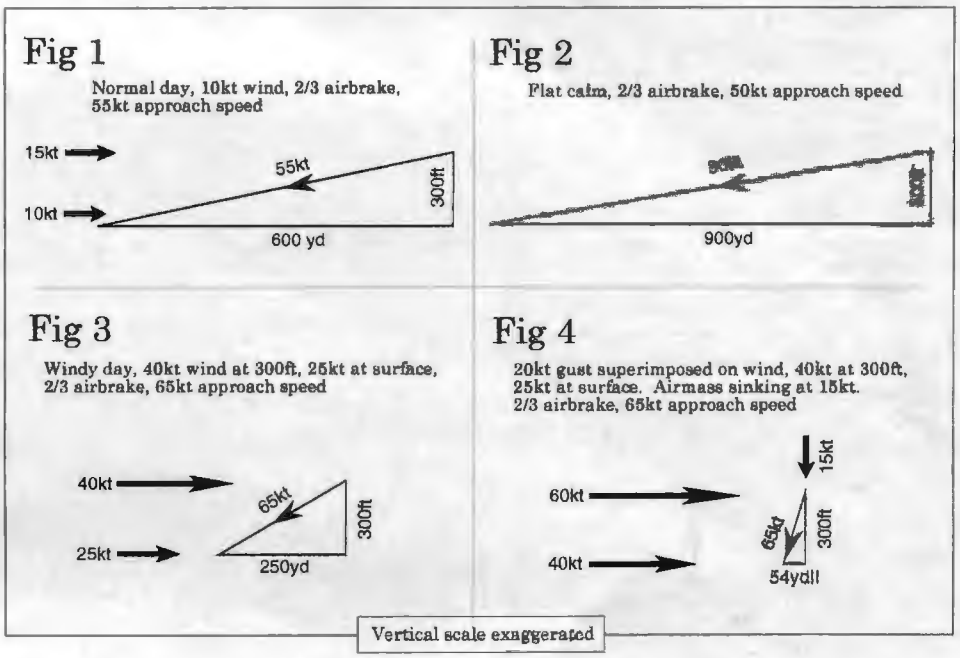
Consider that the whole approach takes 15sec and uses 250 yards if the glider starts 300 yards downwind of the field and uses 3/4 brake for 10sec. It is still 150 yards from the boundary at 100ft and needs to achieve 1:5 to get back even with the brakes closed

The sink rate is 3kt, the ground speed only 30kt and with 1:10 or 50ft to spare - the wind gradient takes care of the extra 50ft and the glider is in the hedge.

Now let us consider a bad case: the same wind basically but with strong convection and gusts. On showery days, rates of climb in excess of 10kt are commonly found and, since the glider will be descending through the air in this lift, vertical currents of around 15kt must be quite common. Horizontal gusts of the same strength and more are also quite common (not one in a thousand chances but commonplace). Let's see what that does to the approach angle.

The glider airspeed is 65kt, the sink rate 12kt with 2/3 airbrakes, surface wind gusts to 40kt and final turn height wind gusts to 60kt. The sink on approach is 15kt (plus 12kt of glider speed sink) and the wind gradient will use up almost 100 ft. The average ground speed is 15kt with a sink rate of 27kt. The approach angle is very nearly 2:1 with the effect of the wind gradient as near vertical as makes no difference. Even closing the brakes completely will not enable you to achieve 1:1 (rate of descent is still 18kt and the ground speed only 15kt). If this all sounds a little far fetched, it is exactly what occurred in two of the accidents I mentioned earlier.

Now the punch line. If the final turn is any distance at all downwind of the landable area in conditions of strong winds and active convection you cannot rely on getting back to it. Set your reference point for the approach 300 - 400 yards into the landable area and **do not fly beyond the downwind boundary**. They have known this for years at the hill top sites, but on windy convective days it applies at flat sites too. You have been warned!



OVERSEAS HANDICAPPED NATIONALS

Leszno, Poland - May 15-28. Impressions and photographs by Platypus

Contest reports : a warning from your correspondent

A wise old Arab chieftain once declined an invitation to watch a horserace, saying "Any fool knows that some horses can run faster than others." How true. In our sport it always seems to be the same damn horses as well. It is my ambition, if the editor does not fire me first, to write a contest report which says nothing at all about the flying, leaving the score sheet, as the football commentators say, to "tell it all". The text and pictures will then be modelled on the magazines Tatler and Hello!: "Lady Arabella Whyngge-Belyake and The Hon. Freddie Gore-Blaymeh share a joke at that popular watering hole. the ballast taps" or "Archie and Mabel ffumble take our camera crew on a conducted tour of their sumptuously-appointed trailer. Note the moiré silk wall-coverings bearing the family crest, the Chippendale trestles and the ormolu-inlaid mock-Louis Quinze fuselage cradle and matching tow bars." Any reader desirous of knowing more about the aviating bit will have to dial up Internet or Compuserve to have the GPS logger data downloaded on to his computer and his virtual reality headset.

One great day, one middling day and three little days out of 14 is not much reward for the heroic efforts of Ken Sparkes, Angela Sheard, Roman Grys and their team. A good Continental day is better than a good English day, but the proportion of unsoarable days in most of Europe at this time of year seems much the same.

Maybe the "We'll get more flying abroad" theory on which the Overseas Nationals is based - bearing in mind that they are necessarily timed not to conflict with the three UK Nationals and the Europeans, which occur in July and August - is just mistaken. As they say in the exam papers, Discuss.

Thumbs up to the Poles

The Poles are delightful people. They have an excellent sense of humour. For instance, after a few days of watching me in action they were told that I had written a famous book on how to be organised, and they just fell about. I warmed to them immediately after that. The Germans - with the exception of HWG (see Tail Feathers, p204) - would simply have been puzzled: "Ve sink zer iss an incompatibility betveen ze theory und ze practice, iss very interesting..."

Poland's premier gliding site deserves to have droves of foreign visitors, to help fill the gap left by the savage cuts in government subsidy following the disappearance of the old regime. Polish sites have hundreds of good gliders, most of them unlikely to be replaced soon, if ever, unless the clubs become commercial. Western visitors are a lifeline. In view of the hideous delays at border posts and the long road and sea journey, might it not make sense for groups of us to negotiate package air tickets to Poland and fly rented Jantars, large or small, when we get there? No rented glider is as nice as one's own, but the economics, especially if you put a value on your time, could be very attractive.

Back to the drawing board

The retrieve control organisation on Day 1 is easy to describe. There wasn't any. There was not much to be gained from setting tasks with lots of turning points close to Leszno, since someone could land 40 miles away and still not get back till 3am. One pilot and crew, admittedly of mature years, stayed in bed the next contest day to recover and effectively dropped out of the Comp. Communications were the problem. Not many people have telephones in Poland. Language was a barrier - you have to get out of the habit of saying "Bless you!" every time someone starts speaking Polish. Back at the site a small, overstretched team had simply hoped that the weather would be like 1993 and that pilots would get back. One crewman was all afternoon plaintively buttonholing anyone who looked official for information about his pilot, eventually to discover that the pilot had phoned in two hours earlier, but the machinery for bringing these tidings to the hapless crew did not exist.

I found it impossible to obtain 1:250 000 road maps in any shops or garages - Norway, Spain, Canada, be my guest, but Poland, no - so what might look like a bridge on a million to one map turns out to be a ferry that won't take a trailer, with vast detour ensuing. Gradually things got better, especially as pilots learnt on no account to land out.

Nice guys sometimes finish first. Chris Garton always finishes first. Yawn. His decision to go for the woods on Day 1, when Jed Edyvean went for a town, helped ensure his 3rd Overseas Nationals Open Class victory in a row.

Bad Luck Gulch

Even before the contest started there came the bad news that John Reed had damaged his car, trailer and glider on the autobahn *en route* from Dunstable, so he never arrived. John Gorringe broke his ASH-25 finishing on Day 3. Bob Welford's BMW was stolen. So much for my belief that right hand drive cars were safe. It has probably been cannibalised by now.

No Teddybear's Picnic

If getting in and out of Poland - and possibly the other East European states - is always going to entail an unpredictable wait at border posts anywhere between nine minutes and nine hours in each direction, then I for one am going to say to hell with it, life's too short.

It is impossible to make any rational travel plans in the face of such Kafkaesque arbitrariness. Whose fault it is I don't know, but it is a major turn-off. The forest alongside the road with its thousands of vehicles, either stationary or inching painfully forward, is the only source of relief to the suffering travellers. Tread carefully if you have the urge to follow their example:

"If you go down to the woods today, you're in for a big surprise..."

Phil Jeffrey, wit, raconteur and winner of Day 1 in the wee Class, in unusually pensive mood, contemplating an appropriate remark to address to the paparazzi that plague these glittering events.

Tim Scott (standing) won the Blue Class (Standard and 15m) by just 10pts. John Gorringe flew the last two days of the Red (Open) Class *hors concours* in a borrowed Std Jantar after bending his ASH-25 like a hairpin. You can finish straight ahead (slow) or you can go around (fast). Don't try anything in between.

Steve Jones has every reason to look pleased. A holiday suddenly turned into a business trip - if I were his adviser I would make sure the whole trip was tax deductible - after a massive repair job was signed up for the Southern Sailplanes workshop. (See Gorringe.)

Mick Boydon's delivery of Swing Low, Sweet Chariot has to be seen to be disbelieved. (Don't you mean heard? Ed. No, I mean seen. Plat.) All in all, it would have been a much duller fortnight without the RAFGSA. I think I'll leave it at that.

Above (left): The car that got away. Rob Welford's BMW was stolen - along with GPS etc etc. He rented a Polish car, then killed a deer with it. They don't mind blood sports in East Europe, though: killing animals is almost as popular as nicking cars. Above (right): Rodney Witter keeps his balls in the air to great effect, but 754, along with all the other Nimbus 3ds, was too heavy for the feeble thermals on most days. On the last day he did 500km at 101km/h, his first ever 500. No Diamond badge yet, however - he had a passenger, and rules is rules.

Below: The social scene was adorned by Jed Edyvean and Suzy Mooring's announcement of their engagement at a vodka, caviar and Russian champagne party at the castle where they stayed. Jed won three days in the Open Class. But for the land-out on Day 1...

Above: Ken Sparkes made the best of a bad job with his task-setting. Having led a blameless life, he found his prayers answered on the very last day of the fortnight with a brilliant taste of what gliding in Poland can be like.

Below: This is one of the Crabb twins, who are noted for their computer-scoring skills. This is the smaller and less aggressive one, I think. He won Day 4 in the little Class - or was it the other twin? (You'll find out if you get a punch in the head after this is printed. Ed.) ➡

Yes, muscle power plus winglets equals Bird-powered flight. Mike Bird came 4th in the big Class simply by getting his ASH-25 round every task in one piece. In this he was helped by Mick Boydon and his team, Keith and Dave, who did a grand job with an air-compressor on the waterlogged plumbing to number 13's instruments.

FINAL RESULTS

Red Class

Pos	Pilot	Glider	Day 1.15.5 321.1km ■ Jasien, Jemielno, Siedlisko			Day 2.16.5 201.4km ▲ Lubiaz, Obra			Day 3.18.5 172.5km ▲ Sroda, Gostyn, Srem			Day 4.24.5 204.5km ■ Przylep, Obra, Siedlisko			Day 5.28.5 508.2km ■ Tuczno, Chelmce Modliszewo			Total Pts
			Speed (Dist)	Pos	Pts	Speed (Dist)	Pos	Pts	Speed (Dist)	Pos	Pts	Speed	Pos	Pts	Speed (Dist)	Pos	Pts	
1	Garton, C.	LS-6c	92.4	1	1000	79.4	2	795	55.7	4	600	69.8	4	887	100.8	2	997	4279
2	Edyvean, J. R.	Ventus C	(322.1)	6	666	76.3	4	753	62.7	1	647	72.1	1	930	101	1	1000	3996
3	Thompson, M. H.	Nimbus 3T	73.3	5	903	74.7	6=	732	51.4	6	571	71.2	3	913	90	9	858	3977
4	Bird, M.	ASH-25WL	80.3	3	939	79.1	3	791	51.1	7	569	54.8	14	595	93.7	5	906	3800
5	Foreman, M. C.	Ventus CT	82.3	2	949	64.2	11	594	(136.2)	8	349	66.2	10	817	95.2	4	924	3633
6	Pozerskis, A.	LAK-12	(313.8)	10	647	74.7	6=	732	57.5	3	614	66.8	8	828	86.2	12	810	3631
7	Boydon, M. V.	Nimbus 3DT	(281.3)	12	576	83.5	1	849	(112.7)	14	278	71.8	2	926	95.7	3	931	3560
8	Glossop, J. D. J.	Nimbus 3DT	(254.8)	14	517	73.2	8	712	(120.8)	11	303	68.4	6	860	93.3	8	900	3292
9	Whitehead, P. F.	Ventus B	(314.2)	9	648	63.3	12	582	(132.3)	10	337	64.2	12	777	87.5	11	826	3170
10	Blackmore, R. H. T.	ASH-25	(316.4)	8	653	DNF	16	0	52	5	575	68	7	851	90.8	8	868	2947
11	Sharman, R. C.	ASW-20BL	(311.1)	11	641	(189.1)	14	293	(118.3)	12	295	66.3	9	819	92	7	884	2932
12	Witter, R. B.	Nimbus 3DT	(281.1)	13	575	69.2	10	660	(103.9)	16	252	45	15	405	89.3	10	850	2742
13	Lee, M. E.	Ventus C	(233)	16	469	(187.3)	15	290	(116.9)	13	291	69.7	5	885	85.7	13	803	2738
14	Innes, D. S.	Nimbus 3DM	(246)	15	498	76.1	5	752	(105.1)	15	256	59.7	13	690	(447.2)	14	322	2518
15	Wilson, K. M. H.	LS-6c	(320.8)	7	663	63.1	13	579	(133.2)	9	340	64.5	11	783	DNF	15	0	2365
16	Gorringe, J. P.	ASH-25	78.9	4	921	71.4	9	689	59.9	2	628	DNF	16	0	DNF	15	0	2238
	Hors Concours Gorringe, J. P.	Std Jantar			0			0			0	69.7	5=	885	90.5	>9	864	1749

Blue Class

Pos	Pilot	Glider	Day 1.15.5 234.4km ■ Siedlisko, Stobno, Grochowice			Day 2.16.5 201.4km ▲ Lubiaz, Obra			Day 3.18.5 154.4km ▲ Sroda, Krobia			Day 4.24.5 184.9km ■ Przylep, Obra, Grochowice			Day 5.28.5 402.1km Polygon Modliszewo, Zagorow, Skoki, Witaszyce			Total Pts
			Speed (Dist)	Pos	Pts	Speed (Dist)	Pos	Pts	Dis	Pos	Pts	Speed (Dist)	Pos	Pts	Speed (Dist)	Pos	Pts	
1	Scott, T. J.	LS-7WL	87.6	4	887	74.3	5	905	102.5	16	248	64.6	16	840	98.1	1	1000	3880
2	Metcalfe, G. C.	ASW-24	79.1	9	941	65	13	748	120.4	2	301	68.5	4=	911	95.9	4	969	3870
3	Strathern, M.	LS-7WL	83.2	6	867	72.1	7	867	103.9	15	252	67.4	6	891	91.3	11	905	3782
4	Toon, R. J.	Discus B	54.8	8	828	70.3	11	837	109.2	9	268	65.9	11	863	96.1	3	972	3768
5	Cheetham, R. A.	LS-7WL	(225.1)	15	597	79.8	1	998	107.1	12	262	68.5	4=	911	98	2	999	3767
6	Jones, S. G.	Discus BT	(231.6)	13	616	75.5	4	924	116	4	288	71.7	2	969	95.5	5	963	3760
7	Jeffery, P.	LS-7WL	91.7	1	1000	71	9	848	48.1	26	84	65.6	12	858	91.8	9	911	3701
8	Hood, L.	Janus C	79.9	2	945	62.6	20	708	108	11	264	66.9	8	882	86.7	15	839	3638
9	Stingemore, G.	Discus	(255.3)	10	684	70.4	10	839	111.8	8	276	67	7	883	93.1	7	929	3611
10	Emson, C.	Std Cirrus	(240.6)	12	642	68.4	12	806	113.3	6	280	69	3	919	92.3	8	918	3565
11	Crabb, P.	LS-7	(216)	20	570	79.7	2	994	81.2	23	184	71.8	1	970	87	14	843	3561
12	Clarke, A. J.	Std Jantar	(250.9)	11	672	72.8	6	878	101.1	17	244	58.9	21	737	94	6	942	3473
13	Franks, H. S. M.	ASW-20	63.9	5	870	64.8	14	746	117.9	3	294	64.4	17	836	77.7	20	712	3458
14	Crabb, S.	Discus	(200.3)	23	524	63.7	19	728	107.4	12	262	65.2	13	850	91.5	10	908	3272
15	Smith, D. W.	Discus B	(216.9)	18	573	63.9	18	730	109.2	9	268	58.2	22	724	88.4	13	863	3158
16	Arnall, R.	Discus	61.3	7	858	71.8	8	863	98.8	19	237	44.1	25	469	76.7	21	698	3125
17	Cockburn, D.	Discus CS	(216.9)	18	573	64.7	15	744	96.7	21	230	65	15	846	77.9	19	715	3108
18	Welford, R. J.	Pegasus 101A	(217.6)	17	575	64.1	16	733	98	20	234	66.3	10	871	76	22	688	3101
19	Gilbert, C. N. R.	Discus	(204.9)	22	538	62.5	21	706	94.3	22	223	53.8	24	644	74.3	23	665	2776
20	Francis, D. P.	Discus CS	(262.1)	9	704	(113.8)	27	159	112.4	7	277	65.1	14	849	82.9	17	786	2775
21	Hallam, J.	Discus CS	(227.6)	14	604	(113.8)	27	159	116	4	288	66.5	9	875	66.3	16	834	2760
22	Rollings, C. C.	SZD-55	(216)	20	570	79.2	3	987	126.9	1	321	64.2	18	833	DNF	27	0	2711
23	Olender, S. G.	LS-7	(0)	28	0	64	17	732	100	18	240	61.9	19	790	90.7	12	896	2658
24	Mee, M. P.	LS-4A	(92.1)	26	210	62.2	22=	651	46.8	27	80	59	20	738	(335.6)	25	239	1918
25	Parker, A. R. L.	Mosquito B	(180.2)	24	466	58.9	23	647	65.8	25	138	64.6	27	87	67.5	24	569	1907
26	Dean, M. J.	Janus C	(222.7)	16	590	(153.1)	26	225	38.6	28	56	(9.6)	28	0	81.6	18	767	1638
27	Freestone, I. P.	Glasflügel 304	(62.5)	27	124	54.6	24	576	104.9	14	255	55.2	23	670	DNF	27	0	1625
28	Strange, R.	ASW-24	(161.5)	25	412	50.3	25	502	71.2	24	154	(162.5)	26	277	(281.9)	26	198	1543

Taskfinder Software =penalty

HOW WAS *YOUR* TRAINING ORGANISED?

Lemmy, a commercial helicopter and competition glider pilot of many years' experience and an instructor at Deeside GC, has gone back over the BGA Accident Summaries in an attempt to find out why there were so many "silly" landings

Most of us get to a stage where the ability to read small print with unaided vision is lost. I have reached that stage and I am unable to read the accident reviews in *S&G* without a magnifying glass. But what fun reading they make! Did you read the one about the pilot who...? How could anyone do something as silly as that?

Unfortunately many people do do silly things and many pilots end up in the small print. In order to prevent silly things happening we invent checks and procedures which are designed to reduce or eliminate expensive accidents. Perhaps these efforts to keep body and glider together have some effect as most pilots manage to get off the ground successfully. Getting down safely is another matter.

In an attempt to find out why there were so many silly landings, I decided to review the accidents to find out how many major "Sillys" occurred and went back a few years to list as many as possible. Three things became apparent:

1. It didn't matter which year one looked at.
2. Most accidents happened at the home airfield.
3. An awful lot of us fail to fly a decent approach and landing!

Why could this be? What checks or procedures would reduce the list of accidents in *S&G* from every issue to once a year? Consider the first conclusion; every year has its list of accidents and the great majority are carbon copies of previous ones. "Undershot the intended landing area" is a favourite, followed by "overshot into hedge" (although not on the same flight!). The pilots involved are usually different over the years and the aircraft have changed a lot.

Some pilots can't land properly on their own site

Now consider the second and third conclusions. Some pilots cannot land properly on their own site, let alone a strange field, and the approaches are a significant problem. Good landings come from good approaches which come from good circuits. Everyone knows that.

Most of the accidents involve errors of judgment sometimes combined with lack of skill or thought. Checks or procedures will not cure these errors. So what is it that we haven't managed to do to stop the rot?

Maybe it is the training we give. "Ah!" you say. "We have lots of instructors and they have all been on courses or had refresher training so our training standards are quite good." Well, yes, but how is the training **organised?** The "silly landing" problems are **judgment** related, so instructor quality is not the root cause. Skills can be acquired by practice until a standard is reached which will only improve a small amount, even with intensive practice. Judgment is different. Some people have it, some develop it and there are others who don't. These latter people must fly by numbers!

The first two groups can reach good standards of judgment by repeating exercises until they are confident that within certain parameters they can achieve the object of the exercise. The introduction of variables, such as change of circuit or wind, will initially upset this judgment but again, with repetition, the variables can be coped with and success can be assured.

Lemmy has all Three Diamonds, flies a Vega and for some years was chairman of the BGA Competitions Committee.

The skills necessary to achieve success must also be there, but the repetition should always improve the skills required. People who develop neither skill nor judgment must be persuaded to stay in the two-seater or be encouraged to find another sport. Our training must be organised to achieve skill and judgment. I suggest that this is where the problem lies. How many two-seater launches do we do per year and how many people start training?

Look at your own club. If someone new comes along and says "I would like to learn to fly", does that person get told that to fly it is merely necessary to sign a form and put their name on the list and when their turn comes they will get an instructor who will teach them? And when the flight is finished they can put their name on the list again etc. If that is how it is done that is **not** training!

Our training approach must be much more organised than it is now. We know that courses are more fun for everyone concerned and are usually more productive. So why do we persist with this wretched list system which has dogged gliding clubs for years? Probably because most of us are unwilling to make the effort to change our habits., Every club with an instructor should be able to provide structured training in the form of an introduction to the club, and formal ground briefings on the aircraft and exercises to be flown. In general it is better for the flying to be done with the instructor who does the briefing.

The flying should be sufficient for the new pupil to achieve the object of the exercise without undue interruption, and there should be a de-brief. The same instructor should also arrange with the pupil a mutually convenient time to progress to the next exercises in the same manner. Continuity is an essential feature of training, particularly during the approach and landing stages.

There is no real reason why the instructors at a club shouldn't select periods of time during days ahead when they will be available to teach. *Ab-initio* pilots can then be allocated to instructors at mutually convenient times and the two-seaters must be made available for those times. No instructor should have more than three pupils at any one time and there should be no planned instructor change until they have at least ten flights each.

Instructors who are "spare" can still make themselves available at convenient times and pilots who wish to get further training can book with the instructor of their choice.

The training regime should continue through to at least Bronze badge, with changes of instructor kept to the minimum. Progress in this manner will be much more rapid than hitherto and the development of judgment will be enhanced by the continuity in the training. Once the aircraft and instructors have been fully utilised in this way, there is no room for new *ab-initio* members or casual visitors and they will have to go on a waiting list. They will not mind waiting if they see that they are going to get some intensive tuition and the launches will be vastly more productive than at present.

Clubs should take steps to review their current methods and consider this approach to training. Some have already seen the light and are becoming enthusiastic about the results. At present, according to statistics, the pupils on the list system go away after a few weekends and don't come back.

If they make progress they will come back and everyone will benefit. And if the number of silly accidents is reduced, gliding will be cheaper and we will have more aircraft to fly. The organisation of training is the key!

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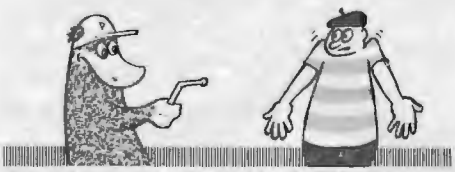
TAIL FEATHERS

A fuselage-up over gender

I have been politely brought to account by a Frenchman, M. Claude Chauvigné, who says I am not correct in saying that the French word for fuselage is feminine (See Tail Feathers in the April issue, p74). Time for a swift Platypounce: I did not say that the French word fuselage was feminine, but that the French word for the English word fuselage was feminine. You still with me? The French word I had in mind is *coque*. This term was immortalised by Mrs Platypus in this magazine, describing when I landed in a wheat field near Sisteron in 1977; the young Frenchman who helped us derig the Club Libelle amidst the alien corn looked her in the eye and solemnly said "Please to hold the *coque*, madame." *Coque* is feminine gender, so there.



Doesn't know what a rudder-bar is.

M. Chauvigné goes on to say that he doesn't know what a rudder-bar is, so he does not challenge me on the gender of that piece of a sailplane's anatomy. Well, it is *palonnier*, and that looks masculine to me. Hold on, I'll dig out my ***Manuel de Pilote Vol à Voile***[1], which volume is incidentally an excellent way of learning French and the fundamentals of gliding at the same time. Yes, *le palonnier*, masculine, on p14.

Oh dear: on p12 of this excellent volume there is a drawing of a glider with terms for each part, and the label on the fuselage distinctly says *fuselage*, not *coque*.

What did that nice young man mean, then?

Springtime for Platypus and Europe

Over the aeons I have made many spring expeditions, trailer attached, to the Congtinong, primarily with the object of escaping the English weather, and secondarily to get better food and a spot of culture. (Though if you get a lot of culture, that usually means that the gliding has been truly lousy.) My choice of May or early June has been based on the desire to avoid the July-August holidaymakers clogging the autoroutes, not to mention infesting the rocky slopes with every kind of flying machine. Well, I have made a reckoning of the success rate of these escapades in flying days, and it proves that I am either a mug or an incurable optimist. Same thing, really.

[1]Produced by the French civil aviation ministry. French gliding clubs have them on sale. Try Spreckers at the European Soaring Club 0844 281487

Better food and a spot of culture.

Drag bad weather around with me.

I have come to the conclusion that in Europe in the spring I drag bad weather around with me the way deceased malefactors are supposed to haul their accumulated sins in great bundles on their backs for all eternity in the infernal regions. My springtime trips respectively to Austria, France, Germany, Poland and Spain since 1970 have almost invariably produced enormous, nay obscene, quantities of *regen, pluie* - a veritable babel of precipitation. End-of-tether time is nigh. I'm fed up.

You should have been here last - aaaarrrggghhh!

The Latin races are very tolerant of the hot-blooded crime passionel, and it probably is forgivable in their eyes to assault with terminal force the umpteenth person (especially if it's a Brit) who says smugly "You should have been here last year/month/week...". I'm not interested in last week. This bloody week is all that matters and it's chucking it down. Of course the weather is usually just as bad back home in the UK, but that is no consolation. This is supposed to be the great aviating holiday of the year, for which the piggy-bank has been gutted, gardens left neglected, home comforts abandoned - not to mention the affections of spouses severely strained[2]. A massive financial and domestic repair job has to be done once you trundle off the return ferry - and all for a handful of goodish days in the air.

The piggy-bank has been gutted.

[2]It's a moot point whether the affections of spouses are more severely strained by leaving them at home or by dragging them across thousands of miles in the slow lane and sitting under a slate-grey sky at the launch point.

In Leszno this May, that traditional and immensely popular British institution, the massed pilots' post-scrub whinge-in, was held on one of the non-contest days - there being a rich choice of nine such days. (Funny, they don't have these ardent debates in Nevada; everyone is too busy humming along at 18 000ft day after day after day till they scream for mercy.) Much debate was expended on where the Overseas Handicapped Nationals should occur next May. Many pilots - sweet innocent things, where have they been all these years? - seemed to think there might be a better 'ole to run to next time. I don't believe it. May is the most beautiful month in Europe, but a thoroughly unpredictable one too. It's a lottery. The good days are marvellous, but the intervals between them follow no known statistical, meteorological or geographical law.

This time I get back home to hear that the most spectacular eight days of soaring were enjoyed at a Comp at Deeside. Where? Stop kidding. In that part of the world, rich American tourists spend a fortune dressing up in oiled jackets and green wellington boots in the hopes of a fine, continuous, drizzling Scotch mist, and demand their money back when the sun comes out for more than five minutes. Nobody has ever had to pay out yet. Now Deeside gets eight days of soaring. In May. (See p223.)

They won't get it next year. I'm going there - unless I'm bribed to stay away.

TINSFOS Über Alles

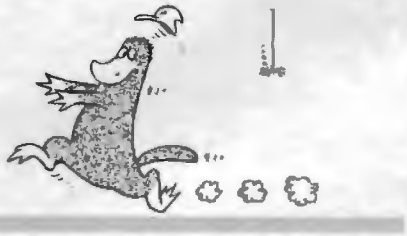
On the way home from Poland I got a little flight - just 300km - in Hans-Werner Grosse's amazing 27 metre ASH-25M, the product of much modification by Walder Binder. It has cranked-up wingtips plus winglets that look like the results of a creative all-night schnapps and origami session. Very much a case of Handsome is as Handsome does. It has no tow hook - to save weight - and relies totally for launches on a 65hp engine. It is easy to fly, with light and effective ailerons, and - well, it's a floater, with the sink rate of a microfilm model in Cardington hangar. I can imagine Hans-Werner starting a vast distance task in Lübeck on the Baltic coast well before the thermals have got out of bed and drifting into Spain or Italy with landing lights long after sunset.

The sink rate of a microfilm model.

Don't pester the Bank of England and Schleicher for one. They are not in general production. This one has just a Permit to Fly, which has to be renewed every six months.

A hole in the woods

We took off from Neustadt-Glewe, site of the 1994 German Nationals, which is in the former East German zone. The field is big enough to accommodate all three Classes simultaneously,



I scare easily.

and is entirely surrounded by an enormous forest. The airfield is just a big clearing hacked out of the woods. Deciding whether or not you can make it on a final glide is emphatically not to be left till the last moment. Sitting comfortably above the field after three hours of extended local soaring, I couldn't bear to watch them coming in. They all seemed to be in the trees. Some gave up and scrambled back to safe fields barely in time, after testing their nerve and their judgment as far as they would go. I wonder if people bet on the woods giving lift, as they do in that part of the world, and try coming in below glide path. I wonder what happens to them when they try it. Shudder! I'm glad I scare easily.

Watch out, Plat, they're coming after you - in waves

Envy being one of the Seven Deadly Sins that I am prone to, along with rage, vanity, avarice, lust, sloth and gluttony (after a few drinks I once inadvertently coined out of these two the compound sin "sluttony", which I suppose is what Roman emperors specialised in) I admit to being truly envious every time the wave fliers hoist their bottoms and their radios above the horizon. The horizon is a long way off at 17 000ft, so as we southerners struggle in meagre thermals, we can hear a splendid *mélange* of Welsh, Northern and Scottish accents broadcasting five-digit altitudes. January or July, they are up there, singing like skylarks. "Think of the distances you could cover from those heights! " I keep thinking, "Lucky blighters!"

The 45 degree club

However it seems that a good proportion of these skilled wave hunters are members of the 45 degree club. They only venture five miles from the

Member of the half-degree club.

site once they climb to five miles. I exaggerate? Let's be generous and say 20 degrees. To moi, as a member of the half-degree club, this seems like an awful waste, like being presented with a Ferrari and only using it to go shopping.

A chap I know once had a splendid day flying out of a wave site in dead of winter. He covered 500km over a glorious variety of countryside, with not a sniff of a vulgar thermal from dawn to dusk. At the bar his flight was discussed along with the others as pilots compared notes on the day. The phone rang: a club member who had not flown that day was ringing from home to ask how good the flying had been. The man who answered the phone, who had just been talking to my acquaintance, said "Well, Mabel Higgs got to 15 000 and Bert Snooks got to 18 000, nothing much else" and put the phone down. The 500km was not interesting enough to mention because it was carried out below 12 500ft.

It takes all sorts, I suppose.

HOOKED ON JUNK

June 2 1993 would be a day with a difference. No, I wasn't about to be sent solo by my long suffering instructor. It was the day I didn't have to ask him if I could use his car to tow the cub gliders out to the strip because my ageing Renault was now equipped to do the job. Oh no, not the usual ball end towbar used for trailers and caravans but a purpose "mackled" assembly.

The original bomb release.

The completed assembly fitted to the car.

Now this assembly has a long pedigree for in 1947, as a 16 year-old apprentice engineer, I would pay regular visits to Wade's scrapyard in Stamford which at that time was overflowing with war surplus. One day I spotted a splendid piece of engineering: a 500lb MkIA bomb release. I paid my 1s 6d (or whatever), took it to show the lads back at work and promptly committed it to the bowels of my tool box where it remained for 46 years until I decided it would make a jolly good basis for a tow hook.

Now how to fix it? Ah yes, that lump of tufnol from my switchgear days in the 1960s and then of course a release toggle - why not use that spare "glydeasy" curtain runner (circa 1950), painted yellow and connected to the release with that plastic coated brass wire surplus from rehanging the weights in the grandfather clock in 1972.

For the uninitiated it should be labelled but will that 1980s Letraset still stick? Just to be sure (and make the whole thing weatherproof) a coat of 1993 varnish.

Assuming the bomb release was designed and produced in the late 1930s then seven decades of bits and pieces have made a tow hook every bit as good as the one on the back of the tug. However, Tuggy doesn't have to climb out to operate the release. Now, I wonder, can I out my hands on a 12 volt solenoid!

There can only be one moral to this story - never throw anything away, especially if you are literally hooked on junk.

MICHAEL SISMEY

RIGGING RIGOURS

Trying to solicit help to rig your glider can be a frustrating task and when all else fails can cost a great deal of beer! Either everyone is madly rigging their own as the cumulus are storming overhead or no one can be persuaded to leave the warmth of the clubhouse for a cold, bleak field, although you are totally convinced that by lunch time it's going to be the best day of the year so far!

What do you do? Not to be defeated, you struggle on and, if you can convince someone to help, even with two the slightest slip can create a momumental problem. Lifting, manoeuvring and wiggling something as awkward and slippery as an unrigged wing, especially on a windy day, can do untold damage to you, your glider and your friendships!

I strongly recommend a look at the innovative rigging aids used extensively at Bidford GC and by increasingly more glider pilots, young and old, around the country.

Designed and manufactured by Phil Manning of Distinctive Designs, Worcester, they are the ideal "buddy" on the airfield. If you suffer from backache, or don't want to, or if you simply want rigging to be safer, quicker and a whole lot easier then this is the answer. They are strong, light, totally manoeuvrable on any surface and can rig anything we've come across, including three piece wing sections like the Pirat. And when you finish they fold flat

You don't believe me? Well why don't you try one for yourself. I can promise you won't want to part with it. You can reach Phil on 0905 454034

CAROLE WYSOCKI

LS-8's MAIDEN FLIGHT

Rolladen-Schneider's new Standard Class glider, the LS-8, had its maiden flight on March 11.

The glider uses the LS-7 fuselage and LS-6 wing section (0 flap), rather reminiscent of the way the LS-4 was developed from the LS-3 Standard.

The wing root and angle of incidence have been modified and winglets are standard, as are automatic control connections and double-paddle airbrakes.

The company are forecasting a 1:43 glide angle and a better climb performance than the LS-7.

Translated from *Aerokurier* by Alan Harris.

SKIRTING ROUND SHOWERS

Tom says that watching how cu develop may help pilots to get round a task in spite of the showers

It is difficult to predict showers accurately. Forecasters use terms like isolated, scattered or widespread but unless they mention the ominous phrase "merging to give longer periods of rain" it is often worth setting out to see if the showers are avoidable. Watching how cu develop may help pilots to get round a task in spite of the showers and save a long muddy retrieve.

Conditions for showers

Most showers occur when cumulus clouds grow big enough to extend well above the freezing level. The theory is that when temperatures fall enough to produce a mixture of ice crystals and water droplets the reduction of vapour pressure over ice causes the ice crystals to grow at the expense of the water droplets. A temperature of -9° C is usually needed to produce a good shower. Once initiated the process seems to occur quite rapidly; the particles fall through the cloud, melt below the freezing level and produce a shower down below.

This is not the only process. Large droplets fall faster than small ones. This results in collisions which eventually produce raindrops. It takes longer to produce rain if ice crystals are lacking but showers do occur from some big cumuli whose tops do not reach the freezing level.

Prediction problems

In theory one should be able to predict the tops of cu by plotting an upwind sounding on a tephigram (see Fig 1), adding the dry adiabatic from the predicted surface temperature MAX T and seeing where this line meets the dew point line. The meeting point gives the condensation level CL. From the condensation level one then draws a third line along a saturated adiabat until it crosses the original environment curve. The shaded area between these curves represents the energy available from release of latent heat. Cumulus clouds should extend up to the top of the shaded area (13400ft in this case) and their momentum will probably take some of them higher.

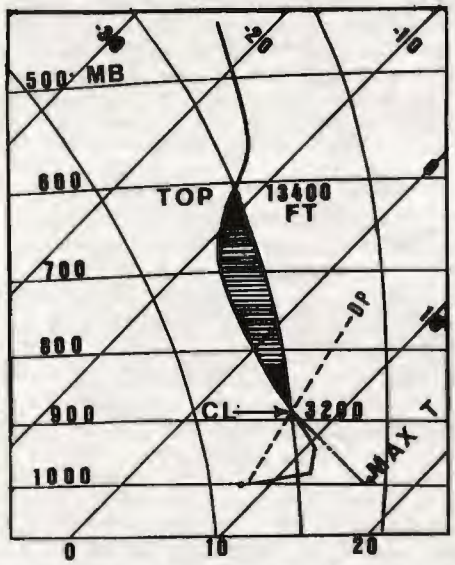


Fig.1 Tepigram showing how the base and tops of cu are predicted using dewpoint and max temperature. Shading shows the energy available when condensation releases latent heat.

Photo A. Two cu turrets, the left hand one pulled off by wind shear.

In practice the process is more complicated. In the first place one cannot always pick a truly representative temperature sounding, especially in a small country like Britain. Even if the sounding was valid at midnight it may be altered by large scale up and down motions in the atmosphere during the twelve hours before the flight.

Curvature of isobars

Showers are most likely where the isobars have cyclonic curvature; the greater the curvature the higher the risk of showers. In contrast anticyclonic curvature tends to reduce the risk of showers.

Fig 2 shows how a building ridge can stabilise the air due to subsidence. The upper part shows the fronts and isobars, the lower part is a cross - section. The ridge effect lowers the cu tops and inhibits showers. A trough has the opposite effect; it raises cu tops and encourages showers. The figure shows a departing cold front on the right; there is a brief clearance behind it due to subsidence beneath the frontal surface. This front is followed by a trough in the isobars where much bigger cu tops are found. It is not until the trough has cleared that the ridge moves in and subsidence brings down the stable layer. The small cu near the ridge give the best soaring conditions.

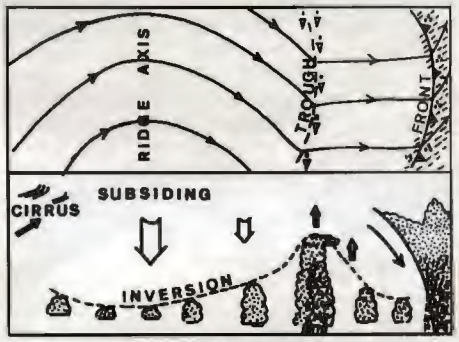


Fig 2. Post frontal troughs enhance cu while subsidence associated with a building ridge can stabilise the air and so reduce cu tops.

Cold fronts are not invariably followed by a showery trough but if pressure is reluctant to rise when the front has passed it is often because there is a trough following. Some analysts mark in a secondary cold front instead of a trough. Theorists may argue which is correct but in practice both troughs and secondary cold fronts bring similar conditions.

B. Mid-morning with a big cu growing strongly.

D. Lines of cu-nim giving many showers.

Photo C. Towering cu changing to cu-nim as the showers started.

Dewpoint changes

Large scale up and down motions are not the only things which affect the size of cumuli. The amount of energy released depends both on the instability and the dewpoint. If the dew point rises it means that the air contains more moisture. Then the condensation level is lower, the energy released by condensation is increased and the cloud top extends higher. A drop in the dewpoint reverses the process; the condensation level rises, less energy is released when cu form and the cloud tops do not go so high.

A fall in the dewpoint may be because a change of wind direction has brought drier air. The shelter provided by a range of mountains may also lower the dewpoint. Showers are apt to be heavier and more persistant over high ground. Much moisture is left behind on the hills so when the air moves on the dewpoint is frequently lower on the lee side. The Scottish Highlands provide a good example of this effect but the Pennines and Welsh mountains also have a higher cloudbase and more broken cloud on the lee side.

WATCHING HOW CU DEVELOP

BBC forecasters try to be helpful by qualifying showers as "isolated, scattered, frequent, widespread" etc and sometimes end up with that most ominous phrase "merging to give longer periods of rain". This latter phrase usually means a trough or approaching front will ruin the day over a large area but a prediction of "isolated showers" can mean a good soaring day and even "frequent showers" may allow reasonable weather for short cross-countries, especially to the lee of mountains. If one is to make the most of a showery day it is worth watching how the clouds develop as the day goes on.

Cumuli usually start out as small and well separated individuals; before any showers develop the clouds often clump together and grow much

Photo E. Wide shower from an approaching cu-nim; the turrets were hidden by decayed bits of earlier cu-nim.

Photo F. Southern edge of the big shower showing ragged bits marking the new inflow of lift.

Photo G. Rapidly growing anvil from cu-nim cutting off sun ahead of it.

Below: Photo H. Cu-nim which gave a hail shower and left a 20 mile wake of dead air. Photo looking downwind when anvil was still growing.

Below: Photo I. Fisheye view of thunderstorm moving right to left. New cells on left, mature storm cloud on right. All photos were taken by Tom. ➡

deeper. Isolated cu suffer from erosion and evaporation at the edges but a clump of cumuli help each other by protecting the inner clouds from evaporation as they grow. If you see clouds joining together and turning dark grey at the base it is often a sign of imminent shower development.

Wind shear

Evaporation is not the only problem faced by a growing cloud. Wind shear tends to disrupt the rising columns. The weaker the thermal the more the cloud will be distorted by wind shear. Photo A shows how wind shear distorted the growth of a cu. The base of the nearer left hand cloud slopes upwards. The cloud had lost the lift under it even though the top was still bubbling up. On the right where the base was level the lift was still active below cloud. The same effect can be seen in the distant cloud beyond. Both clouds started out growing vertically but the stronger wind aloft carried the turrets away to the left as thermals weakened. The broader clouds were not troubled by wind shear; it is the narrow clouds which contain short lived thermals that suffer most from wind shear.

Photo B shows many big cu with fairly level dark base. The tops were growing strongly and showed no sign of decay. This mid-morning picture suggests bigger clouds would appear later on but at present there is no sign of the clustering which precedes a shower. There were lots of good looking cu beyond suggesting one could go on for an hour or more without meeting a shower.

Photo C shows a towering cu in the process of changing into a cu-nim. Showers had just started under it and also under similar clouds further away. Unlike case "B" the prospect ahead does not look very hopeful.

Showers often break out under a line of big cu; when they do the changes can be quite rapid.

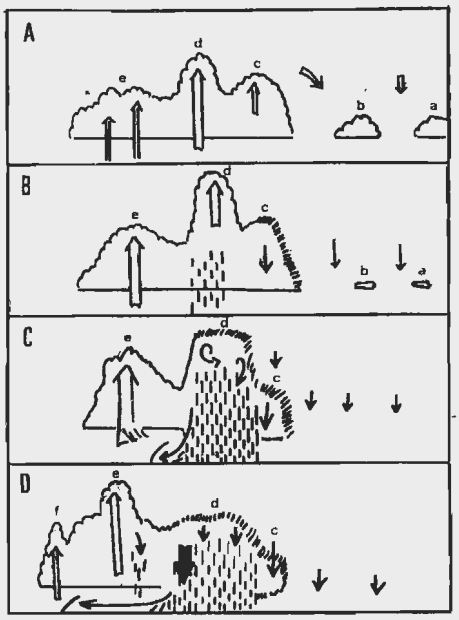


Fig 3. Evolution and subsequent collapse of a cumulus tower setting off new turrets. Small letters show age of clouds, "a" being the oldest, "f" the youngest.

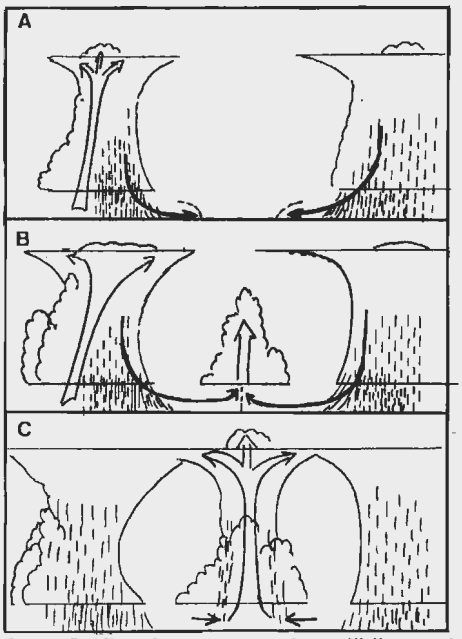


Fig 4. Outflow from two cu-nim colliding and setting off a new one.

Fig 3 shows four stages. The clouds are labelled "a" to "f" in order of age. "a" and "b" never made it to the big league and dispersed when the bigger cu formed. "c" began to evaporate too soon. The cloud top became fuzzy showing it had ceased bubbling up and was degenerating. Turret "d" shot up far above the rest and soon produced a shower.

The rain produced a downrush of air which spread out as a gust front; this boosted cell "e" which then took over from "d" as the dominating cell. Finally as "e" reached shower size the new cell "f" formed at the left hand end of the line.

Photo D shows lines of cu-nim giving many showers. On such days the cu-nim can produce conflicting gust fronts which may meet to set off yet another cu-nim. The situation is shown schematically in Fig 4. It is unlikely that such gust fronts would actually meet head on; more often they intersect at an angle. When this happens the new cu-nim grows rapidly outward above the intersection point to form a fresh shower line.

This is a trap which probably catches more powered aircraft than gliders. Power pilots rely on their superior speed and power to find a way through a mass of cu-nim. They do not expect to find the clear lane they came in by has been blocked if they decide to turn round.

Going round the end of a cu-nim

Photo E shows a wide shower giving an area of heavy rain almost large enough for lightning. This cloud was at the southern end of a line of cu-nim. Photo F is a close up of the southern end. The lower bits apparently hanging down below the main base were actually updrafts feeding the cu-nim. These cloud tails were constantly altering as separate surges of fresh warm air were sucked into the shower cloud.

It looked as if one could safely tuck in under one of the tails and make a quick climb to cloudbase before going on towards the little cumulus in the distance. On this occasion there seems a safe exit from the storm area. This is in contrast to the clouds shown in "C" and "D" which had active cu-nim on all sides. Photo G shows a rapidly extending anvil from quite a small cu-nim. Such anvils are a nuisance when they cast a big shadow ahead of the shower cloud. The anvil is often so thick that it stops all convection under its shadow. In this photo there are still some active cu under and to the left of the anvil so the shower could have been skirted on the left (sunny) side.

Wake Effect

When a cu-nim travels downwind it often leaves a wake of dead or sinking air behind it. Photo H shows a retreating hail shower which left a 20 mile stretch of dead air behind it. The anvil was still expanding and since there was little wind shear aloft it spread out on both sides. The picture was taken looking downwind. The typical structure of a cu-nim wake is shown in Fig 5. The cloud is moving from right to left. The upper diagram (A) shows a side view. The lower part "B" is a plan view. The old cu-nim with its overhanging anvil of cirrus is preceded by new cells growing rapidly on the downwind side. With luck one can make a rapid climb in the new cells and, if you remember which way to head, break out into the clear before flying gets too rough. Sometimes one can still climb even if part of the circle is made in the rattle of precipitation. The loud noise is a useful guide; it shows which way the sink lies and serves as a warning to get out before sink engulfs the whole circle.

The wake of a mobile cu-nim often kills the thermals for many miles, as is shown in the plan view "B". If the cloud motion consists of growth on one side and decay on the other there can be the dregs of showers falling from cloudless air several miles behind the main cloud. Sometimes these show up as unexpected bits of rainbow marking areas of even more sink.

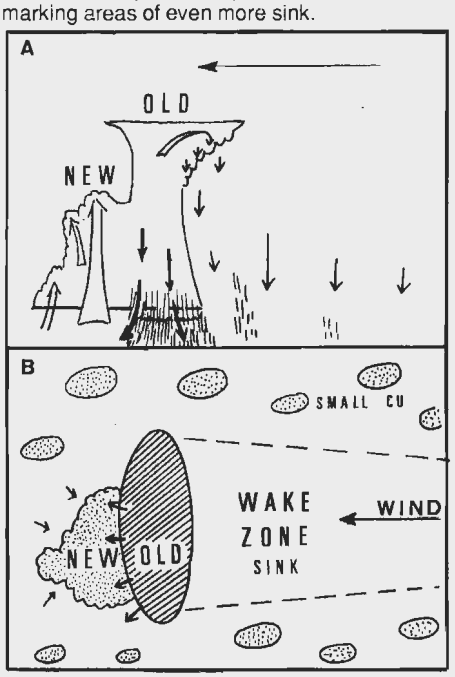


Fig 5. Region of sinking and dead air in the wake of a cu-nim. "A" is the side view; "B" a plan view.

Severe cu-nim

Photo I was taken with a fisheye lense. It shows a well developed thunderstorm moving westwards from right to left. The youngest cells were on the sunny western side. One generally needs a theodolite or time lapse camera to see how fast a cu top is rising but these towers were going up so fast their ascent was detectable by eye. In the centre and on the right were the mature cells under whose shadow the lightning flashed. There was enough heavy rain to produce local flooding soon afterwards.

Bold pilots may venture under the leading edge of such storms but going in can be uncomfortable if not actually dangerous. Clouds of this size can produce exceptionally strong lift which takes you up to oxygen levels while you are still fumbling with the mask and plugging in its tubing. The addition of ice and the noise of hail can distract one from concentrating on the artificial horizon. This is a poor time to start flying on the turn and slip if the horizon is toppled in turbulence. Unless you fly a strong metal glider lightning becomes a serious risk in big cu-nim. Nor is that the only problem. Some gliders can have the controls freeze solid.

Landing near showers

One cannot always get enough height to glide to the next thermal. Several pilots have opened their airbrakes to get clear of cloud and been unable to close them till the ice melted off. Others have followed a course through the wake zone of the cu-nim and met excessive sink. Even if one is clear of the wake, the spread of a big anvil cloud carried ahead of the cu-nim by strong upper winds may cast such a wide area of shadow that the smaller cu you hoped to reach die out before you get to them.

It is often hard to tell the surface wind direction when committed to landing out. Showers produce their own circulation which can be very different from the general flow of wind. A developing cu-nim may appear to come up against the wind. This is partly because some clouds have a gradual inflow extending many miles ahead of them. The flow aloft may be westerly but at low levels a light easterly wind can occur ahead of the storm. Then, when the downpour is near, the arrival of a gust front spreading out ahead of the cu-nim can reverse the wind direction in a few seconds. The strongest winds generally blow outwards from the storm.

The squall is increased if there is a big temperature contrast between the hot sultry air ahead of the storm and the cold downburst and outflow brought by the storm. Hence thundery squalls are usually more severe in summer and wind speeds may suddenly increase from almost calm to 60kt. Parked gliders have been blown over because the previously light winds gave a false sense of security. Even in the colder months many showers pull down faster moving air from aloft to boost the surface winds. There may not be much change in direction but the speed can easily rise by 20-30kt when the gust front arrives.

Time distribution of showers.

On average the development of showers lags an hour or two behind the daily rise of temperature. One expects most showers to fall between early afternoon and sunset but the time can vary a lot.

The early morning showers: Sometimes after a cold front has gone through overnight the day starts bright and clear but cu-nim and showers develop almost as soon as the sun has come up. Such exceptionally early showers are often due to a post frontal trough. There is a fair chance that this breakfast time downpour will be the only showery spell. The succeeding ridge will make the air subside and damp out any further showers. This is not an infallible rule but works quite often.

The slow starter: This is an awkward situation because cu are slow to grow. One is lulled into a sense of false security and sets off under a good looking sky. Then, just after rounding the furthest TP, the cu tops break through a small stable layer and quite suddenly start to grow into cu-nim. It may need the maximum amount of heating to break the final inversion so nothing happens till 3 or 4pm. The delay stores up a lot of heat energy at low levels and once the cu-nim starts it is apt to grow explosively.

The sea breeze front

Sea breeze fronts sometimes produce strong convergence. Often this simply sets off a line of much better clouds but occasionally the convergence lifts the stable layer several thousand feet and then showers break out along it. When this happens the sea breeze usually comes to a halt. On rare occasions when two sea breeze fronts meet the cloud builds high enough to give a thunderstorm. This has been observed over East Anglia but a meeting of sea breeze fronts seems more common over a long narrow peninsula such as Cornwall and Devon or Pembrokeshire. When the wind blows along such a peninsula the convection is enhanced for a long distance downstream.

FAI NEWS

FAI World Air Games. After the dispappointing withdrawal of funding by the Greek government for the 1995 "Icariada" World Air Games, the FAI Bureau decided that the concept of the World Air Games remained valid (a geographically concentrated high level competition, held every four years, during a short period of time, of all kinds of air sport disciplines).

A new date and venue for the first FAI World Air Games must be found and all FAI members have been invited to bid to organise the first games, probably in the period 1997-99. A preliminary decision on the venue is expected to be made in October at the FAI's next general conference.

Gliding - three men, one record. Americans Leonard Roy McMaster, John C. Seymour and Karl H. Striedieck together beat the free distance with up to three TPs record instituted in 1992 (homologation pending).

On May 12, flying ASW-20s, they covered 1433.93km over Pennsylvania, bettering the previous record by 40km. The three friends have also held the record for distance over a triangular course since 1986; on that occasion they were accompanied by two other pilots.

TWO GLIDING AIDS REVIEWED

I love gadgets, especially gliding gadgets. I am convinced every time I see a new device that it is bound to transform my flying and I am instantly sold. Consequently I have enough junk in my flight bag from pens to protractors to equip the maths department of a medium sized comprehensive school. Every now and then though I acquire a new device which is so useful it lives in my glider cockpit or on the dashboard of my car

Just such a device is the new navigation aid designed by Rod Ward, the Rodz Nav Aid. It is one of those products which is so simple yet so useful you wonder why no one has thought of it before. It is a small transparent plastic quadrant with six concentric slots cut in it, marked on its curved edge in degrees. These markings are reproduced in 5° segments on each inner slot. Down the centre there is a line marked in nautical miles to both half and quarter million scale and each straight edge is marked in kilometres, one to half million scale and the other to quarter million scale.

This piece of plastic can perform an amazing number of tasks. It is obviously very useful for marking your maps with TP photographic sectors, being able to not only bisect the track lines but also to accurately draw in the 90° sector and the five mile outer radius. In addition it can be used to mark your maps with "distance to go" markers as the slots are positioned at 5nm intervals in half million scale.

I don't like too many lines drawn on my map therefore I find it better to clip the Rodz to the map over the area that I am using and with the point of the device on my goal, I can then read from it directly. It is not necessary to move it to line up with my current bearing as it will give an easy to read distance measurement any where within a 90° sector. It has also proved to be very useful in the quick and easy reading of course deviation. All that is necessary is to place the point on your TP or goal and the centre line on the track line and your course deviation can be seen on the other edge or any of the slots. If you are over 45° off track then simply place the straight edge on the track line and add 45°.

I am sure this aid will prove to have more uses than even its inventor thought of and become a standard piece of glider equipment.

Rod Ward has also produced a clear plastic ruler marked down one edge in kilometres and the other in nautical miles. The ruler is long enough to show 180km in half million scale and should satisfy even mega pundits when marking up tasks.

Both products are made in a clear and durable plastic with the markings stamped on to the plastic so that they are easy to read. Every glider pilot needs a scale ruler and this is the one that will be most useful. As far as the Rodz Nav Aid is concerned, if you aren't already using one you probably soon will be.

BOB KING

ANDY DAVIS

Ventus 2A, the 15 metre version.

THE NEW VENTUS 2

A test flight by Andy, the World Standard Class Champion

It was during this year's Hahnweide International Competition held close to Schempp-Hirth's Kircheim-Teck factory that I had the opportunity to fly the new Ventus 2 in its 15 metre version late one afternoon following cancellation of the day's tasks.

The 15 metre Ventus 2 appears like a rather aggressive Discus with the now customary Schempp-Hirth swept back planform, also swept up over the outer third of the wing and finished off with purposeful looking winglets. A slimmer elliptical tailplane is installed at the back end and i also features a tail ballast tank, huge wing ballast tanks, double decker airbrakes, 18 metre option and various trubo and motor versions.

The requirement to optimise the wing geometry for both 15 and 18 metre versions led the designer, Klaus Holighaus, and his team to separate the wing into inner and outer panels about 5.5m outboard of the fuselage. Rigging of both panels is quick and easy and, in common with all current Schempp-Hirth gliders, features the automatic connection of controls. Added benefits of splitting each wing into two sections are first, lightweight for rigging with only 29kg (about 64lb) to be lifted at the wing root and, secondly, the possibility of a much shorter trailer.

A new airfoil section has been developed for the Ventus with the objective of achieving good climbing ability and low minimum speeds whilst retaining the high speed characteristics of the old Ventus section. Klaus was very positive in confirming these requirements had been achieved.

Extensive use of carbon-fibre in the construction and careful attention to detail has enabled the empty weight to be trimmed to just 220kg (485lb) for the 15 metre type, so that the minimum flying weight with the pilot and parachute is in the order of 300kg (660lb). This results in a minimum wing loading of about 31kg/m² (6.35lb/ft²). With waterballast, the loading may be increased to 54kg/m² (11lb/ft²) offering the pilot enormous flexibility to match the conditions.

The factory demonstrator "YY" is the narrow fuselage A version yet I had no difficulty sliding my 6ft, 12 stone frame comfortably into the cockpit complete with my hiking boots! The redesigned cockpit appears to have more room than the earlier narrow cockpit models.

I felt instantly at home in the cockpit with its standard Schempp-Hirth layout. On the left side wall is the airbrake lever and on the lower left side the flap lever with settings L, +2, +1, 0, -1, S for landing, thermal, cruise and speed settings respectively. The elevator trimmer is incorporated in the flap lever so that trim changes with flap selection are automatically compensated. On the right hand side is the undercarriage lever and waterballast jettison knob. Tow release and pedal adjustment fall easily to hand. The wheelbrake lever is mounted on the short stick which itself feels just about right with remarkably little friction evident in the control circuits.

Take-off roll commences with flaps in the -2 setting to enhance aileron response and there was no difficulty maintaining wings level and directional control. Moving the flap lever back to the 0 setting as the speed increased caused the unballasted Ventus 2 to leap lightly into the air and there was no difficulty following the tug with good harmonisation of the controls and response rate readily apparent.

Releasing at 2000ft in a sickly looking sky I headed for the slopes of the local mountain at best glide with flap 0. Sliding along the hillside and under a scrappy piece of cumulus brought a kick from below, a squeak from the variometer and I pulled up selecting flap +2 and rolling into a narrow thermal against the hillside. First impression - the roll rate was astonishing. Second impression - I couldn't believe how slowly we were flying; 80km/h (43kt) in a 45° bank in a narrow and broken thermal. The Ventus 2 feels as if it is on rails, perfectly stable, no hint of airflow separation. It just sits there and **climbs.**

Approaching cloudbase I set off over the hills to join below another glider in its thermal. Despite its 18m wings, the other glider was easily outclimbed as the Ventus 2 wafted up in the middle of the thermal at its leisurely 80km/h. With practice it could probably be flown slower still.

All good things come to an end and it was soon time to return the Ventus 2 to Hahnweide and the queue of eager test pilots! Acceleration to 250km/h with the S flap setting was brisk, even at such a low wing loading, and there was no reason to disbelieve Klaus' claims that high speed performance has not been compromised in the search for climbing ability.

Back over the valley and it was time to check out the stall. In +2 flap (thermal setting) the initial stall buffet occurred at 66km/h (36kt) with the full stall at 62km/h (33kt). The stall was innocuous with just a slight tendency to drop a wing in the fully developed stall. Remarkably, characteristics and figures for the 0 flap setting were very similar. Gross mishandling could bring about a full spin but even with the stick held fully back the Ventus fairly quickly recovered into a spiral dive. Normal spin recovery techniques resulted in immediate recovery.

Joining the circuit and selection of the landing flap lowered the nose to give a good view of the landing area. The Schempp-Hirth double paddle airbrakes were very effective and smooth with no tendency to snatch out. Landing was straightforward with good directional control to the standstill.

In summary, the new Ventus 2 incorporates the results of all Schempp-Hirth's research over the last decade. I had approached this flight with some reservations. Although I love my Discus I absolutely loathed the original Ventus. Not only was I pleasantly surprised by the new Ventus 2 I was stunned by the outstanding handling and low speed climbing ability combined with a viceless personality. Even though the wing leading edges were plastered with squashed flies (even World Champions don't have the wings specially washed for them before flight!!) the low speed handling was impeccable.

Given the chance to own a Ventus 2 would I? You bet I would! A word of warning: if you can't afford it, don't fly it or you'll never be happy again. And how much does it all cost. You'd better discuss that with the agent, Ralph Jones of Southern Sailplanes.

Below: The new winglet developed for the Ventus 2.

LADISLAV SMRCEK

The Vivat flying over Oxfordshire.

VIVAT, THE NEW CZECH BUILT MOTOR GLIDER

A look at a new motor glider which owes part of its design from the Blanik

Southern Moravia, in the Czech Republic, is one of the few places in Europe manufacturing motor gliders. The company, Aerotechnik, was set up in 1970 and its aircraft are known as Vivat L-13. Whenever a veteran glider pilot sees its shining metal surface he will recall the old Blanik. Although the name Vivat is original, L-13 is the name of the Blanik - and over 2600 of these two-seaters were built since 1959 in the former Czechoslovakia - from which the Vivat is derived. Aerotechnik has produced two versions of the motor glider, - the L-13SEH powered by a 65hp four cylinder in-line engine Mikron III AE with a Hoffman HOV62 R/L 160BT propeller and the L-13SL, powered by the L2000 EOI Limbach engine with a Mühlbauer MTV-1-A/L160 propeller.

The entire process, from the design to the final hand finishing and painting, is done in just a few buildings. The firm also designs and produces hot air balloons, winches, engines, transport trailers and overhauls light aircraft, gliders and Mikron engines.

Cs of A for the Vivat have been issued by Australia, Canada, Germany, South Africa, Sweden, Switzerland, USA and the UK. The CAA issued the British C of A for L-13 SEH, registration mark G-BVGD, on February 4.

Description of the aircraft

The Blanik glider manufacturer supplies the wing, rear fuselage and tail unit. The wing is an all metal semi-monocoque structure and the rear fuselage section and tail are of similar structure. The central and front fuselage sections are a welded strut frame covered by laminated aerodynamic fairings. The ailerons and the tail unit control surfaces are covered in fabric.

The cockpit of both powered gliders are roomy with efficient heating and two side-by-side seats. They have full primary flight and engine controls. The undercarriage, trim, electrical system and nav comm equipment are within easy reach of both pilots. The luggage compartment, aft of the pilots, holds 20kg and is fitted with restraining straps and there is the protection of headrests, a portable fire extinguisher in the luggage compartment and basic tools and first aid kit in a special enclosure. The cockpit canopy can slide backwards with a sunblind as an extra.

The landing gear consists of a single undercarriage main wheel, tail wheel and wingtip wheels. The main and the wingtip wheels are retractable, thus providing for a better lift drag ratio of the glider. The wingtip wheels may be folded independently of the main undercarriage for parking in a hangar with one wing resting on the floor. The main undercarriage wheel has an effective brake and the tail wheel an automatically disengaged locking system, which gives better ground handling. All metal parts are treated for corrosion.

Included in the standard equipment are all the necessary engine instruments for the installed engine and propeller. The standard flight instruments, *ie* the altimeter, airspeed indicator, magnetic compass, rate of climb indicators, bank and turn indicator, may be complemented by a clock and gyrohorizon. Extras include wheel chocks, tow ropes and fabric covers.

Cost per flying hour is considerably less with the Vivat than that of other comparable two-seater motor gliders. Cruising speeds in the range of 92kt makes it a good choice for cheap transport flights. The 32kt stalling speed and its stable flight make it exceptionally suitable for observation, photographic and video purposes and it is considered by many customers as one of the best aircraft for photographic surveys.

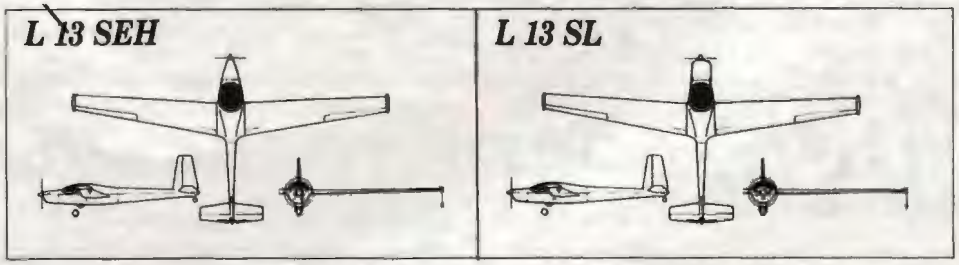
Ladislav is a lecturer in aerospace design at the Department of Aerospace Engineering at Glasgow University. He is a specialist in multivariable optimisation for aircraft design, marketing and production forecast and a consultant to industry on C of A requirements for ultralight aircraft and motor gliders in the UK. Ladislav was formerly a glider pilot in the Czech Republic. He says he returns to fly powered aircraft at his Slovacky Aeroclub in the summer holidays. Ladislav is a member of OSTIV with three OSTIV congress publications to his credit.

It has been designed in accordance with JAR-22 in the Utility category. The long awaited structural dynamic test is near completion and it is hoped it will soon be cleared for advanced aerobatics. Current approved manoeuvres are: sideslip, steep turns, spins, stalls, steep stalls and lazy eights. Taking into account its operating cost it is ideal for basic training.

Engine off flight performance is good too. Pilots flying Vivat in Germany and Spain managed 4 to 5hrs with the engine switched off and gained 6700m asl in wave. South African pilots reported no drop in engine power or take-off performance at high altitudes and in hot atmospheric conditions.

Not as futuristic as a Stemme S-10 nor as grown up as a Dimona or a G109 with their "Two legs landing gear", however, the Vivat looks solid and has a solid flight performance. In two parameters Vivat prefers to be below its competitors: first in the price and second in the stall speed. With about 32kt the Vivat can "hang" in the air.

Vivat L-13 SEH, registration mark G-BVGD, is operated by Oxfordshire Sport Flying Club, Enstone Aerodrome, Church Enstone, Oxon OX7 4NP tel 0608 677208. Ray Brownrigg is looking after the aircraft and will give advice on its operation and maintenance. Certification, marketing, sales and product support for the aircraft is handled by Euroindex (UK), Consulting Agency, 19 Clouston Street, Kelvinside, Glasgow G20 8QR.



TECHNICAL DATA

Aircraft type	SEH	SL	Power unit	SEH	SL
Wing span (m)	16.8	16.8	Engine	MIIIA	L2000EO1
Length (m)	8.3	8.3	Cylinders	4	4
Height (m)	2.3	2.3	Comp Ratio	6:1	8.6:1
Wing area (m2)	20.2	20.2	Max TO pwr	65hp	67hp
Empty weight (kg)	500	500	Max rpm	2600	2900
MTOW (kg)	720	720	Cruise pwr	45hp	58hp
Min crew wt (kg)	55	55	at rpm	2350	2500
Max crew wt (kg)	200	200	Propeller	Hoff	Muhl
Max luggage wt (kg)	20	20	Fuel (min oct)	72	96
Performance			**Cruise performance on engine**		
VNE (kt)	111	111	Cruise speed	92kt	93kt
Max cruise (kt)	100	101	Fuel consumption	16l/hr	14.1l/hr
Stall speed (kt)	32	32	Endurance	3h10m	3h30m
Best gliding ratio	1:25	1:25	Max rate climb (fpm)	590	590
at speed (kt)	54	54	Take-off run (m)	220	220
Min.rate desc (fpm)	215	215	Take-off to 15m (m)	420	420
at speed (kt)	51	51	Range (km)	530	600

GRAHAM'S CORNER

Graham, a BGA national coach, writes about

Vario Blues

So you tell them to turn left and they find themselves circling in a 4kt thermal. Instead of concentrating on what they are doing they start congratulating you on your prescience. How did you know that was there? "It must be magic. What's your secret?" they ask.

No secret of course, just experience. I've done it before, many times. It's not a trick or any particular gift, just time in the air that makes it easier and less of a gamble. The fact is I've flown in and around more thermals than my pupils and you get to know what to do after a while, not because you were born with any gift but because you have learned what to do. It's intuitive.

It's just as well. If I was to rely on the average club vario to help me I'd be on the ground very quickly. It's possible to do without a vario - you can stay airborne on most soarable days to some degree without using one, drawing on years of experience and a few thousand hours.

You use a number of clues - accelerations, speed changes, control feedback, what it looks like, etc. All of these I learned over many thousand thermal climbs, probably sub-consciously. Using these as an aid you can forget the vario unless it actually matters whether it's 3 or 3.5kt.

If you don't have that level of experience then you have to rely more and more on the vario to stay aloft. It is little wonder then that pilots have problems staying airborne in club gliders, particularly when the varios have never been serviced, the pipework leaks like a sieve and they effectively have no total energy.

How can pupils learn to soar, learn the subtleties of the sensations during a climb that direct pilots towards the best lift when they are denied the basics by trying to use instruments that are worse than useless? How can instructors possibly teach soaring with a vario which is as accurate as an elastic tape measure?

A vario, even the cheapest, is a very sensitive instrument. It can register heavy breathing from 200ft if kept serviceable and fitted into a leak free system with good total energy. Stickiness and sluggishness, under or over-compensation, is a severe handicap. I believe it is a major reason why clubs lose a lot of pupils between solo and Silver. First of all they aren't initially taught how to soar, probably because the instructors have never been able to climb efficiently, and secondly, when solo they are unable to teach themselves because the instruments tell lies.

For the experienced it is relatively easy to soar and is a lot easier with a serviceable kit. The inexperienced must use instruments and if they are flawed they stand no chance. They get bored not being able to stay up, get fed up with circuits and take up some other activity - worse still they buy a motor glider.

It's not just club aircraft that are to blame. You don't have to spend a fortune but just make what you've got work. But how?

The next time you fly on a calm evening with no thermal activity, take a winch launch and at the top settle the speed and then time how long it takes for the vario to recover to a sensible figure (a realistic amount of sink depending up the glider type). If it takes longer than 5-8sec it needs servicing.Some take the whole circuit, others refuse to come off the top stop without physical persuasion.

Next increase the speed to about 70kt and once the speed has stabilised pull back smoothly but firmly to 45kt and observe the vario. It should move from its higher sink rate to a new lower figure without deviations (not excessively up or down). If it doesn't then you have a leak - either fix it or scream and shout until someone else does. A glider with a defective vario is a handicap and how many of us can afford to fly with a handicap.

DG-303 ELAN

The DG-303 Elan, an upmarket version of the DG-300, had its maiden flight in April with an improved wing section, modified for lower drag, and winglets. The latest safety measures have been incorporated, such as a new seat back with integrated neckrest to absorb high loads in a crash and the improved canopy jettisioning system used on the DG-800.

This system is designed after findings of a German government sponsored research project. The canopy is jettisoned by operating one handle. A long spring lifts the canopy in the front and a hook to the rear guarantees it rotates around this point and leaves the fuselage safely.

The DG-303 also has a new cockpit interior and colour scheme.

VARSITY MATCH

The Oxford versus Cambridge 10th annual gliding match was held at Bicester during the weekend of May 14-15 and for the first time sponsored - by APIN Research Chemicals of Abingdon.

We had typical varsity match weather on the Saturday with strong winds and the constant threat of rain. Henry Rebbeck gained most points with a useful flight by Mark Williams adding to the Cambridge score to put them in the lead.

Sunday was fine and calm and a 105km triangle was set. The contest was extremely close with Cambridge emerging victorious by 458 to 434pts. The splendid trophy, a glass model of a primary glider, was presented by Dr E. Boehm, managing director of APIN. Our thanks must go to Oxford University GC for their brilliant promotional efforts and to the RAFGSA for hosting such an enjoyable and exciting event. - *Extracts from a report by James Chappell, the Cambridge University captain.*

GLIDER-BORNE TRIBUTE DELIVERED

Bob Pirie had the idea of glider pilots paying their own special tribute to the D-Day commemoration (see last issue, p145), then enlisted the help of Phil Phillips, manager and CFI of Lasham GC, and ended up with a spectacular glider formation of 36 aircraft leading the official flypast. Here Bob fills in the background followed by accounts by Phil and Andrew

Above: Part of the formation team. Below: Bob Pirie (
Joint and Austin Brown (Airspace International magazi
able through Centreline, tel 0489 571000.

Sunday, June 5, 0918hrs. Nobody actually repeated Eisenhower's famous "OK, let's go!". But after anxious days of gales, low cloud and rain, it was OK - and we went.

The last *S&G* left us training hard for our D-Day commemoration flight. Those practice sessions were salutary for all of us - especially the two Lasham crews who became "disconnected" during training, and the formation wingmen, who inevitably tended to dangle from the end of the rope on the inside of turns.

I'll skip all the admin. Suffice to say that helping to maintain enthusiasm and momentum among the participating groups, reassuring the organisers that we *would* deliver what we had promised and working with club and hard-pressed MoD PR people to stimulate media interest became very much part of the Pirie family routine.

As ever, only gliding accidents seem to be newsworthy - although no doubt a ducking or carrier landing would have sufficed. But 18 tug and glider combinations and our whipper-in aircraft made it to the Solent and back in a safe and dignified manner - and judging by the radio, TV and press coverage, and more importantly the reaction of the spectators, we did OK. There is a residual feeling that the media did not do justice to the airborne elements of the Southsea event, but after all our flight *was* a tribute - not a publicity stunt.

As the Sunday dawned our collective anxiety about a washout was overwhelmed by bright sunshine. Arriving at Lasham I was relieved to discover that determined crews and their aircraft marooned at Parham and Keevil the previous evening had sneaked in before dusk.

My organisational role completed, all that remained was to fly K-13 Alpha Glider One, the lead glider, as accurately as possible.

Never was I more conscious of the taped formation markers on my wings - or of the high-powered might of British gliding soon to be snapping at my heels.

If the scrutiny of Alan Meredith in the tug behind and Derek Piggott in the back seat of the glider were not enough, the presence of the "high society" of the gliding movement was an extra incentive to accurate airmanship. With people like Bill Walker, MP (BGA vice-president), Ian Macfadyen (RAFGSA chairman), Peter Stean (AOC Air Cadets) and BGA committee members Chris Pullen, Ted Lysakowski and Terry Holloway behind you, you just don't get out of position.

Our take-off from Lasham bordered on the emotional. A silent crowd of families and other well wishers lined the peritrack, and as we rolled a radio call from Echo Leader announced that our Odiham colleagues, too, were airborne. For the first and only time, Sword Formation had taken flight.

The run-in to the target at 1250ft asl was unforgettable. "Sea level" assumed a special significance - yet with the reassurance of Derek behind me to share the workload, I was able to look back as we turned over the water for my only glimpse of the rear "Vics" of the formation and to contemplate the thousands of little black dots on Southsea Common.

The project has left me with many memories. For example the message from HRH Prince Philip, which gave us all a big boost, and the simple "good luck" note left on my car by a neighbour - an old soldier - in the early hours of the Sunday morning.

Then there was the Friday evening briefing, which filled Lasham's canteen. Likening it to a Comps briefing, I was reminded by a very important Lashamite that this inter-club event was unique in that it was not competitive but all about co-operation and a shared goal.

And I'll never forget the kindness of two of our strongest supporters, Peter Crawford, OC RAF Odiham, and Bob Bickers.

At a very sad and difficult time, they not only welcomed Echo and Foxtrot sections to their domain but loaned life preservers to everyone flying in the formation.

But of all the memories, none will surpass those of goodwill and comradeship generated between the participating clubs and individual pilots and helpers - especially the grins, hugs, sweaty handshakes and sheer relief which signified the end of a once-in-a-lifetime experience - and the start of a normal Lasham Sunday.

rie (left) and Phil ready for the take-off. Photos by Terry gazine). They have made a video of the day which is avail-

Thermals - the Day I Hated Them

Phil Phillips, Sword Formation Leader flying a Robin

Sunday, June 5, dawned bright and beautiful with the sun shining. Clearly it could well be a very good gliding day. I prayed it would not be, at least not till late in the day...it was the last thing I wanted, yet we were going gliding. However, I would rather have the thermals than what happened in the preceding three days - wind, rain, fog and no flying.

Going back a touch, in February Bob Pirie, a senior club member at Lasham, casually asked me whether I would be prepared to train and lead a formation of tugs and gliders as part of the commemoration for D-Day if he could arrange it. It seemed a long way ahead and I love formation flying, after all it would be easy to train up say three tug and three glider pilots to a good standard. Lasham would never let more than that number go on a summer weekend would they?

I forgot all about it for a month or two until Bob cornered me again and told me that he had received a very enthusiastic welcome to the idea from the MoD, the Navy, the RAF, the Army and everyone else. He said that perhaps up to 20 tugs and 20 gliders could be involved and it could be a major event, the first item on the programme in front of HRH The Queen and 14 heads of State at the Official Commemoration at Southsea Common on the sea front at Portsmouth.

By the way, he said, as it would be symbolising the glider-borne raid on Pegasus bridge, which was the very first attack on D-Day, it would be nice to fly out to sea a mile or two along the Solent. I tried to back-peddle very fast indeed.

"It's too difficult", "can't train so many", :"got to get together all 40 aircraft at least twice - impossible", "very expensive", "even Lasham couldn't launch that number quickly", "better formation leaders than me", etc, etc. There were many reasons why it was impossible. It was no good, no matter how hard I protested the momentum was there, meetings, offers of other clubs, considerable enthusiasm, including myself if someone else ran it. However, it had to happen. I gave in to the inevitable; I was the leader of the Sword Formation.

It was agreed that the exercise would not cost the club money, so a condition was that the pilots would have to pay the costs, Lasham volunteers were asked for, a few were co-opted and training and selection of the pilots of Lasham started in early April. I was surprised and very pleased that many of them took to formation flying like ducks to water. Competition to be part of the formation was very keen and some were disappointed - no one dropped out, even when it got tough with many cancellations due to weather.

We had a series of sessions in all sorts of weather with a weekend start time of 0730 without fail. DI, set out the pattern on the field, brief and fly, or put the tugs and gliders away to be all over by 0900 so as not to interfere with normal flying. The pattern soon emerged.

We built up the number of combinations of tugs and gliders from two to three then five and finally to eight, using imported tugs and gliders from Kestrel, Defence Research Agency, Bannerdown and Parham GCs, all of whom were joining in the fun and needed mass practice. We formed up, flew round the sky climbing, descending, turning and over flying Lasham to simulate Southsea Common. We made a video of it, we debriefed and rebriefed. In my opinion we became very good. Indeed for nearly a month we stopped practising.

All we needed now was to practice the join up between the Lasham and the Kestrel formations as it had already been decided some 20 tugs and 20 gliders were too many for one site to handle comfortably. So after issuing a major briefing paper we agreed that all that was needed was two or three full practices with the 36 aircraft on the Friday, June 3, or Saturday June 4, before the D-Day flypast.

The main obligatory briefing was fixed for 1830hrs on the 3rd with potential flying that evening or the next morning, or the next evening. The plan couldn't fail. It did. Despite briefing, lots of frustrating weather forecasts and a lot of waiting around, it was never good enough to fly. So after a lot of nail-biting we decided to go on the day, having only previously flown a maximum of eight tugs and gliders and only having a theoretical join up plan.

Same way same day was the order. Do your best. I need not have worried, the quality of the pilots and training put in by all paid off. As far as I am concerned it was absolutely superb. The formations were symmetrical and safe and we lost no one. However, the thermals were horrendous and made the flying very very difficult.

I congratulate each and every one in the formation on a job well done - I was extremely proud of the result. It was a day I and many others will not forget. For the record the participating clubs were Lasham (5 combinations), Portsmouth Naval (3); Southdown (3), RAFGSA Bicester and Bannerdown (3), Air Cadets (1+whipper-in), Army/Kestrel (1), London (1) and Defence Research Agency (1), making of total of 36 aircraft and more than 70 pilots plus the whipper-in aircraft and a following photo/video helicopter. An excellent video will be available by the time this is printed. (See photo caption.)

The View From Foxtrot Three

Andrew Fordyce in a Chipmunk

At 0645, June 5, the sentries at the base treated me courteously, aware that their rifles were making me nervous. The normally relaxed faces of my fellow pilots were unusually tense. All around me where reminders that this was a military operation - an arrow-straight line of tugs on the dispersal tended by a camouflaged fuel bowser, gliders lined up by pre-set markers on the runway for a stream take-off, their size the only giveaway that this was 1994 and not 1944.

Thanks to Terry Holloway, I had secured a place as his P2 in an RAFGSA Chipmunk tug ➡

after I balloted on the reserve pilot list at Lasham.

I had flown in several of the glider positions in the Vic at Lasham during training, including P2 to Bob Pirie whose idea for a relatively informal flypast by a few Lasham pilots to honour D-Day glider pilots had grown into a major operation. With the aircraft in position Bob Bickers gave his final pre-flight briefing which ended at 0830. With an "In cockpit" time of 0900 we all attended to those few last minute duties, which for me meant getting every pilot's signature on the Telemessage from Prince Philip.

At 0845 there was a general, unsignalled, move from dispersal for the half mile walk to the launch point. Some pilots walked alone, some talked quietly in small groups.

As I walked, carrying my Mae West, my thoughts turned to those pilots and men who, 50 years ago, were leaving at night for unfriendly fields near Pegasus bridge and other strategic targets, with the likelihood of finding Rommel's Asparagus (anti glider spikes) waiting for them on landing.

I thought of my own father's action at Monte Casino and Anzio before going into action. As I turned on to the runway I was reminded of the four men from this base who so tragically lost their lives only a few days ago on the Mull of Kintyre. My thoughts were only broken by Terry's friendly face beckoning me towards the cockpit.

At 0900 we were in the cockpit as briefed, lined up on the runway, ropes taut and stomachs churning. The minutes dragged by slowly while Terry and I sorted out cameras and went through the aircraft's ditching procedure. At 0909 and 30sec Terry said quietly "Thirty seconds to engine start."

"Ten seconds".

"Clear props" and with a sense of her own importance Oscar Uniform burst into life on the first turn. All the tension melted away as it has so many times before when the cockpit closes and it's down to business.

At 0918, exactly as briefed, the Odiham formation leader called "Echo Formation rolling" and seven seconds later, once Terry could see the gliders in the first Vic were airborne, he pushed the throttle forward and we were rolling. As the Chipmunk's tail came up I could see the six aircraft in the Echo Vic climbing away ahead and then we were airborne.

Our two Vics in line astern already made a wonderful sight, but it was nothing compared to seeing the four Vics airborne from Lasham appear to our right. As we joined up over Shalden we became Sword Formation, six Vics with three tugs and three gliders in each, line astern. Over 70 pilots with one mission - to fly professionally and honour our gliding forefathers. After all the waiting, we were on!

En route to the first turn at Tapnage, John Dobson (Air Cadets), flying a Grob 109 motor glider, appeared at every compass point and gently whipped us into shape over the radio. Adjusting all the Vics, he started with Apha Vic at the front and then set the distances between Vics until he got back to us in Foxtrot Vic.

My view of the aircraft close to us was fine, but restricted to the front by the canopy frame and Terry's head. Tapnage appeared ahead, Sword Leader called "Turning left" and suddenly the whole formation was spread out across the sky to my left and I heard Terry saying "Fantastic, absolutely fantastic" over the intercom. Only flying with the Red Arrows could have come close to this.

After releasing at 6000ft over the French coast, the Pegasus bridge pilots found their destination by flying on a compass heading, timed on a stopwatch by the co-pilot. Many of them didn't see Pegasus Bridge until they turned on to their base leg. This day we were VFR and GPS steered and as we went "feet wet" over Portsmouth harbour I could see Britannia, Canberra, warships, aircraft carriers and small boats in profusion. Southsea Common was packed with people and as we flew over the monument and past the viewing area I secretly hoped that Prince Philip would point out to the Queen the Slingsby Eagle in the formation which he flew years ago at Lasham with Derek Piggott.

Then suddenly it was all over and, as we turned right for our return along the Solent, a voice exploded in the intercom. "We did it. We did it" and I knew that Terry's enthusiasm was shared by at least 70 other people around us at that moment.

A few seconds later, in a quieter voice, he added: "You'll be glad to know that Ts and Ps are fine". I was, because the Janus behind us would have made it comfortably to Lee on Solent, but I wasn't so sure we would."

On the return leg we were a stunning sight for anybody who found their Sunday morning disturbed by the buzz of aircraft and I was quite content to go on for a couple of hours like that. It was easy for me but I saw that the whiplash effect of speed changes in the formation, combined with the very thermic conditions, were making it hard work for tug and glider pilots alike, especially down at the back. I never thought I'd be unhappy about thermals at 10am but it was just increasing our workload.

After the Parham Vic left to return to their base, Sword Leader called for a flypast at Lasham and it was an undeniably good feeling to provide a display for our peers with the formation looking every bit as together as it did at Southsea.

Many of the pilots put in tremendous efforts of adminstration and preparatory work leading up to that day and I hope our flypast struck a chord with those veterans who saw us at Southsea and on TV. Their mission on D-Day has since been described as the greatest feat of flying in the war.

Back on home ground at Lasham I knew that it had all been worthwhile as soon as I saw the faces of Bob Pirie and Phil Philips as I walked through the clubhouse door.

Thank you Bob for having the idea and thank you Terry for letting me come along for the ride. I wouldn't have missed it for the world.

KEEPING A LOOK OUT

In an article on the importance of a good lookout, Guido Bergomi, a former Italian Air Force instructor, passes on a tip from his days in jet trainers. In order to make a pupil look back far enough before starting a turn, the instructor holds up his hand with a number of fingers extended, and the pupil has to say how many he sees. (Translated from *Volo a Vela* by Martin Boycott-Brown.)

HE WAS THERE!

Jim Wallwork, now living in Canada, was one of the combat glider pilots who flew four missions. Herrie ten Cate interviewed him for us before he left for the D-Day anniversary in Normandy last month

Field landings are something most of us try to avoid. For Jim Wallwork it was his speciality. But then again that's what combat glider pilots are trained for.

After reading about Jim's military gliding career, I visited him at his home in Ladner, British Columbia. He had after all flown in four famous combat glider operations - the invasion of Sicily, the Normandy invasion, the Battle of Arnhem and the crossing of the Rhine.

Fifty years ago this June Jim Wallwork took part in probably the most famous combat glider assault of all time - the D-Day attack on Benouville bridge over the Caen canal in Normandy. After the war the bridge was renamed Pegasus in honour of the British Airborne soldiers who helped liberate Normandy. In Jim's own words: "It was a rather heavy landing in a rough field at a rather rough time of night." Probably a bit of an understatement if you think the Horsa glider was the size of a Dakota and carried 30 fully armed infantrymen.

The attack started a few minutes before 11pm on June 5. Six Halifax bombers took off from

Tarrant Rushton Airfield in southern England with six Horsa gliders on tow. Their objective was the Benouville bridge and the Ranville bridge which were about six miles in from the French coast. These strategic bridges would be needed to link up the British Sixth Airborne division which had dropped inland and the forces which were hitting the Normandy beaches.

Jim considered the Horsa a fine combat glider with a high wing and side-by-side seating for the pilot and co-pilot. He said it had excellent visibility and was easy to manoeuvre. "With full flaps at 45°, the Horsa would come down like an elevator. It was really something."

After crossing the coast near Worthing, the tugs and their gliders flew for about 75min at between 4800 and 5600ft before reaching the landing zone. They weren't very worried about German flak because they crossed the French coast through a narrow corridor where German air defences were practically non-existent.

The gliders pulled off at 6min intervals and headed for the small fields beside the bridges. And to throw the Germans off the real target, the Halifax bombers flew on to a cement factory in Caen and dropped a few dozen small bombs. Three gliders landed at Benouville bridge, two at Ranville bridge and the sixth was released beside a wrong bridge five miles away. This the soldiers took before joining their comrades at the other bridges.

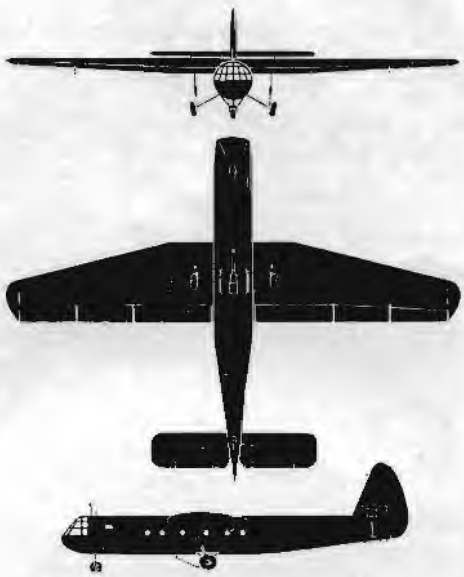
Jim recalls: "It was a dream operation. A real classic. We landed with complete surprise and took the Benouville bridge in a matter of minutes." But because they were worried about the two gliders coming in behind them, they put the Horsa into the bridge embankment at the end of the field and the impact put both pilots through the perspex.

The co-pilot twisted his knee and broke an ankle while Jim thought he had lost an eye. However he had cut his forehead rather badly and the blood had only filled his eye. Although bruised and injured, he spent the next few hours carrying supplies and ammunition to the troops on the bridge.

His orders were to return to England as soon as possible in case further glider flights were needed to reinforce the troops. He made it back and still had the Arnhem and Rhine crossing ahead. He was awarded the Distinguished Flying Medal for the attack on Pegasus bridge.

But all this probably wouldn't have happened if Jim and his fellow glider pilots hadn't passed an important test that February on Salisbury Plain, watched by their CO and military top brass. Six Horsas and six tow planes were waiting for them and they were told to climb to 4000ft and release at one minute intervals. The first three gliders were to do right hand circuits and the others left hand circuits with landings in a small marked out triangle. This was to find out if large gliders could be put into small fields like the ones beside the target bridges.

After Jim joined the newly formed Glider Pilot Regiment he trained on single engine aircraft before the Hotspur, which was a smallish military glider with tandem seats for the pilots and room for eight combat troops. He was then posted to North Africa to prepare for the invasion of Italy. He eventually flew a Waco glider into Sicily, an operation which was deadly for



The Horsa 2 which had a hinged nose to permit the direct unloading of vehicles, a twin nose wheel and a tow hook in the nose wheel strut.

many of the pilots and troops. Communication problems meant a large number of gliders were released too far from the coast and were forced to ditch in the Mediterranean. During the months of training, Jim would occasionally soar the Waco in strong lift.

He flew the Horsa into Arnhem as well as Normandy before trading it in for the Hamilcar. This rather large and ugly glider even had a machine gun to take out any opposing forces in the landing area. The Rhine crossing was Jim's last combat glider operation of the war.

After the war he worked in England for a few years before imigrating to Canada where he is happily retired. But he carries a faint reminder of those combat days - a small scar on his forehead.

PC-BASED GLIDER PILOT'S LOGBOOK

A review by Julie, an instructor at the Kent GC and holder of a Gold badge and Diamond goal

Last December I bought a copy of Gemini Simulation's PC- Glidelog, a PC-based glider pilot's logbook and spent a few days transferring 13 years of gliding on to my computer. Although time-consuming, input was made easy by the notepad which accepts repetitive data by a single key-stroke. The comprehensive manual provided with the software explains its use.

Although this package is an ideal way of storing information of all the flights I have done, I found that its sorting/searching facility didn't give the information I, as a glider pilot and instructor, wanted. So I contacted Gemini Simulation with some of my thoughts and suggestions and these were incorporated with comments from other pilots to produce version 1.5.

Not only has PC-Gliderlog become a record of my flying career, its powerful sorting facility means I can break down the data into various categories, which is particularly useful if you are an instructor and need to extract information for the annual instructor returns. And you don't have to be an instructor to find this useful. It will also list a record of all cross-country kilometres flown together with other relevant information of each flight, *eg* site name, type of launch, date of flight, glider type and total time taken.

Data entry is very easy with the computer prompting you for the information required. Once all flight information has been entered, it can be sorted in many ways *via* the search facility - for example by glider type, flight origin, total number of hours flown, total P1 instructing, total P1 solo, total P2 together with the corresponding number of launches - again useful for those returns.

Have you ever wanted to know how many flights you have done from a particular airfield? Or how many flights/hours you have flown in a K-13? PC-Gliderlog will do this and more for you very quickly. You can also print out your logbook in four different formats and, using the print screen on the keyboard, you can print a copy of the various graphs PC-Gliderlog provides.

Of course one very good advantage is that it takes away the tedious task of adding up all those flight times in your logbook and does it with 100% accuracy - something I have yet to achieve manually.

All in all this software package is a very useful for any glider pilot - instructor or not - and I would recommend it to all who have the use of a PC. Incidentally, although DOS-based it works equally well if run from Windows.

SILVER DISTANCE ON OXYGEN

Shaunne started gliding at the Essex GC in 1971 for two years and then had a 16 year gap. She restarted in 1989 at the Cornish Gliding and Flying Club and has an assistant Cat instructor rating which didn't take effect until her Silver badge. She gained her Gold height at Aboyne in 1991.

I'd been trying to get my 50km for ages. During 1993 I was the pilot with the most outlandings from the Cornish CG - 45km in a major headwind in a Skylark was my best effort. My next chance was on our wave soaring trip to Aboyne last September, although I had picked the worst season for years.

There are two good 65kms where you can land - Feshiebridge in the west and Easterton in the north (both gliding clubs). We had visited Feshiebridge by road the previous year and on a wet day this time we checked out Easterton. The tug master said a distillery stood out clearly but we had trouble finding it on the ground. You have to cross the mountains on these trips and you learn quickly that while the lift can be good, down draughts can be ferocious and the clouds can have hard centres.

You can go round them to the north, following a path that has more landable fields but less lift because of the sea breeze. All this is a long-winded way of me saying that beginners don't try cross-countries in Scotland without having plenty of height, but frankly I rather overdid it for my Silver distance...

The flight began innocently enough. It was a gentle south-westerly but didn't look as though it would be up to much. I pulled off tow in the Cirrus at 2000ft in very gentle wave over the two lochs just to the west of Aboyne and "rode the elevator" between the two lochs and Campus 'O' May bridge over the Dee for an hour until I reached 11 000ft. I donned my oxygen and started exploring. By now I was at Ballater and the cloud streak looked perfect for Feshiebridge. I pressed westwards but kept losing out - up to 13 000ft and back to 11 000ft and the cloud gaps getting smaller.

Only a few of us had caught the wave properly but someone was doing well over Glen Tanner, just to the south-west of Aboyne - I headed there and began climbing again. By now the gaps had closed in though the airfield were reporting a small hole over Aboyne village (but you couldn't see it unless directly overhead).

There were identifiable gaps to the north and east but not to the west. I could see glints of the Dee and the coast far to the east to fix my position. After 3hrs flying I topped out at 17 4000ft above airfield height, only 1200ft off a Diamond, but I was now on my way down. At 16 000ft I decided I should do something with the height and after a radio check back to base went to Easterton where the gaps looked good.

With the courses already marked on my map, I lined up the compass, sighted up on a cloud formation and speeded up. Soon I could see the northern coast and a distant lighthouse which turned out to be the one at Lossiemouth. The gaps were opening up - a town to the east with a very large red roof was Huntley. With this much height I was going straight over the mountains and not round the edge.'

The only problem with map reading and location fixing was the oxygen mask that kept restricting my vision. It also made it difficult to pop in the boiled sweets. The coastline give me easy fixes - there was the big inlet at Lossiemouth and the military airfield and further to the west was Kinloss. Elgin, the town near Easterton, was therefore easy to place and to the south-east there were pit workings -. what a surprise that big white roof was the distillery - so the grass strip of the airfield was...yes...there. At 12 000ft, still on oxygen and I was overhead!

I lost height to get off oxygen and to radio gliders in the air over Aboyne to arrange for John to tow me back in about an hour's time. I descended gently on airbrakes, enjoying the view, taking photos and letting the eyes adjust to lower altitudes. Just as I was on my downwind leg a Land Rover crossed the runway (never looking, it turned out to be the local gamekeeper who got quite a shock when I landed. Exactly 5hrs, an unassisted 15 4000ft climb and 65km for my Silver badge - what a flight.

A stiff climb out of the glider and I got the gamekeeper to sign my landing form - as it was a weekday there was nobody at the Highland GC. A few minutes later John and the Super Cub arrived and 25min later we were back over the two lochs after an, at times, exciting tow.

CLUB FOCUS

In this issue we feature South Wales GC, based at Usk. They have a membership of around 70 and last year flew 10 500km in their four club and 21 privately owned gliders.

We are about two miles NE of the village of Usk in the county of Gwent. To the north and west lie the Black Mountains, the Brecon Beacons and the mountain ranges of the South Wales valleys. The site is on level ground in the broad Usk valley.

First the bad news. Let's face it, we don't have an enormous field, there are trees around it and it's grass. You won't see a Discus, LS or anything high performance unless you bring one with you. There is no one famous to acknowledge or kowtow to. If you happen to be famous, most of the members won't have heard of you.

But now the good news. There is a lot of unimpeded and deserted airspace. The mountains and countryside rival the best anywhere and it's easy to get to, being only a few minutes drive from the M4 and a couple of hours' drive from the home counties.

Every sort of gliding is to be had - wave, ridge and thermal. Wave flying is usually best when the wind is from the NW, although it can happen in any wind with a westerly component. Our height record is 32 000ft and more than half the members have Diamond height. The winter months are usually best for wave although it can appear at any time of the year.

Ridge soaring is best with winds ranging from the NE to W. The Black Mountains offer the most challenging ridges, however there are easier opportunities right next to the field in W and NW winds. When there is a north-westerly the usual ploy is to aerotow over Usk village and kick off into wave. If this fails, you fall back downwind on to the nearby Westwood ridge and hang about to see if wave develops.

Sometimes when a wave system is in phase with Wentwood ridge, very high rates of climb are possible. I have had sustained climbs of over 8kt from the southern end and on one occasion seen wave off the clock. The tug pilot estimated it to have been at 12 to 15kt. On good wave days the rotor and curlover effects can lead to exceptionally violent conditions close to the ground. One just has to be prepared to hack it.

Cumulus cloudbase tends to be relatively low. I have never seen it above 6000ft and 4000ft is considered good, though a few miles inland it is higher. However, pilots prepared to take cloud climbs can top 12 000ft on occasions.

Wave over Usk. Photo Simon France.

All or any of the above effects can combine to give thermals of exceptional strength from 8 to 10kt. The mountain tops tend to dry out first and to be heated sooner, so the usual advice is to head for the hills.

Another, though rarer, source of lift is when a sea breeze front comes in, usually in the afternoon.

Little cereal is grown in the area with most fields down to grass, so that landing out is usually on in all seasons with mown hay or silage fields being the best bet. But pilots must be able to distinguish between the various shades of green as there are such nasties as potatoes, rape and maize.

If going into the mountains it is important to be able to assess gradients (especially if flying glass) and be able to land in sloping fields. I have had a couple of frights and certain areas are best avoided if one is low. And it is necessary to be reasonably good at spot landing as some of the fields are quite small.

We have two club K-13s, a K-8 and an Astir, a Pawnee tug and two winches. Due to the relatively short length of the field it was decided to build a high power winch as the previous one (a converted bus) was getting tired. Accordingly a derelict Tost winch was given a Jaguar V12 engine and mounted on a 4WD Bedford truck. Launches can be startling to put it mildly!

Most club flying is at weekends but we have summer competitions and aerotow courses, so it's usually possible to wangle an aerotow midweek. We also have winch courses in the summer evenings.

Simon's photographs of CFI Peter France (his father) above and below the launch point. Harold says Peter, a founder member, "works like a dog, worries and gets harassed by the likes of me."

The clubhouse and bar have recently been renovated - in winter we have a wood fired stove to keep the place cosy and members have the use of the kitchen.

Members spending a non flying day logging.

BGA CHANGES

National coach

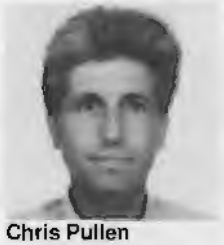
Graham McAndrew has resigned as national coach with effect from September when he will become CFI at Lasham.

For the last four years Graham has been working for the BGA, assisting Chris Rollings, senior national coach, and his input to the coaching operation has been tremendous. While we are sorry to be losing his services, we do wish Graham every success and happiness in his new role at Lasham. On behalf of the multitude of club members and instructors who have benefited from Graham's coaching skills I offer him my gratitude and thanks.

An additional coach

Chris Pullen, deputy chairman of the BGA Instructors' Committee has been appointed an additional national coach with immediate effect.

In recent years Chris, as senior regional examiner, Thames Valley region, has been providing a most valuable back up to the coaching operation. He has taken responsibility for running numerous instructors', soaring and cross-country courses and assisting with many other coaching activities. Chris will bring a high level of skill and experience to the coaching operation and I am delighted to welcome him as a full member of the national coaching team.
Dick Dixon, *Chairman of the BGA Instructors' Committee.*



Chris Pullen

Roger Coote

New BGA development officer

Roger Coote has been appointed development officer to allow Bill Scull partial retirement. (See Bill's story on p194.) Roger started gliding in 1958 at his present club, Southdown, and has been an instructor for 22 years and a full Cat for 18.

He was CFI at Cranfield from 1979 -1982 and has been deputy CFI at Southdown GC for ten years. Roger now has 1750hrs, a Gold badge and one Diamond and as well as flying a DG-300, has a share in a 1956 Slingsby Eagle. He says his only claim to gliding fame was with Andy Bushby in 1991 when they completed a declared 311km triangle in the Eagle. (See the 1992 October issue, p295.)

Roger has an agricultural background, coming from a Sussex family which has farmed in the county for over 300 years. For six years he worked on sheep and cattle stations in Australia after agricultural college, returning to spend three years' lecturing at the East Sussex College of Agriculture. Later he managed several estates and became self-employed in 1993, managing farms in receivership and running an agricultural consultancy business.

He is a keen member of the European Soaring Club, has flown at many UK, European and Australian sites and serves on the BGA Instructors' Committee as AEI regional examiner for the south-east.

Roger is married to Jenny and has two sons. His interests include music, writing, hiking and sailing - but only when it's not flyable.

* * * * * * *

Max Bacon has taken over from Humfrey Chamberlain as chairman of the BGA Development Committee.

NATIONAL LADDER

Although dogged by quite long periods of poor weather, this year has got off to a pretty healthy start. I have to look a long way into Ladder records to find totals of nearly 8000pts in June!

Tim Macfadyen has managed a few 500km flights to rack up an impressive total at the top of the Open Ladder. John Bridge from Cambridge is responsible for separating him from his wife Geralyn in 3rd spot.

Things are looking good on the Weekend Ladder too, also with the Cambridge pair of John Bridge and Peter O'Donald split by Brian Marsh, a new and very active contributor to the Ladder from the Stratford on Avon GC.

Open Ladder

Pilot	*Club*	*Pts*	*Fts*
1. T. Macfadyen	Bristol & Glos	7856	4
2. J.Bridge	Cambridge Univ	5768	4
3. G.Macfadyen	Bristol & Glos	5470	4

Weekend Ladder

Pilot	*Club*	*Pts*	*Flts*
1.J.Bridge	Bristol & Glos	5768	4
2.B.Marsh	Stratford on Avon	4309	4
3.P.O'Donald	Cambridge Univ	3855	2

Ed Johnston, *National Ladder Steward*

GLIDER IDENTIFICATION

At the BGA AGM in February members voted to introduce a new Operational Regulation (OR) on this subject starting on January 1, 1995.

The new OR reads as follows: "All gliders must have BGA approved identification markings displayed as large as practicable on each side of the fin and rudder, or on the fuselage in a substantially vertical plane. If under wing markings are also present they must be identical to those carried elsewhere on the glider."

From next January the C of A inspection forms will include a report by the inspector detailing any markings shown on the glider which will then be checked at the BGA office with the register of approved markings before the C of A is renewed.

Under the forthcoming European harmonisation of regulations it is likely that identification markings will become compulsory and it was decided that we would prefer to have a BGA devised system in force rather than to have something new imposed upon us., We also hope that this move will remove the duplication of markings which has previously occurred on some gliders and which can cause confusion.

As you know, all gliders are issued with a three letter identification which is shown on the C of A document. It is recommended that this "trigraph" is shown on the glider as there is no charge for the identification and it would need to be applied only once and then remain with the glider for its life. However, the system of competition numbers will continue to be BGA approved markings running from 1 to 998 and renewable each year by the owner on payment of a fee.

It is now intended to extend the marking system for those persons who do not wish to use the trigraphs but have to comply with an approved BGA marking. Accordingly for 1995 we shall be approving markings in the series starting with A1 and running through to Z99. In each case the marking will start with a letter of the alphabet (with the exceptions of I and O) and be followed by either one or two numbers., The cost for registering these markings with the BGA for 1995 will be £12 , the same as the charge for competition numbers.

The first priority within this new series of markings will be given to associations and clubs that have been using them before this on an informal basis. Applications should now be made to the BGA office to register any new markings under this scheme for 1995 although we shall not be issuing any approvals until this October. In the case of duplicate applications all requests received by September 30 will be put into a ballot before the new markings are issued by the office in October.
Barry Rolfe, *BGA secretary*

BGA 1000 CLUB LOTTERY

The **May** draw results are: First prize - K.J.Cadman (£84.50) with the runners up - P.Perry, M.J.Wilshere, S.Robinson, R.Adams and J.M.Woodford - each winning £16.90.
June. First prize - D.Manser (£84.50) with the runners up - S.Brixton, S.Hill, J.Parsons, C.Buzzard and C.Hogarth - each winning £16.90.

FATAL ACCIDENTS

Dan Smith, a lifelong member of the London GC, died some hours after an accident at Dunstable on Monday, May 30.

His glider, an LS-7, was being aerotowed, taking off to the north-east, when at about 50-70ft the launch was abandoned. Neither the tow rope or the weak links were broken.

The combination may have flown into turbulence or convection. The glider was seen to turn to the left in a manoeuvre not dissimilar to a chandelle. The impact was in a steep nose down attitude (about 60-70°) and slightly left wing down.

With doctors in immediate attendance the pilot's condition was stabilised but he died in hospital from his injuries. The immediate investigation was undertaken by Peter Claiden, an AAIB inspector and member of the club. I attended the scene to assist.

From the prelimary investigation there is no evidence of any problem with the glider, a type on which all the controls connect automatically in rigging.

A second fatal accident involved a Skylark 4 at Halesland (Mendip GC) on June 9. The pilot, Paul Youhill, had taken a winch launch and immediatly afterwards the glider was seen diving vertically and it crashed near the winch. There is no evidence to suggest a problem with the glider which had been flown previously that day for an hour.

During the dive there was a progressive

failure of the outer wing panels (the Skylark has a three-piece wing)., The impact speed was high resulting in disintegration of the glider. The accident is being investigated by the BGA.
Bill Scull, *BGA director of operations*

GLIDER PILOT REGIMENT VIDEO

A group of The Glider Pilot Regiment veterans have made a 1hr 10min video recording the campaign in which the gliders took part and showing in detail the machines they used. The aim of the project is to raise money for airborne charities.

It is available at £12.99 plus £1.50 p&p from the Glider Pilot Regiment Film Project, COS, 65a King Street, Knutsford, WA16 6DX.

BGA TP BOOKLET - 1994 EDITION

Amendment List 1/94 was issued by the BGA to all clubs in May. Originally it was intended not to amend the 1994 edition of the TP booklet, but in the event it proved difficult to be perfect and some small errors were noticed which it was felt should be publicised straight away. After all, the total number of points now stands at 772 and so perfection is not easy. Some errors had existed for several years but no one had told the TP co-ordinator! Hint, hint! Please write, ring, or fax if you note any anomaly or inaccuracy; don't assume someone else will have done so.

The most significant error concerned Newent (NWT, 12 NMI W of Cheltenham) which was listed at 1° of longitude whereas it should be 2°, an error of some 40nm! Hopefully no one has lost a Gold or Diamond as a result. Smaller corrections have been made to the lat/long of Atherstone, Goole and Sudbury. Small corrections of description have been made to Bromsgrove, Harting, Mendlesham, Oxford South, Rufforth, Thame Church and Thorne.

Two clubs have moved site, Highland from Dallachy to Easterton and Angus from Arbroath to Drumshade. These changes are included in AL1/94.

A new bypass has been built round Kingston Bagpuize village W of Abingdon, and as the previous TP was not easy to find, the opportunity has been taken to change the point for KSB to a prominent roundabout N of the village on the new road.

Hard copy of booklets incorporating AL1 may be obtained from either the BGA office or myself, and software versions in ASCII and Word Perfect 5.1 are available from me by sending discs to Bentworth Hall (West Wing), Bentworth, Alton, Hants GU34 5LA; Tel 0420 564 195. Fax 0420 563 140.

For 1995, the list may be stable enough simply to issue an amendment (AL2/94) with some changes and additions, rather than print a complete new edition as in previous years. Meanwhile, please send your ideas for improvements to me, and a decision will be made during the winter on what we do next year.

Finally, some discussions are being held on "Internationalising" a system of describing TPs, particularly to enable world-wide use of GPS to a common standard of data input. If this were to happen, the existing trigraphs might have to change to a four or five digit code in order to avoid ambiguity with TPs in nearby countries or with existing navigation beacons (some UK VORs have the same trigraphs as some BGA TPs). The format of lats and longs might have to be changed from decimal minutes to seconds of arc, to fit in with international protocols on recording the locations of navigational aids and other aeronautically-significant points. Opinions, and advice from those with expertise in this field, are invited. The end result may be a voluntary FAI/IGC procedure on the formatting of data for points significant for gliding; it could, for instance, be a procedure used for all international contests in order to prevent problems which could result from the use of widely different systems in each gliding country.
Ian Strachan, *BGA TP co-ordinator*

Corrections: We regret that North Wales GC (No. 96) and High Moore GC (No.95) were transposed on the Club Directory in the April issue, p80. North Wales GC point out that their tel No. is still 0745 582286. And Cranfield GC tell us that they are still operating from their site and can be contacted on 0234 750111 (Cranfield reception). We apologise for any inconvenience.

In the last paragraph of the comments by Ian Strachan on The Arm-Chair Pilot's article "A Bridge too Many", in the last issue, p155, a line was missed out in the printing. The reference to the Ordnance Survey **Road Atlas** should have read: "The OS three inch to the mile **Road Atlas** is revised annually and uses the same topographical data base as the 1:250 000 air maps: this includes contours, railways and the like. The 1994 edition costs only £6.99 for complete cover of England, Scotland and Wales, and includes details of road changes such as new roundabouts, bypasses, motorways and so forth."

GLIDING CERTIFICATES

DIAMOND DISTANCE

No.	Name	Club	1993
1/617	Bradley, J.	Wyvern (in South Africa)	15.12
1/618	Nunn, A.V.W.	Lasham	13.8

DIAMOND HEIGHT

No.	Name	Club	94
3/1143	Reeves, K.R.J.	Four Counties (in France)	6.3
3/1144	Rogers, J.F.	Black Mountains	13.3
3/1145	Haley, V.	Essex & Suffolk (in Spain)	6.4
3/1146	Macdonald, A.T.	Essex & Suffolk (in Spain)	6.4
3/1147	Rae, D.A.	Phoenix (in France)	3.10.93
3/1148	Grimes, P.	Phoenix (in France)	8.4
3/1149	Elliott, A.	Phoenix (in France)	8.4
3/1150	Mansfield, C.A.	Lasham (in Spain)	26.4
3/1151	Clegg, J.	Phoenix (in France)	8.4
3/1152	Dent, E.	Bristol & Glos (in Spain)	26.4

GOLD BADGE

No.	Name	Club	1994
1718	Pickering, K.	Southdown	22.3
1719	Evans, D.A.	Bowland Forest	24.8.93
1720	Parsonage, S.J.	Swindon	1.5
1721	Hook, K.D.	SGU	1.5
1722	Mountain, I.	Essex & Suffolk	23.11.93

GOLD HEIGHT

Name	Club	1994
Dent, J.	Yorkshire	27.4
Brooks, M.P.	Lasham	22.3
Lees, E.	Glyndwr	29.3
MacDonald, A.T.	Essex & Suffolk (in Spain)	6.4
Rae, D.A.	Phoenix (in France)	3.10.93
Challans, M.	Lasham (in Spain)	10.4
Challans, M.A.	Lasham (in Spain)	6.4
White, L.	Cranfield	6.4
Telus, T.	Southdown	22.3
Pickering, K.	Southdown	22.3
Grimes, P.	Phoenix (in France)	8.4
Maynard, D.J.	Shalbourne	29.3
Clegg, J.	Phoenix (in France)	8.4

GOLD DISTANCE

Name	Club	1994
Wright, T.C.	The Soaring Centre	26.3
Leutfeld, W.H.	Welland	1.5
Evans, D.A.	Bowland Forest	24.8.93
Parsonage, S.J.	Swindon	1.5
Hook, K.D.	SGU	1.5
Mountain, I.	Essex & Suffolk (in Australia)	23.11.93

SILVER BADGE

No.	Name	Club	1994
9352	Walker, S.R.	Four Counties	26.3
9353	Cox, M.	Wolds	2.8.93
9354	Bryce-Smith, K.M.	Cambridge Univ	26.3
9355	Beach, J.	Bristol & Glos	26.3
9356	Deacon, D.J.	East Sussex	26.3
9357	Huff, T.J.	East Sussex	6.4
9358	Howarth, I.	Cranwell	26.5
9359	Perkins, K.J.	Yorkshire	26.3
9360	Clark, J.	The Gliding Centre	29.3
9361	Goudie, G.	SGU	13.4
9362	Meadows, A.	Lakes	10.4
9363	Jenkinson, B.	Bristol & Glos	30.4
9364	Peters, A.J.M.	London	1.5
9365	Rogers, E.J.	Cambridge Univ	30.4
9366	De Torre, M.E.	Dukeries	30.4
9367	Smith, G.	Wolds	30.4
9368	Foster, P.S.	Yorkshire	26.3
9369	Hornby, S.	The Soaring Centre	1.5
9370	Crews, M.T.	Borders	26.3
9371	Cummings, D.M.	Midland	8.5
9372	Milner, M.J.	Bidford	8.5
9373	Hadland, M.	Bicester	26.3
9374	Foster, P.	London	10.3
9375	Crane, M.S.	London	30.4
9376	Douglas, J.M.	London	8.5
9377	Walton-Knight, B.P.	Marchington	8.5
9378	Lees, E.	Glyndwr	26.4
9379	Griffiths, M.R.	Sackville	8.5
9380	Whitaker, L.	Essex	9.5
9381	Urpeth, D.J.	Dukeries	30.4
9382	Bractord, J.	Norfolk	30.4
9383	Cartwright, R.J.	The Soaring Centre	1.5
9384	Watson, J.C.	Bidford	30.4
9385	Greengrass, C.R.	Aquila	30.4

UK CROSS-COUNTRY DIPLOMA
Part 1

Name	Club	1994
Hook, K.D.	SGU	19.3
Richardson, J.H.	Lasham	26.3
Parry, J.	Midland	26.3
Lewicka, A.	Booker	26.3
Boyle, E.A.H.	Ulster	1.5
Seward,	Fulmar	1.5
Hughes, M.E.	Surrey Hills	1.5
Balshaw, G.	Glyndwr	9.5
Edwards, M.W.	SGU	1.5
Parry, J.	Midland	26.3

Support the British team and buy a special World team kit of Cloud Nine shower/gel bubble bath and a special waterproof sun screen at £10, plus £2.50 p&p. Order from Comfort and Joy, Bay Tree Cottage, Eastleach, Nr Cirencester, Glos GL7 3NL and 10% will be donated to team funds.

STEMME S-10

An assessment of its competition capabilities by Dick Johnson, the famous American glider pilot who has evaluated many sailpanes over the years.

I flew the Stemme S-10 as co-pilot with Marc Arnold during the US Motor Glider Nationals at Winterhaven, Florida, from May 16-18 with nine competition days. Soaring conditions were only fairly good with tropical, humid/soggy cumulus forming early every day. The 3000ft agl cloudbases at the start increased to around 4000ft later in the day with 2 to 3kt thermals occasionally improving to 4 to 5kt. Showers usually formed most days after 3pm.

Though conditions were weaker than expected, the Stemme proved to be capable of climbing with the best - eight extended wing Ventus, two Nimbus 3DMs, a PIK-30 and DG-800. Most of the Stemme's thermalling was with +10° flap, but occasionally +16° flap was used where smaller turn radius was needed. Marc and I shared the flying evenly in roughly 30min periods. Though Marc was new to contest flying and had little soaring experience, he was quite capable under my coaching.

I insisted on keeping airspeeds below 55kt and though they sometimes dropped momentarily to as low as 45kt while thermalling, I don't recall it ever once stalling. Its gentle low speed flying characteristics contributed greatly to its excellent soaring capability. Most inter-thermal cruising was at 70 to 80kt with the MacCready set to 1 to 2kt, and again the S-10 demonstrated that it would cruise with the best. Many long glides were made with just a straight ahead pull-up in weak thermals when altitude permitted.

Admittedly our flying included a number of errors, but none serious enough to prevent the unhandicapped scoring placing the S-10 in first place. Unfortunately the contest rules include unrealistic handicap factors for several types of sailplane, including the S-10. A 16.6m Ventus CT is given 14.5% more points that the S-10 when each flies the task in the same time. That handicap defies reason because each has about the same wing loading (8.84/sq ft for the Ventus versus 9.17/sq ft S-10 actual). Even under current US handicapping the S-10 was still placed a creditable 6th out of the 13 entries.

The S-10 was the only motor glider competing with a four stroke engine - the Limbach 2400 which performed flawlessly. There was never any doubt about its starting at any time. The side-by-side seating gave excellent visibility for both pilots and a pleasant environment for coaching and team flying.

Thank you Dr Stemme for creating such a fine motor glider.

A CALENDAR SAMPLE

Below is one of a series of drawings by Dick Parker who is planning to bring out a Cartoon Calendar for 1995. Dick started gliding at RAF Leeming in 1964 with the Clevelands GC and later became CFI. This is still his club where he flies a Dart 15, although at the moment he is working for British Aerospace in Saudi Arabia. For this reason David White is marketing the calendars at £7 plus £1.50 p&p. You can contact David at the Deeside GC or ring him on 03398 86836.

SCOTTISH REGIONALS

We don't normally report on the Regionals, only giving the results, because of demands on space, but we have made an exception in this case. It is believed to be the first rated Scottish Regionals and, held at Deeside GC from May 21-29, had nine competition days

Aboyne might seem an unlikely place to hold a competition where racing was involved. Those of you who have been to Deside GC will be more aware of the Gold and Diamond height claims than distance flights. The mountains are also a formidable barrier, even to adventurous pilots,,but they do produce good thermals.

The week was blessed with dry, cold, north-east winds with a freezing level around 3500ft. Over the summits the cloudbase was up to 7500ft asl. A few showers developed late in the week at some inconvenient places and these led to some tactical flying and not a little ridge soaring. The tasks varied from 170 to 350km. For the most part the tracks were over the high mountains but with ingenuity and some gritting of teeth pilots managed to fly over, round or occasionally through the snow banded peaks. The Lharig Gru is especially spectacular below hill top level!

Landing out is less of a problem than it appears. There are fields in the valleys and in general one has enough height to reach suitable landing areas. Whilst there were some unfortunate incidents, the lack of landable fields was not the prime factor. One field in particular had a glider magnet in it and half the contestants arrived in it over a 2hr period despite many others being available. Landing fees were not waived.

Eight days of hard flying with several pilots getting well over 30hrs made for good competition and the placings were very close throughout the week.

Peter Coward (LS-4) kept the lead he established on Day 1 despite being challenged by several other pilots who gradually cut the lead down. The total distance covered during the Comp was just short of 21 000km.

There were sponsorships from Lochnagar Distillery, Allied Dunbar and the Scottish Sports Council and everyone involved had a wonder if exhausting week.

There are plans for another Scottish Regional next May, so book the dates.

The winner, Peter Coward with the cup, Nick Norman (3rd), back left, Lemmy Tanner (2nd), front left and Richard Hungerford (Allied Dunbar) who made the presentation.

SCOTTISH REGIONALS – Aboyne, May 21-29

Pos	Pilot	Glider	Day 1.21.5 204.4km ▲	Day 2.22.5 234km double O/R	Day 3.23.5 225.7km double O/R	Day 4.24.5 184.4km double O/R	Day 5.25.5 160.9km double O/R	Day 6.27.5 179.8km ▲	Day 7.28.5 348.1km ▲	Day 8.28.5 160.3 cat's cradle	Total Points
1	Coward, P.	LS-4A	1000	954	999	885	246	1000	881	839	6804
2	Tanner, L. E. N.	Vega 17	900	926	922	1000	262	993	868	1000	6770
3	Norman, N.	Ventus B	869	931	1000	914	252	930	990	865	6651
4	Allcoat, R. W. P.	DG-300x	812	916	889	851	625	673	939	640	6245
5	Nunn, A. V. W.	ASW-17	928	1000	913	933	242	0	1000	818	5834
6	Gray, P.	DG-202/17	909	877	358	746	258	778	794	936	5554
7	Bottom, R. Martin, D. H.	Mosquito B	867	756	398	800	170	866	782	829	5486
8	Greensmith, A.	ASH-25	0	676	786	917	637	847	650	652	5175
9	Hamilton, C. J.	Std Cirrus	857	425	487	791	281	971	805	0	4807
10	Davidson, J. W. L.	DG-200/17	400	819	493	446	227	613	651	0	3649
11	St Pierre, A. H. G.	DG-200	956	315	854	367	289	0	556	191	3508
12	Adam, K. J.	DG-100	0	112	0	522	158	746	751	642	2931
13	Bauld, A. J. W.	Nimbus 2	267	671	351	29	0	469	770	0	2557
14	Donnelly, I.	Discus B	381	162	111	310	0	358	837	0	2160
15	Housden, R.	ASW-20c	762	123	722	102	90	0	0	0	1799
16	Neill, W. B. Douglas, J.	Astir CS	307	54	24	0	0	0	0	0	385
17	Kentish, S. C.	Kestrel 19	381	0	0	0	0	0	0	0	381

BGA competition scoring programme by Specialist Systems Ltd

BGA ACCIDENT SUMMARY

Compiled by DAVID WRIGHT

Ref No.	Glider Type	BGA No.	Damage	Date Time	Place	Pilot/Crew Age	Injury	Hrs
14	Blanik	2066	S	28.1.94 1530	Talgarth	61 P2 47	N N	1150 176

Landing into the sun on a late winter afternoon, the pilot lost sight of the landing area. The glider drifted slightly to the left and sank below the normal glide path. The left wing and tailplane clipped the top of a tree but the glider made a normal landing. Making a landing on another run would have avoided the problem.

15	K-13	1572	S	19.2.94 1605	Eyres Field	54 P2 49	N N	720 276

This was an instructor training flight. After a briefing P1 pulled a simulated winch cable break at about 150ft, expecting P2 to land straight ahead. However, P2 decided there was not enough space so, after regaining speed, turned to make a 360°. P1 realised too late they could not make the airfield and force landed on rough ground.

16	K-13 & K-13	2317	S	11.3.94 1217	Lasham	72	N	120

After an intensive short course the pilot was sent solo. On his seventh solo flight he saw a jet transport taxying on to the runway and became concerned that he should land quickly but keep well clear. He chose to land between the runway and a K-13 that had just landed. Distracted by the jet he misjudged the distance and hit the K-13's wing.

17	Club Libelle	2203	S?	19.3.94 1215	Usk	42	N	14

The pilot experienced a weak link failure at about 200ft on a launch with a high powered winch. The pilot decided to make a 360° turn rather than land in the ample space ahead. During the turn he had to lower the nose to maintain speed and the lower wingtip hit tree tops which caused the glider to crash.

18	SZD Junior	–	N	–9.2.94	Incident report	54	N	35

The pilot was wave soaring at 6000ft over broken cloud though which he was able to keep check on his position. Returning to the airfield, the gaps closed rapidly so he decided to try and stay in the same position and wait for a gap. When one appeared he found he had drifted downwind and had to make a forced landing. Emergency services were called.

19	Bergefalke 4	3551	N	12.3.94 1600	Winthorpe	48 P2 57	N S	218 0

The instructor had prompted his student about speed control during the approach. This was due to a marked wind gradient and also P2's unfamiliarity with this type, which needs a faster approach speed than the K-7 normally flown. In the flare P2 opened the airbrakes and allowed the speed to fall. P1 was unable to prevent a heavy landing.

20	SZD Junior	–	3rd party	–12.93 –	Incident report	55	N	68

The pilot failed to lay-off sufficiently during a winch launch which became excessively fast with a strong crosswind component. At the top the winch driver had to stop the drum as a loop of cable was thrown off. The cable drifted across a public road and hung suspended between wall before being hit by a passing car.

21	SZD Junior	3950	M	16.3.94	Camphill	65	N	426

The pilot had a winch launch to soar the local ridge. He climbed at a shallow angle which contributed to a very high airspeed and so he pulled off at about 200ft. He first attempted to reach the ridge, then changed his mind and turned crosswind into the shorter length of airfield. The glider bounced and landed sideways just missing a stone wall.

22	K-13	2944	M	27.2.94 0930	Gransden Lodge	47 P2 48	N N	268 –

The student was handling the winch take-off when at 5-10ft the power failed as the power was cut by thedriver when the winch moved. P2 released then lowered the nose slightly. P1 did not react in time prevent a heavy landing that damaged themain skid. P1's hands had not been near the controls at the start of the launch.

23	Blanik	2923	M	27.3.94 1018	Shobdon	39 P2 78	N N	364 6000

While conducting a series of check flights on a visiting pilot the instructor had to prompt that an undershoot was developing and took control to reposition. P2 again fully opened the brakes and P1 again shut them as the glider was approaching the boundary fence too low. The glider just cleared this but hit a runway marker which P1 had not seen.

24	Puchacz	3576	M	20.3.94 1405	Aboyne	33 P2 53	N N	300 82

While ridge soaring the pilot misjudged the speed of an approaching snow shower. He could not see the airfield so had to make a landing in a known field. Due to early use of airbrake plus the sink ahead of the shower and in the lee of the ridge, theglider hit the top of trees before making a normal touch down.

25	Olympia 463	–	N	–4.94	Incident report	0	N	–

During a positive control check the captive nut holding the left outer elevator hinge was found to be unscrewed. It had been thought that the hinge pin was held in place by a spot weld but in fact a split pin was missing. This was not noticed during ten C of A inspections by several inspectors.

26	ASH-25	3909	S	1.4.94 1205	Aboyne	39 P2 39	N N	2711 191

P2 was flying the circuit in strong wind conditions and turned finals at 5-600ft having selected land flap. It soon became apparent that anundershoot was developing so P1 took control. Too late to land on the airfield, a landing was made in a rough field collapsing the undercarriage. The very experienced P1 had low experience on type.

27	Open Cirrus	–	S?	22.3.94 1738	Lleweni Parc	29	N	145

After a wave soaring flight the pilot returned to the airfield where she knew the conditions were difficult due to rotor and turbulence. Touch down was planned for the middle of the airfield but the final turn was made too far back and the glider undershot, hitting the left wingtip on a tree which spun the glider around into the ground.

28	K-13	2425	W/O	5.3.94 1700	Shenington	47 P2 42	S M	640 3

The early solo P2 held the glider low and flat during the early stages of the winch launch. P1 prompted to rotate and as P2 pulled back the cable 'chute inflated causing a back release. P1 took over and lowered the nose too slowly to prevent the glider dropping in from about 50ft, writing off the glider.

29	ASW15	3048	M?	26.3.94 1646	Winthorpe	45	N	345

After a normal ground run the glider lifted off and climbed to 5 or 6ft where the pilot pulled off as the speed was too low. He eased the stick forward but the nose dropped quickly and he could not round out. The glider struck the ground, on the mainwheel which then pitched the tail down heavily, cracking the fuselage.

30	Skylark 3F	950	S	9.4.94	Portmoak	61	N	113

At about 40ft on the winch launch the speed fell so the pilot released the cable and lowered the nose. The airbrakes were not opened and the pilot induced a series of pitching movements causing the glider to hit the ground at least three times before coming to a halt.

31	Puchacz	3658	S	13.3.94 1500	Husbands Bosworth	45 P2 25	N N	150 0

On his fourth flight that day the pilot hit heavy sink on the downwind leg. When he turned on to base leg at about 300ft, he found that this was substantially into wind and he would have difficulty making the airfield. There was nowhere to land out upwind so he continued the circuit. Stretching the glide in turbulence, he stalled into a scrub area.

32	K-13	3927	W/O	14.4.94 1415	Shenington	37 P2 17	N N	430 0

P1 flew the circuit and positioned behind another, lower K-13. Both gliders encountered extremely severe sink. The leading glider made a hurried, but successful downwind landing in a field and the second had to follow it in. In avoiding the other glider the glider's wing hit a tree and went through a hedge.

33	K-6cR	2516	M	9.4.94 1530	Near Husbands Bosworth	32	N	50

The pilot encountered sink and headed back to the airfield, but deciding he could not make it he chose a field with a northerly landing run. At 400ft on base leg he saw that the field sloped downhill in this direction so turned to land the other way.At about 100ft the left wing hit a tree top but the glider landed normally.

34	PA18 Cub	Tug G-BCFO	M	7.4.94 1230	Lee on Solent	31	N	400pwr

The tug pilot landed ahead of a heavy and turbulent shower then turned the aircraft into wind and waited for the worst to pass. Five minutes later the sun came out and the pilot decided to return to the launch point. As he turned across wind a sudden gust lifted the tail. He quickly closed the throttle before the propeller hit the ground.

35	K-8	2093	M	20.3.94 1300	Lyveden	45	N	47

During a practice spin the centre wing fairing fell off. The spin was terminated and the glider landed safely. The two wing nuts securing the fairing had not been replaced after the fairing had been removed for maintenance. This had also been missed during the DI.

36	K-13	1438	M	19.3.94 1552	Farnborough	40 P2 32	N N	896 1.5

The instructor was checking out an early solo pilot and pulled a simulated cable break at about 30ft on the winch launch. P2 lowered the nose at "an appropriately restrained rate" but allowed the nose to drop too much. P1 took over too late to prevent a heavy, tail first landing that damaged the rear fuselage.

37	PA25 Pawnee	Tug G-ASKV	M	10.4.94 1400	Parham	47	N	56pwr

Gliders were being launched into a strong north-westerly wind that was gusting at up to 4 mph.The Pawnee tug was turning across wind ready for the next glider tow when it was struck by a strong gust that lifted the tail despite full up elevator. The propeller struck the soft ground stopping the engine.

38	K-18	2973	M	13.4.94 1830	Parham	53	N	32

After a day of strong winds the conditions had calmed down noticeably as the pilot came in to land. He decided to approach at 60kt and land long in the fading daylight as there were two gliders behind him. He closed the airbrakes as he passed through the wind gradient and floated some distance before "nosing" into the ground to stop the glider.

39	DG-300	3366	S	14.4.94 1250	Nr Parham	29	M	47

The pilot returned to the ridge at just above ridge top height and at right angles. At 64kt and with a 30-40kt tailwind he was rapidly blown behind the ridge before he could turn parallel. In curl-over the right wingtip caught a barbed wire fence and the glider cartwheeled before crashing inverted in thorn bushes.

40	Discus CS	4030	M	24.4.94 1715	Lee on Solent	35	N	310

As the pilot joined the circuit he noted a light aircraft landing and an aerotow lined up ready to take-off. He turned on to finals as the runway became clear and made a normal approach. Unfortunately he had been distracted from his downwind checks and the wheel was up. At the last second he remembered but, while lowering it, hit the tail down hard.

41	Falke	M/G G-BRRD	M	10.4.94 1445	Selghford	62	N	43 +308pwr

The motor glider taxied to the take-off point and was given clearance to take-off. As the pilot increased rpm from 1500 to 2500, clouds of mud and grass flew up as the propeller flew off. The cause was a sheared woodruff key which allowed the hub to rotate relative to the crankshaft and unscrew the central retaining bolt.

42	K-8	2369	M	22.4.94 1400	Shenington	69	N	18

After a good thermal flight the pilot flew again expecting to find more lift. This time there was none and so he returned to the circuit. In strong sink he decided to turn in early and land crosswind but failed to take into account the lack of headwind component and restricted space. He missed the far fence but hit a farm trailer.

43 1515	K-6	1970	M	17.4.94	Bellarena	36	N	51

The pilot failed to correct for a low final turn and a wind gradient until too late and the glider clipped the boundary fence with the rear fuselage. Half airbrake had been open for most of the approach.

44	SZD Junior	3718	S	4.5.94 1544	Husbands Bosworth	44	N	29

After a check flight the instructor decided that the pilot should convert on to the Junior. After a short winch launched flight the pilot approached too fast then failed to round out in time to prevent a hard landing . After this the glider bouncedi nto the air then stalled back on to the ground

45	K-23	2996	S	2.5.94 1430	Dunstable	39	N	22min

The low hours pilot was making his first solo winch launch from the easterly run after three good check flights, but no simulated cable break. After a normal lift-off the speed failed to increase due to picking up an aerotow rope and the pilot delayed releasing. While landing ahead the glider's wing hit a marker post due to the high speed.

46	Skylark 4	1119	M	30.4.94 1428	Kirknewton	66	N	126

After a slow aerotow the pilot released at 2000ft and turned back to his intended soaring area. He found this covered by a light shower which he had to fly around, encountering strong sink. He decided that he would have to land in a field but was down to only 300ft before he found a suitable one. Avoiding cables, he landed downwind and hit a fence.

47	K-8	3384	S	2.5.94 1530	Bowland Forest	63	M	178

The glider returned to the airfield and made a normal circuit until the downwind leg when the airbrakes were seen to open. A gentle turn was made until it hit the ground slightly nose down. The pilot was found semi-conscious but with only minor injuries from the impact. He was taken to hospital where he died later from a heart attack.

48	Puchacz	3576	M	7.5.94 1545	Aboyne	21	N	3

The low hours pilot released from aerotow and mistakenly tried to soar the downwind side of a ridge. He found himself too low and initially decided to land in a field. Though very low he changed his mind and made for the airfield. He just managed to reach it but landed downwind and ran into a rock strewn pond.

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

CLUB NEWS

Lucy Withall (London GC) after completing a Diamond goal in her Discus on May 29.

Above: Richard Trives, the first ATC cadet at Peterborough & Spalding GC to go solo, photographed with instructor Bob Sharman.

John Tanner of Deeside GC who went solo at 16.

Below: (l) Andrew Tristram and (r) Fran Brennan who soloed at 16 within a few days of each other at Enstone Eagles GC.

Copy and photographs for the October-November issue of *S&G* should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 0223 247725, fax 0223 413793, to arrive not later than August 8 and for the December-January issue to arrive not later than October 11.

GILLIAN BRYCE-SMITH
June 15

ANGLIA (Wattisham)
Alan Elliot completed his 5hrs and Silver height in one flight. Mat Jones has an assistant Cat rating and Ian Bentley gained a Bronze leg on his first solo flight.

The weather only allowed flying on the first day of our Long Mynd expedition when John Courchee and Gwen Thomas gained 300kms and Steve Lamb his 5hrs.

We have taken delivery of a motor glider from Bicester and are hosting Cranwell Flying Club so they can experience gliding and we can test powered flight in exchange.
M.A.T.J.

BATH, WILTS & NORTH DORSET (The Park)
On Monday May 30 over 3000km were flown with several badge claims. CFI Ron Lynch flew 506km, the first flown from The Park, and there were three flights of over 300km, three over 250km and many others. John Holmes (Carmam) completed his Silver badge in one flight to Shalbourne. Conway Shields gained a Bronze leg on his fourth solo flight having soloed the day before. During the week Jean Whyte and Les Mott gained a Bronze leg and Harry Wright went solo.

Alan Milne is assisting Stuart North as DCFI to Ron Lynch. Roy Gaunt brought the BGA Motor Falke to run a highly successful field landing course for Bronze pilots over the Bank Holiday weekend. George Kemp and Dave Pengilley have worked very hard renovating the two club K-6 trailers.

George reaped his reward by gaining Silver distance and 5hrs in the club K-6E on June 11.

Dave Pengilley and Dave Smith are assistant rated instructors. Four of our youngest members are learning to fly through our newly introduced bursary scheme.

The airfield is kept in excellent condition due to the many hours of hard work rolling and cutting by Dick Yerburgh, Les Mott and Paul Wade.

Veteran member Vincent Griffith, who joined

Julie Angell, Booker GC's CFI, who is claiming the women's UK 500km triangle record.

Maureen Weaver (Dart 17) and Mike Dunlop (L Spatz) who both flew 300kms from South Wales GC at Usk.

Above: Henry Morris (l) and George Hilbert with their Manchester University K-6 at Glyndwr GC. Below: Ian Broughton briefed for his solo by Alan Garside at Kent GC.

If sending in handwritten reports, please print all names and try to give the first name or just initials, not a mixture. Also, we would be grateful for a contact address and tel number in case of queries and for the return of photographs.

our club from Nympsfield in 1963 and is now in his 81st year, has been made a life member.
J.L.

BICESTER (RAFGSA Centre)
This weekend we hosted a very successful Inter-Club League competition with good task setting on the Sunday ensuring some exciting final glides. Dave Kearns won the Novice Class.

Added to a very full programme of *ab-initio* training, task weeks and competitions the Centre (organiser Kevin Sharp) is now running AEI evenings, which are well supported.Mike Gazzard has a Diamond goal; Owen Walters, Sue Pryee, Dan Gillians and Craig Livingstone Silver badges and Tom Thomson has gone solo.
Y.E.

BLACK MOUNTAINS (Talgarth)
In common with the rest of the UK, conditions have been less than ideal with the spring wave topping out at only 15 000ft and few cross-countries of note. Don Puttock set a new record by landing the Blanik out at 8am. A remarkable achievement.
D.U.

BOOKER (Wycombe Air Park)
The two new club Discus are flying for their keep. CFI Julie Angell is already claiming the UK women's 500km triangle record with a flight in the Std Discus at 83km/h and the Duo Discus is giving competition experience in the Regionals and Open Class Nationals.

Our range of gliders now includes an EoN primary whose performance is even lower than predicted. Three have been chosen for our cadet scheme.

The Cirdanya expedition had excellent weather unlike the Overseas Nationals in Poland, won by our Tim Scott (Blue Class).
R.N.

BORDERS (Galewood)
Although we have good flying, the possibility of a move is restricting our development plans for general improvements to our site. There was no fresh news at the April AGM about our Gas Board negotiations.

We have a steady stream taking trial flights and have gained a few new members, one as far away as Cambridge. He is taking advantage of our country membership rates and flies with us regularly on his visits up north.

Good soaring conditions in March and April saw Silver distances by Mike Crews and Ian Johnson, Ian flying 106km in the club Pirat.
B.C.

BOWLAND FOREST (Chipping Airfield)
The season started off very well in April with good thermal and wave soaring. Our air experience evenings are again very popular and booked up until the end of the year.

Tina Antcliffe after her flight with Derek during the Wolds GC's Derek Piggott weekend. Photo: Dave Cowburn.

Sue Foggin (Vale of White Horse GC) needed a large crew after she landed her K-6E out on a BGA soaring course at Bicester - the farmer wouldn't let the crew take the trailer on to the field.

Above: The Kite 2B which has been restored at Lasham by Ralph Hooper, Frank Irving and Bill Tonkyn who took the photograph. They first owned it in a 1950's syndicate. Below: HRH The Duke and Duchess of Gloucester visited the Derby& Lancs GC. The Duke is seen being greeted by (l to r) Frank Townsend (chairman), Dave Salmon (CFI) and John Mckenzie (manager). Photo: A.Robinson. ➡

Bill Cooke, Phil Punt and Barry Skelton have gone solo. Expeditions to The Soaring Centre, Pocklington and Sutton Bank have been planned. As always a warm welcome awaits all visitors.
S.R.

Obituary - Peter Coleman

It is with great sadness that we announce the tragic death of Peter Coleman on Spring Bank Holiday Monday. Peter will be remembered at Woodvale where he was a member for many years. He joined Bowland Forest in the early 1980s and has always been an active member.

He could always be found either on the airfield, or in his caravan where he always had a smile and a friendly chat with anyone who wanted one. He will be remembered for the tales he would tell and his willingness to lend a helping hand.

I am sure everyone who knew Peter will join us in sending our condolences to his wife and family.
Steve Robinson

BRISTOL & GLOUCESTERSHIRE (Nympsfield)

Ray Payne's ploughing operation is complete and our range of courses are all well attended. We had some good cross-countries in May including 500kms on two successive days by Tim Macfadyen and a successful Enterprise style task week run by Les Bradley.

Sid's task week was also a success with five contest days and 500kms by Bob Cunningham and Rob Simpson; 300kms by Dave Williams, Dave Zarb and Alan Price; 100kms by Chris Witt and Russ Francis and a double Silver distance from Chris Bowman who flew to Rivar Hill, landed and flew back. The women's 400km speed record is also being claimed by Geralyn Macfadyen.

The BGA course held the same week was notable for a superb navigational feat by Pete Waite and a mass outlanding by the entire course.

Obituary - Denise Hughes

Sadly Denise Hughes died on May 24 after a short illness. She will be greatly missed by her numerous friends at many gliding clubs throughout the UK, particularly at Nympsfield, Southdown and various clubs in France.

We extend our sympathies to Chris, Richard, Monita, Jackie and their families.
S.I.D.

BUCKMINSTER (Saltby)

With regret we said goodbye to Arthur Keeling, our oldest instructor who has retired from gliding after 16 years. He was a pathfinder with the RAF flying Lancasters and we presented him with a tankard, a K-13 engraved on one side and a Lancaster on the other. He will be sadly missed.

The two rough patches on the main runway have been resurfaced.

Neil Scully, Dave Omeroyd and Richard Rockley have gone solo. Lynn Cawte and Dennis Hargreaves completed Bronze badges, Lynn her Silver height and Dennis and Samantha Morecraft their 50kms. Richard Harwood flew his second 5hrs; this time the barograph worked.

We had a very successful aerobatic course in April, despite the weather with Peter Mallinson and Mike Woollard instructing. We look forward to seeing them back again at the British National Aerobatic Championships on September 10-11.

A Cirrus and an ASH-25 join the privately owned fleet. We won the first round of the Inter-Club League on May Day weekend at HusBos.
N.R.C.

BURN (Burn Airfield)

Burn has joined the clubs offering free reciprocal membership to others in their group. We hosted a reunion of ex RAF 587 squadron, who were based at our site during WW2.

Stan Kochanowski flew his 5hrs in his Javelot, on his second attempt this year. Club flying hours are well up when compared with last year.

Our annual "wrinklies" excursion to German clubs was again well organised by Derek Wilson. We were given a mayoral reception in Alfeld near Hannover, with whose club we are twinned, visited the Carl Zeiss club, Jena, in former East Germany, where we had the sole use of two Puchacz and returned to the Wasserkuppe and the Schleicher factory, seeing the ASH-26 in full production.
P.N.

CAIRNGORM (Feshiebridge)

Nick Norman, our CFI, came 3rd in the Scottish Regionals and gained a Diamond goal.

Thanks to the efforts of our members the T hangar for the Puchacz is nearing completion. Our open day in May was a great success attracting a lot of local interest. We have the intermittent use of a tug aircraft throughout the year.
T.C.

CAMBRIDGE UNIVERSITY (Gransden Lodge)

The AGM assured us the club is growing on a sound footing and the courses are going well, resulting in many new members. The entrance track is now in good condition ready for our Regionals in August.

Andy Williams, Clare Colton, Andrew Watson, Stefon de Cristofoso, Malcolm Daines-Smith, Ray Ross, Jim Farquar, Jan Angermann, Chas Cook, Peter Wright and Andrew Jude have gone solo, Andrew Jude being the first of this year's cadets. Ian Stenning, Jim King and Ben Adgie have Bronze badges.

We celebrated the start of the season with an enjoyable steak dinner party.
M.H.L.

CLEVELANDS (RAF Dishforth)

We have been quite busy. Chris Wilson, Rob Elworthy, Lucy Hammond and Richard Edwards have gone solo, Lucy then getting Silver height. "Mac" Mackenzie took time off from servicing the MT to get his Bronze badge and 5hrs. Zoe Stewart and Doug Steward have Bronze and Silver badges, 16 year-old Zoe becoming our youngest Silver pilot ever. Glen Stewart has his 100km diploma and Steve Olender, Derek Smith and Paul Whitehead represented us at the Overseas Nationals.

At the AGM, awards went to Bob Jackson, "Mac" Mackenzie, Jim McLean, Dick Cole, Steve Olender, Dick Dawe, Derek Smith and Mark Evans.
J.P.

CONNEL (North Connel Airfield)

History was made on Sunday April 17 when a Libelle from the club flown by Alex Fleming, DCFI, landed at Glenforsa Airfield on the Isle of Mull and was aerotowed back. This was the first time a sailplane had operated from Mull.

The morning was fine but the wind light and only circuit flying was possible at Connel. Paul Keegan, our tug-master, suggested a club lunch at Glenforsa and agreed to tow a sailplane across for exploration while we were there. With John MacGilvray flying a second light aircraft, in all ten members with three of their children were shuttled across in small groups. The 20 mile journey took 20min. After an enthusiastic welcome from David Howitt, airfield manager, we called down Alex who had released when over the Mull coast and was still soaring happily over the range of hills, Cnoc Maol Mhucaig, to the SW of the airfield. He had been unable to contact the wave whose associated clouds were at times visible high above the Sound of Mull.

With its mountains, well kept smooth grass airfield and friendly people, Mull seems a perfect setting for exciting soaring and we plan to take the Puchacz when we next visit. Our new Executive Committee under the re-elected chairman, Bill Miller, may well be asked to consider changing our name to the "Connel & Mull GC."

"Figgs" Ferguson and Ted Murphy have gone solo and Norman May has his 5hrs.
R.W.

CORNISH (Perranporth)

Bernie Halton flew Silver distance to Brentor in the K-6cR. Rex Vinson and Cliff Clarke visited the Mynd for better soaring and John and Shaunne Shaw went on a Bicester cross-country course, although the weather was less than kind. Amongst our reciprocal guests have been a group from the Mynd who had good soaring weather, one having his longest solo flight. John Dean has joined us from Wales for the seven day week season.

Dick Gillow, John Stewart-Smith and Ken Buckingham have completed their AEI course thanks to John Smith. We celebrated with a big barbecue with more than double our membership - at least four clubs were represented.
S.S.

COTSWOLD (Aston Down)

First 300km triangles were flown by Jim Rodgers and Chris Marsh, Oliver Ward flew his first 500km.and there have been several Silver legs.

At our first open day of the year in May we again flew some 200 visitors on yet another 500km day.

Larry Bleakin, who was instrumental in our move to Aston Down many years ago, was given a surprise 60th birthday party and presented with gifts including a TP camera as a token of thanks.from members.
M.S.

CRANFIELD (Cranfield Airfield)

We do still fly from Cranfield despite being left off the Club Directory in the April issue (see BGA News).

The Besseneau hangars are down, thanks to Arnold Higgins and helpers, with one good set stored on the airfield awaiting re-erection.

Ian White achieved Gold height at Aboyne.

Flying continues apace with trips planned to Sutton Bank and Aboyne.

For those pilots low in our area, Cranfield is a busy GA airfield with the power circuit mainly to the south and east of the airfield with the gliders operating to the north and west. We use the large grass area in front of the three hangars, so by using the grass and keeping to the north and west of the tarmac we avoid conflict with the power. The club gliders operate non radio, so if you are this side it's no problem. If in doubt and you have a 720 channel radio a call on 122.85 will be appreciated and get a helpful response. Relights and a 'phone are available.
M.K.

CRANWELL (RAF Cranwell)
Our Chipmunk tug is back on line at last having had its wings and tail completely resprayed. We had an enjoyable May Bank Holiday weekend getting aerotow current.

Adam and Bell have gone solo, Adam shortly after his 16th birthday. Ivan Howarth and Trevor Cook have Silver badges with 5hrs and 50km respectively. Ian Mountain completed his first UK 300km (just) having spent thousands doing the same thing in Australia last year.
R.A.B.

CULDROSE (RNAS Culdrose, Helston)
Golf Charlie, our faithful Chipmunk tug, has flown after an extensive year long overhaul including a new engine, thanks to the hard work of Robby Robinson, Pat Eady and CFI George Kosak. George also got the "bog-seat" back in May from Perranporth.

With the Easter course a washout we are hoping to run one during the summer leave period. Our thanks to YUASA for sponsorship.
R.A.

DARTMOOR (Brentor)
We are attracting more young members thanks to publicity and good flying weather. Richard Roberts (who joined as a schoolboy) gained his Silver badge at Dunstable and had the first flight of the year to North Hill and back, while on the same day his father Terry flew a 60km. Peter Williams gained the first 5hrs of 1994; Gwyllam Griffiths has a Bronze leg and John Smith re-soloed. One of our K-7s was on display at Tavistock Balloon Festival, a major local flying event.

We have several courses, family evenings and club weeks and for the nostalgic a special barbecue to celebrate the 10th anniversary of the first flight of our beloved old T-21, our first club glider. (The first year as a club was spent hacking a landing field from the Moor so we have two separate 10th anniversaries.)
F.G.M.

DEESIDE (Aboyne Airfield)
Peter Coward won the Scottish Regionals held at Aboyne (see report on p223). The provisional date for next year's Scottish Regionals at Aboyne is May 20-28.

John Tanner went solo at 16; Cameron Robinson has Silver distance; Alain White his duration and Steve Thomson an AEI rating.

We are compiling a comprehensive brochure to be kept in our clubhouse of all other gliding clubs and what they can offer. All clubs are therefore invited to send us details and update the information on a regular basis.

April saw us at 23 400ft and in May at 27 200ft.
G.D.

DERBY & LANCS (Camphill)
We held a successful open weekend over the Spring Bank Holiday, organised by Brian Hamlet with much help from members. The Duke and Duchess of Gloucester visited us recently.

We have started a cadet scheme. Tony Lawrence, Roger Fielding and Clive Thrower have gone solo; John Potter has a Silver distance; Liz Plant 5hrs and Donald Mackenzie and Andy Tate have AEI ratings.
W.T.

DUKERIES (Gamston Airport)
Peter Uden made our first dinner-dance a great success. Trophies were presented to Mike de Torre (cross-country), Mike Burrows (achievement) and Bob Cartledge (club service).

Our site height record was shattered recently when Dave Prosalek reached 9000ft in wave. Mike de Torre and Dave Urpeth have Silver badges and Mike Burrows both Bronze legs. It is interesting that while recent weather has been poorer than other years we have flown more hours, indicating an improvement in standards.
J.C.P.

EAST SUSSEX (Ringmer)
At the AGM the chairman reviewed a momentous year when we finished paying for the field.

Trophies were awarded to Ian Bull (best overall performance); Steve Barter (fastest 100km); Tim Huff (best flight in wood); James Warren (best progress) and Tony Kerwin-Nye and Steve Blackman (services to the club).

Our new, larger hangar will soon be in use, after mammoth efforts masterminded by Richard Goodsell. Come and visit us and help invent a whole new set of hangar packings.

Graeme Fudge, Gerald Green and Dick Tingle have gone solo.
L.M.

ENSTONE EAGLES (Enstone)
At the AGM in April Ken Sparkes retired as chairman after ten years' hard work. David Wardell has taken over.

At our open weekend over the May Bank Holiday we did a record number of launches and gained several new members. The May course was also very well attended with two going solo.

Andrew Tristram, Fran Brennan and Turan Turan have gone solo and Roddy Maddocks has an assistant instructor rating. We do need more instructors at the weekends and anyone interested should contact our CFI, Geoff Dixon, at home on (0684) 299622.
L.J.B.

FENLANDS (RAF Marham)
Mark Anderson went solo and promptly gained both Bronze legs and there have been many more Bronze legs. Tony Mountain flew Gold distance/Diamond goal on April 30 and A.J. her 5hrs the day after. Ron Smith, an ex member, kindly brought his motor glider to the site for the annual field landing checks.

We had wave on most days giving flights to 16 000ft during our March expedition to Lleweni Parc. We have a wealth of instructors with four new assistant Cats and one new AEI plus an increase in members.
A.R.M.

FULMAR (Kinloss)
Mike Seward is an assistant Cat and Jackie Pratt has made wing covers for our club fleet.

We have trial lessons on Friday evenings (complete with a barbecue) with members giving good support. Our annual expedition in September will be to Feshiebridge.
B.F.G.

GLYNDWR (Lleweni Parc)
The Skylark 3 syndicate - Eddie Lees, Brian Williams, Roy Pittaway and Chris Bolton - all completed their 5hrs, Roy and Chris on the same day.

Paul Asbridge has gone solo; Chris Jackson has both Bronze legs and Chris and Jo Fox flew a 105km triangle in their Janus.

The Manchester University K-6 was flown on a Silver distance by Ben Long who has been gliding less than a year. Henry Morris also flew an O/R to the Long Mynd. Manchester University have three solo pilots and several regular *ab-initios*. They are expanding their fleet and joining forces with other universities and colleges in the area.

Our trial instruction evenings this summer are rounded off with excellent barbecues by Sue Conyers and Alison Long.
G.P.

HEREFORDSHIRE (Shobdon)
Things have really woken up with so many cross-countries only a few can be detailed. D Gardner (Ironbridge, Brecon Beacons); David Evans (306km Bletchley, Bicester and a 303km O/R Bletchley at 74km/h) and a good effort in the Rockpolishers Comp by Mike Dodd.

The Whit task week, organised by Dave Fall, proved a great success with 300km flights by Paul Witt (Turbo Ventus) and David Evans (Nimbus 2c). Mike Dodd (SHK) and Dave Fall (K-6cR) completed a rapid 200km the following day. The overall winner was the Nimbus owned by David and John Evans.

We hope to have our cadet scheme running shortly.
R.P.

IMPERIAL COLLEGE (Lasham Airfield)
Pete Bird and Alex Borak have Silver heights and Rafal Lukawiecki his 5hrs. We entered the Inter-Club League for the first time this year and are leading our group.
A.N.

KENT (Challock)
Now that Al Thompson is our course instructor we have a seven day operation. Alan Kemp has gone solo and Bob Burden has a full rating.

Keith Nicholson joined our syndicate fleet with his immaculate two-seater Acro Twin 3.
A.R.V.

LAKES (Walney Airfield)
First solos were flown by Jim Ashcroft, John Martindale, Mark Mason and Andrew Tebay. ➡

Identical twins, Jonathan and Mark Sugden of Peterborough & Spalding GC, with instructor Richard Kilham who sent them solo a few days after their 16th birthday.

The Connel GC's outing to Mull. David Howitt photographed the group on Glenforsa Airfield.

Norfolk GC's new solo pilots with instructors - l to r, John Herring, Adrian Bennett, George Day (instructor), Mike Sweeting and "Woody" Woodhouse (CFI).

Above: Harry Wright (Bath, Wilts & North Dorset GC) after going solo. Below: (l) Booker GC's new Duo Discus with Brian Watkins (l) and Al Kay. Centre, Richard Rockley (Buckminster GC) prior to going solo. Far right, Mark Parsons (r) and Phil Pickett of Stratford on Avon GC with the Dart 17 they refurbished and gave a distinctive colour scheme. Photo: Harry Williams.

Graham Welch gained Silver height in local wave and Alan Meadows finished his Silver with a marginal 74km flight.

Peter Redshaw completed his UK 100km diploma and to demonstrate what the club IS-28 could do (see last issue, p167) flew a 100km thermic O/R.

Peter Lewis (CFI), Graham Sturgeon and Peter Redshaw were the first pilots of the year to make it across the Pennines into Yorkshire resulting in a convoy retrieve involving nearly half of the club - it was a Bank Holiday!
A.D.

LASHAM (Lasham Airfield)

Graham McAndrew takes over as CFI on September 1. (See the BGA News.)

Hugh Kindell and Andrew Fordyce flew their first 500kms on May 30. On the same day, Bill Tonkyn flew a Kite 2 at a rate of climb of 1000ft/min to 4800ft.

Lasham did well in the Overseas Nationals. Chris Garton won the Red Class and Mark Thompson was 3rd. In the Blue Class, George Metcalfe was 2nd and Steve Jones 6th.

Surrey and Hants GC have a new chairman,

Les Harris (r), The Soaring Centre's auditor for 40 years, being thanked with a presentation made by Tony Scragg.

Graham Gilkes, who has taken over from Mike Roff-Jarrett. Non club members are being encouraged to fly the club's solo gliders at "off-peak" times.

The hangar doors, built in 1942, are being reclad and having new rollers fitted.

Above: Bembridge, home of the Vectis GC, Isle of Wight.

Tim Browning, Clive Mansfield, Graham Ross and Colin Short gained Diamond heights in Cerdanya, Spain, with Brian Spreckley.
A.M.S.

LINCOLNSHIRE (Strubby Airfield)
The saga ends! After five years rebuilding, the club Skylark 2 flies again, joining our club K-7, Bocian and K-8. Our open weekend was a complete washout, but still a useful public relations exercise.

Harry Fleet won the first hour of the year cup in his Pirat and Dave Fenn, John Knott, Steve Sykes, Dave Draby and Tom Bartholomew (at 67) have gone solo.
R.G.S.

LONDON (Dunstable)
The club has a new K-21 fitted with the latest instrumentation and GPS equipment for cross-country training. We now have a direct link to the computer at the Met Office at Bracknell, which will give us even more accurate weather forecasting.

Shortly after winch launching in a T-31, Robin Tillett was delivered of a daughter, Emily, who arrived ten weeks' prematurely.

Very sadly, we have lost our club president, Dan Smith, who was fatally injured when his LS-7 crashed on take-off (see BGA News). He was 84. Our sympathy to his son, Graham.
R.C.

MARCHINGTON (Tatenhill)
The improving weather has brought a number of badge flights with Mark Sherwood and John Wood going solo. Piet Walton-Knight completed his Silver badge, whilst Paul Walton and Jim Robinson gained Silver distance and 5hrs, respectively. Bill Ulyett and Bob Thacker have Bronze legs.

We have two task weeks, have extended our introductory evening courses and, for the first time, there is midweek evening flying. We have bought a K-21.
B.T.

MENDIP (Halesland Airfield)
Our soaring season is well underway. Lawrence Anderson, Daryl Mansbridge, Keith Simmons, Paul Renshaw have Silver heights and Kirstie Turner and Mick Longhurst Silver badges.

At our open day in May we flew over 100 visitors resulting in a few new members and lots of interest shown by others. We have also flown a local radio reporter and are promised an 8min spot on BBC Somerset Sound.
G.W-S.

MIDLAND (Long Mynd)
The Camphill-Mynd plate is now going to and fro between the clubs after a few years at the Mynd unclaimed. We also have a Nympsfield-Mynd tankard unclaimed for some time. Does a Nympsfield pilot wish to fly in and claim it? We are looking forward to our 60th anniversary celebrations in August.

Peter Cope, Tony Errington, R. Mylchreest and Roderick Rennison have soloed. Mark Stapleton, John Warren and Bill Duckett have Silver distances, giving John and Bill Silver badges. Jon Blackhurst and Martin McCurdie have become AEIs and Ken Screen and Paul Stanley have their assistant ratings. Simon Adlard is now a full Cat instructor and Paul Garnham an advanced aerobatics instructor.
A.R.P.

NENE VALLEY (RAF Upwood)
We have a record number of instructors. Martin Reynolds and James Clark have AEI ratings and Gary Johnson is an assistant Cat.

Ron Sibley, Richard Howard and Ted Dickerson have gone solo, Nigel Perry has a Silver badge and "Taff" Turner a Silver height.

CFI Roger Emms and Nigel Parry are encouraging members to get away from the airfield after their BGA cross-country course.
R.T.

NORFOLK (Tibenham)
The Eastern Regionals were again very successful with Paul Shelton winning, closely followed by Nick Wall and Bob Fox. The Two-seater competition was won by Dave Aknai and Phil Woodruffe who came 5th overall. Our own chairman, Eric Arthur, was the highest placed local pilot at 7th.

Eric is retiring as chairman to concentrate more on flying. Our membership is on the increase and we are setting up a cadet scheme.

John Herring, Adrian Bennett, Mike Sweeting, Tim Davies, Dave Sturman, John Dixon and Mike Judd have gone solo; Jacki Bradford has a Silver badge and Norman Clowes a Diamond goal.

There were many fine flights during our task week in May. Phil Jones (Ventus) made a subtle protest to the task setters on one day by flying his own 300km triangle and then the task 200km triangle, completing this in the winning time. Needless to say, the other pilots considered the task quite sufficient.
K.E.P.

NORTHUMBRIA (Currock Hill)
We had an expedition of 15 members and six aircraft to Lleweni Parc with Tom Corrigan and Wilf Turnbull gaining Silver distances. Ken Murphy is well on the way to his Bronze.

Peter Johnson and Kevin Thwaites have gone solo. We have fitted a Borgelt vario system to one of our Puchaczs for cross-country training. George Wearing, of Bowland Forest, arrived in his Open Cirrus and left with the club "propeller" which we shall endeavour to claim back!

A new DG-300 has also arrived on site as has an LS-4 which was imported from Europe by Derek Robson.

Our lectures are well attended and cover many aspects.
J.T.C.

NORTH WALES (Bryn Gwyn Bach)
Our season started well with many wave and thermal flights. The fleet, ground equipment and field are in good condition after our dreadful winter.

We had an enjoyable if not soarable club week with another in August. The May open weekend was very successful with a second in August. Our courses have started well with just a few places left later in the year.

Mike Carlin has gained his 5hrs.
P.C.

OXFORD (Weston on the Green)
Max Makari has soloed; Barry Taylor has a Silver height; Chris Woodcock Silver height and distance and Howard Stone and Martin Cooper have Diamond goals. There have been flights in excess of 300km by Brian Payne, Steve Evans and Tony Boyce.

Our CFI Cris Emson gained a 10th place in the Overseas Nationals. We have a summer expedition to the Alps.
F.B.

PETERBOROUGH & SPALDING (Crowland Airfield)
Identical twins Jonathan and Mark Sugden soloed a few days after their 16th birthday. Mannel Williamson has also soloed and Mike Edwards gained Silver height and his 5hrs on the same flight.

Having spent the winter at Crowland, Snoopy began his travels in May when a glider from Norfolk GC "dropped in". However, his stay at Tibenham was short-lived because Roger Gretton, our chairman, retrieved him on May 30. (Snoopy's aim is to encourage pilots from both clubs to fly cross-countries, with extra awards on club ladders when achieved.) A Jantar 19 has recently joined our private fleet.

Our flying fortnight begins on August 1 rounded off by us hosting the Inter-Club League. Visitors are welcome to our renowned barbecue on August 13.
G.E.W.

RATTLESDEN (Rattlesden Airfield)
Andrew Howell, Andy Page, Adrian Cleveland and Kevin King didn't help the CFI to win the annual quiz (see last issue, p169) - they were better than that - they all went solo.

The Inter-Club League, spoilt once again by bad weather, did fly on the Sunday.

Dave Warren has gone solo and Martin Aldridge has a Diamond goal.
M.E.

SACKVILLE (Riseley)
The recent closure of DRE Bedford and the removal of the associated MATZ now allows us to fly midweek.

Our newly refurbished Super Cub is working hard with several new *ab-initios*. Mark Griffiths has a Silver badge.
D.C.W.

SCOTTISH GLIDING UNION (Portmoak)
After much hard work the clubhouse is looking splendid, thanks to Irene, Steve and their team. Kevin Hook gained his Gold distance and Mike ➡

Edwards his 100km diploma at a Bicester soaring course. They also have AEI ratings.

Gavin Goudie completed his Silver badge in a flight to Ripon. At 17 is he the youngest in Scotland to have achieved this? George Ross has gone solo, Mags Doig has her Silver badge, Derek Aspey Silver height and duration and Mike Sheehan (Derby & Lancs GC) and 16 year-old David Mclellan have their 5hrs.

Several enjoyed the good flying at the Scottish Regionals. Our task week, organised by David Bruce, was well attended but strong winds made the going tough.

Wave continued to produce lift into mid June allowing some interesting cross-countries.
G.S.G.

SHALBOURNE SOARING SOCIETY (Rivar Hill)
Our open day at the end of April was a great success with ten joining in the following months. In addition we have issued eight introductory (monthly) memberships which can be converted to full ones. This is welcomed as *ab-initios* had become a bit thin on the ground!

May 30 brought a crop of achievements. Ken Porter flew a 300km triangle for Diamond goal completing his Gold badge. Rob Sharpe took 5hrs to fly to The Park, getting Silver height on the way and so achieving his Silver badge in one flight. Peter Mortimer also flew to The Park for Silver distance, Chris Dearman and Alan Brind got to Silver height and Bryan Vovell flew 100km for the part 1 of the 100km diploma. Gareth Naples and Bill Orson have gone solo and Jim Gavin has a Bronze leg.

The club set up a trust fund in memory of Dave Maleham, chairman and instructor, who was tragically killed in a flying accident in 1991, with money donated from his family, friends and the company he worked for. The trust's aim is to assist youngsters to learn to fly who would otherwise be unable to afford it and consists of free membership for a year (donated by the club) and financial assistance towards flying fees. This year the gliding scholarship has been awarded to Ronnie Slatter. However, another candidate made such an impression on the selection committee that an additional six months membership has been awarded to Chayla Oakley.
J.R.

SHENINGTON (Shenington Airfield)
We came joint 1st in the first Inter-Club League with an even better result in the next. We've had a good spring with many going from pre-solo to Silver in less than a year.

Barry Bullen has gone solo; Chris Kidd and Rachel Carter resoloed after a break; David Weitzel has a Bronze badge; Terry Herbert and Arthur Carpenter have Silver badges; Rachel Carter and Chris Kidd Silver heights and 5hrs; Sheila James, Rob Russan, John Hartley and Brian Thompson Silver heights; Phil Akrill has part 2 of the 100km diploma and Brian Babb has Gold distance. Paul Warner and Red Staley are assistant Cats and Simon Adlard a full Cat.

We had a busy open weekend and plan more throughout the summer. Visitors (flying or otherwise) are always welcome.
T.G.W.

SOUTHDOWN (Parham)
Les Merritt and his team did us proud in the D-Day flypast (see p214.)

After more than 2000 man hours of dedicated work, the Olympia 2 is ready for its test flight. When it arrived it was in a sorry state but Mick Dunford, Ron King, Bob Stringer and Ted Nicholson have lovingly restored it to its former glory.

Kevin Pickering and Chris Hancock have Gold badges and Jerome Ennis a Silver badge.

Despite indifferent weather, our cross-country squad have continue to set off on impossible tasks, Guy Westgate being among the most successful in completing 300km triangles. Bob Adam, bored with outlandings in Sussex, has taken to visiting the West Country.

Henry, the airfield cat, has a pair of swans for rivals. They flew in from somewhere, without permission, and have so far paid no reciprocal fees!
P.J.H.

SOUTH WALES (Usk)
Evening flying and courses have been running successfully thanks to the tireless work of Jane Paul, the course secretary.

The rented extension to the field, negotiated by John Milsom, has improved winch launch heights in north-easterly winds and our new powerful winch continues to give excellent launches in all wind directions.

We have an Astir CS for pilots moving on from the K-8, recently refurbished by Iain Evans.

The first few days of the task week were a great success with numerous tasks completed including several 300kms, 400kms and 500kms. 300km badge flights were completed by Mike Dunlop in an L Spatz and Maureen Weaver in a Dart 17.

Bill Mills, DCFI and safety officer, has run a series of well attended safety forums.
M.P.W.

STRATFORD ON AVON (Snitterfield Airfield)
Peter Jones and David Spooner have gone solo, Ian Edkins has 5hrs and Sharon Edlin Silver distance, landing at Aston Down in her ASW-15.

New members are trickling in, particularly as we now offer a seven day operation, and holiday courses are looking up after a slow start.

Bank Holiday Monday was a brilliant soaring day with many hundreds of cross-country kilometres flown.
H.G.W.

THE SOARING CENTRE (Husbands Bosworth)
The progress of the clubhouse was reported on at the AGM. The club's auditor Les Harris retired after 40 years and a presentation was made to him by Tony Scragg. Barry Broom and Alan Foxon retired from the committee after many years' service and were replaced by Carl Buzzard and Basil Fairston.

We have had some good flights and Sonya Hornby and Richard Cartwright have their 5hrs.

Our task week was a success - despite the weather there were four competition days. The winners were Bob Nicholls (Ventus T), in the hot ships, Tom Burton and Rory Ellis (Sport Vega), in the Sport Class and Bill Clay, Martin Lee, Keith Ashford and various instructors (Bocian) in the two-seaters. The competition was run by Doug Sadler and Claude Woodhouse who both retire from this job after many years.
T.W.

ULSTER (Bellarena)
The year's first cross-countries were as late as May 29/30, in difficult NE conditions but much welcome bright sunshine and phenomenal visibility.

Because of its proximity to our ceremonial site opening (see last issue, p148) we postponed our traditional open day in May in favour of an August Saturday. We are experimenting this summer with a number of two-day, all inclusive, weekend courses with a dedicated trainer and instuc-

tors and a guaranteed sequence of flights.

The new site and big hangar has provoked a spate of procurement; recent arrivals on the field include a Jantar 1, a DG-300 and, most recently, Tom Snoddy's Cirrus.
R.R.R.

VALE OF WHITE HORSE (Sandhill Farm)
At our successful open weekend in April the use of a tug was popular - we are now trying to have aerotows available about once a month.

Some fine weather resulted in Mike Leach get ting his distance and duration to complete his Silver badge; Gordon Walker (CFI) his 300km and Jonathan Huband a Bronze badge.

Steve Parsonage organised an expedition with the K-13 to the Long Mynd and put in a great deal of hard work on the trailer. Everyone had soaring flights.

John Ashcroft is enthusiastically leading us in the Inter-Club League.
S.F.

VECTIS (Isle of Wight, Bembridge)
We've had good soaring conditions and on one occasion most of the thermals were found over the sea. The longest flight this year was Martin Parson's 4.5hrs in the SHK and Malcolm Huddart has a Bronze badge.
M.J.H

WOLDS (Pocklington)
Our Derek Piggot weekend went well with a good attendance The opportunity to "fly with Derek" was snapped up by many (see photo).

Our new task weekends have encouraged many to fly cross-countries. We had some good soaring weather with more than 2500km covered on one day. A new height record was set by Derrick Roddie, climbing to 25 000ft above the site for Diamond height on May 31.

The club's new Junior has had a lot of use in the last few weeks and we have had too many badges and first solos to mention.

There is still time to enter our Two-seater Competition starting on August 21-27.
M.F.

WREKIN (RAF Cosford)
We have had good cross-countries in the last two months with a 300km for Siobhan Hindley and Ian Cramman completing 298.7km of a 300km task. Adam Gresh has Silver duration and height and George Wilson and Alan Podmore Bronze legs. Dave Farrell and Dave Hayward have gone solo with Steve Wright and Ian Gallagher re-soloing after long lay offs.

Our "start of the season party" was a great success. Tiffany Rolfe, a member of the BGA staff, has joined us.
I.C.

YORK (Rufforth Airfield)
Our first open house weekend was a great success resulting in visitors reaching saturation point. Chris Brayne has a Silver badge and Phil Ellison a Bronze.

Sadly, Tony Simms has resigned as our airfield manager.
H.McD-R.

YORKSHIRE (Sutton Bank)
Peter Ticehurst and Peter Cowling have gone solo and John Lynas has a Gold height. The task week, won by Mike Brook, was a great success with eight out of nine scoring days, flights in wave to 19 000ft and cross-countries up to 460km.

Our replacement Pawnee is now in use and we have installed Meteosat in the clubhouse.

We are celebrating our 60th anniversary during the Slingsby week starting on August 29. Everyone is welcome.
C.L.

ARSON AT AN ITALIAN CLUB

A gliding club's hangar at Missaglia in Italy was set on fire, the building collapsed and all the gliders and tugs inside were destroyed. No doubt many, or most, gliding clubs are vulnerable to such vandalism, and it is probably worth considering what could be done to improve security. (Translated from Volo a Vela by Martin Boycott-Brown.)

WAY OFF TRACK

Of Horsas, Hamilcars and heroes

It was a master stroke of Lasham's Bob Pirie and others to have organised such a tremendously high-profile plug for gliding as the formation flypast of tugs and trainers over the Queen and 14 other heads of state in the Solent which opened the main D-Day commemoration on June 5. (See p214.)

It was also a stroke for justice and equity too, for until Bob put forward his plan the contribution to the Normandy invasion of the Glider Pilots' Regiment threatened to be overlooked.

One can't expect top PR "consultants" and high-price hype merchants, feeding at our expense from the Whitehall trough, to have remembered people as inconsequential as the D-Day glider pilots and their passengers. After all, their initial suggestions for an appropriate remembrance included brilliantly original and relevant Spam fritter-frying competitions.

But it was, perhaps, remiss of the MoD planners not to have remembered until Bob and his pals prompted them.

This may have stemmed from the fact that gliding as a means of military assault died with the war's end. It has never been used in any conflict since. Assault gliders became as extinct as dinosaurs. And no one in the immediate aftermath thought of preserving intact a single Hotspur, Horsa or Hamilcar - any more than any complete Halifax or Stirling bomber survived.

Too young to have experienced the Second World War as anything but an air-mad London schoolkid and evacuee, I nonetheless have memories of military gliders.

Passing the Lee Marshes factories of Harris Lebus - the Henry Ford of furniture, whose expertise in mass producing wooden goods made him a key member of the project team which brought the Airspeed Horsa about - one could see from the top deck of any bus between Tottenham and Walthamstow dozens of Horsa fuselages, and Mosquitoes too, lined up like monster Havanas in the factory yard.

On D-Day itself I was in Nottingham, convalescing after major chest surgery and about to avoid the doodlebugs falling nearer home. I remember, even at that distance from the English Channel, standing in the garden on the morning of June 6 watching a constant stream of military transports overhead, including Dakotas and Halifaxes dual-towing Waco Hadrians on Y-shaped strops, as the initial Normandy assault built into an endless invasion stream.

Later, as a grammar-school kid back home in Tottenham, I cycled out to de Havilland's aerodrome at Hatfield one Easter holiday. It was probably 1948, in which case I would have been 13. My chum Norman Smith (not the amiable Bicester one) and I easily evaded a dozy DH works policeman on a bike to enter by a side gate and roam the place at will. The prototype Comet was under construction at the time; there were Vampires on the deserted assembly lines and aprons and a gleaming brand-new Dove.

In the holiday silence, its retracted door handle made an alarming clang as we released it to peer inside.

Later, still undetected, we hid and ate our sandwiches in a Horsa fuselage seeing out its days, unexplained, in a DH hangar. It was only on leaving the sanctuary of the Horsa that we were spotted. After hotly pursuing us on his bike the works policeman slung us out on to the St Albans road.

It is unbelievable now - in these days of terrorism, intense security, intruder alarms, CCTV, armed guards, Alsatians, Rottweilers and all - a microcosm of the safer, more relaxed if less affluent life in early post-war Britain.

But more important: what happened to that Horsa fuselage?

As for the men who flew to war in such machines: a few years ago I stood in the small, rough, boggy and tree-surrounded field beside the Pegasus bridge across the Caen canal at Bénouville where the first D-Day Horsa landing was made at 0016hrs GMT, several hours before the seaborne assaults began.

Armed with the experience of a cross-country soaring pilot, I would have rejected it even for a field landing in a K-6 - let alone a transport glider, overloaded with troops and explosive ordnance, approaching at 80kt, at night and under fire.

And squeezing in to the same small field were other glider pilots, performing the same feat of unimaginable skill and bravery.

Their fraught field landings helped make our pleasurable peacetime ones possible - and they beggar belief.

OVERSEAS NEWS

500KM IN ICELAND

News of the world's most northerly Diamond distance has been published in Sweden's gliding magazine. The pilot, Magnus Ingi Oskarsson, flew his much modified Club Libelle (17m, retractable gear, long canopy) on a double O/R over a SE/SW course just inland from Reykjavik, Iceland. He covered the 558km in 7hrs 8min, mostly in wave, and has now already worked out a route for a 1000km attempt. (Translated from *Segelflygsport* byAlan Harris.)

AIRBAGS FOR GLIDERS

The sometimes tragic experience of previous years and the recent German study on the difficulties of baling out of gliders have led to a number of more or less complicated engineering schemes to solve this problem.

Thomas Matuschak, a student from Stuttgart University, has come up with a solution which looks practicable and could be reasonably priced. It consists of an inflatable cushion, shaped to fit the glider seat and lift the pilot to or above the level of the cockpit wall when operated. This makes it much easier and quicker to get out of the glider and use a conventional parachute.

The cushion is inflated from a compressed air bottle, much like a Mae West or life-raft. In fact, Thomas has been helped by a local company which makes these products and is planning to produce this life-saving aid.

Unlike more complicated abandonment devices, the cushion will be easy to retrofit to existing gliders. (Translated from *Aurokurier* by Alan Harris.)

ASI FOR WINCHES

Some members of a club near Düsseldorf have developed a telemetric speed indicator for winch drivers.

The device produces an analogue, digital and acoustic readout of the glider's airspeed on the wire. A transmitter fitted to the glider sends a signal to a receiver on the winch during the launch and switches itself off afterwards to leave the frequency free for the next launch. The winch unit costs about £1000 while the transmitter in the glider is about £400. (Translated from *Aerokurier* by Alan Harris.)

ALPINE EMERGENCY LANDING AREAS

The Italian pilot Giorgio Pedrotti has begun to make a kind of "Jeppesen" guide containing safe landing places in the Italian Alps - which are not exactly blessed with large numbers of big, flat fields. Anybody who plans to visit the area might do well to contact him at: Via S. Pietro 3, 38100 Trento, Italy. tel 0461-824799. fax 0461-233448. Austrian Pilots have apparently already made such a guide for the northern side of the Alps. (Translated from *Volo a Vela* by Martin Boycott-Brown.)

ITALIAN NATIONAL LADDER

Since the ladder was instituted in Italy in 1988 it has grown enormously. Then there were 37 competitors who in 69 flights totalled 29 588km (29 of the flights were over 500km). Last year 175 pilots had 380 flights for a total of 152 256 km. Six flights were over 800km and 109 over 500km. This represents an increase of 48% more contestants than 1992, 79% more flights, and 179% more flights over 500km. The total of kilometres flown in 1993 was up by 112% compared with the previous year. (Translated from *Volo a Vela* by Martin Boycott-Brown.)

ITALIAN SAFETY REPORT

It seems that the same kinds of accidents occur in all countries. An initial report on gliding accidents in Italy in 1993 notes that of three fatalities, one was caused by the collision of two gliders while thermalling. One pilot was saved by his parachute, which opened just as he hit the ground, while the other was still in the cockpit when the glider crashed. He was killed by the impact.

Another mid air collision had a happier outcome - damage was slight and the landings were normal. Another serious accident with grave injury to the pilot occurred during a field landing. Of the other two fatal accidents, one involved a glider inexplicably, and apparently in straight and level flight, colliding with the vertical wall of a mountain top. The other saw the death of a wing-holder who did not move away from the runway after the launch. He was struck on the head by the wingtip of a landing glider and was killed instantly. This underlines the fact that the ground can be as dangerous as the air. Surely the most bizarre incident reported involved someone jumping into a car and racing off to retrieve a glider. Unbeknown to him the tow rope had been left loose, and a dog that had been playing with the end of it had literally wrapped it round a person, who was thrown to the ground, sustaining relatively serious injuries. No doubt most will say that dogs should be kept away from airfields, but one cannot help reflecting that usually people are far more dangerous. (Translated from *Volo a Vela* by Michael Boycott-Brown.)

CLASSIFIED SECTION

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PHOEBUS 17c 42:1, good condition, 720 radio, basic instruments, plus CAV11, barograph, parachute, oxygen, Dolphin under 4 yrs old. Metal/glassfibre trailer, roll on roll off one man rig/tow- out. View/fly Burn. £10 500 ono. Dave Peters 0226 295596 work, or 700358 home. Seller looking for Nimbus 2B/C, ASW-17.

INSTRUMENTS FOR SALE Altimeter 57mm, T&S 57mm, Bohli Compass, Cambridge MK2 Vario/Speed Director, EW Barograph. 0622 735063.

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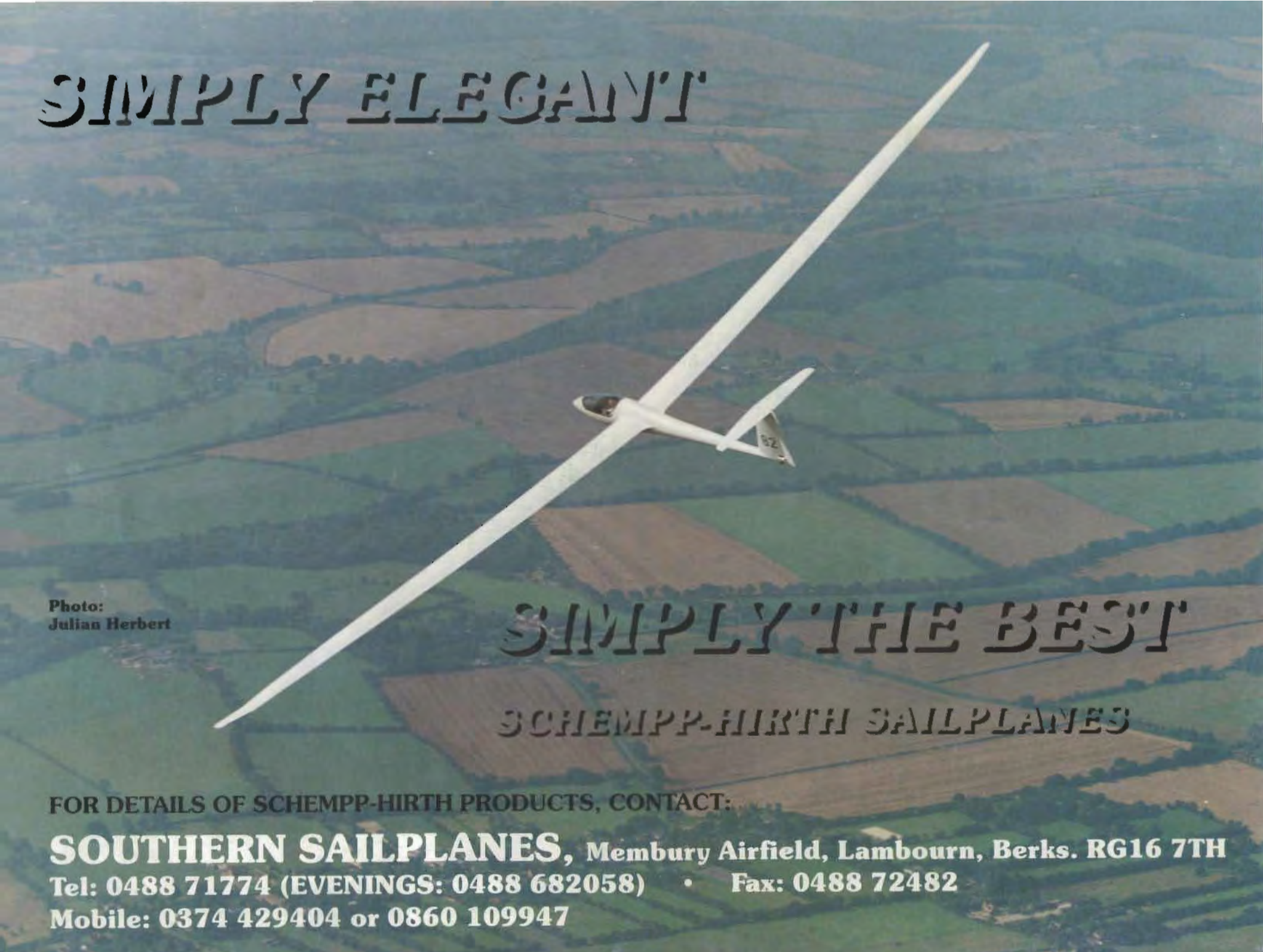

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