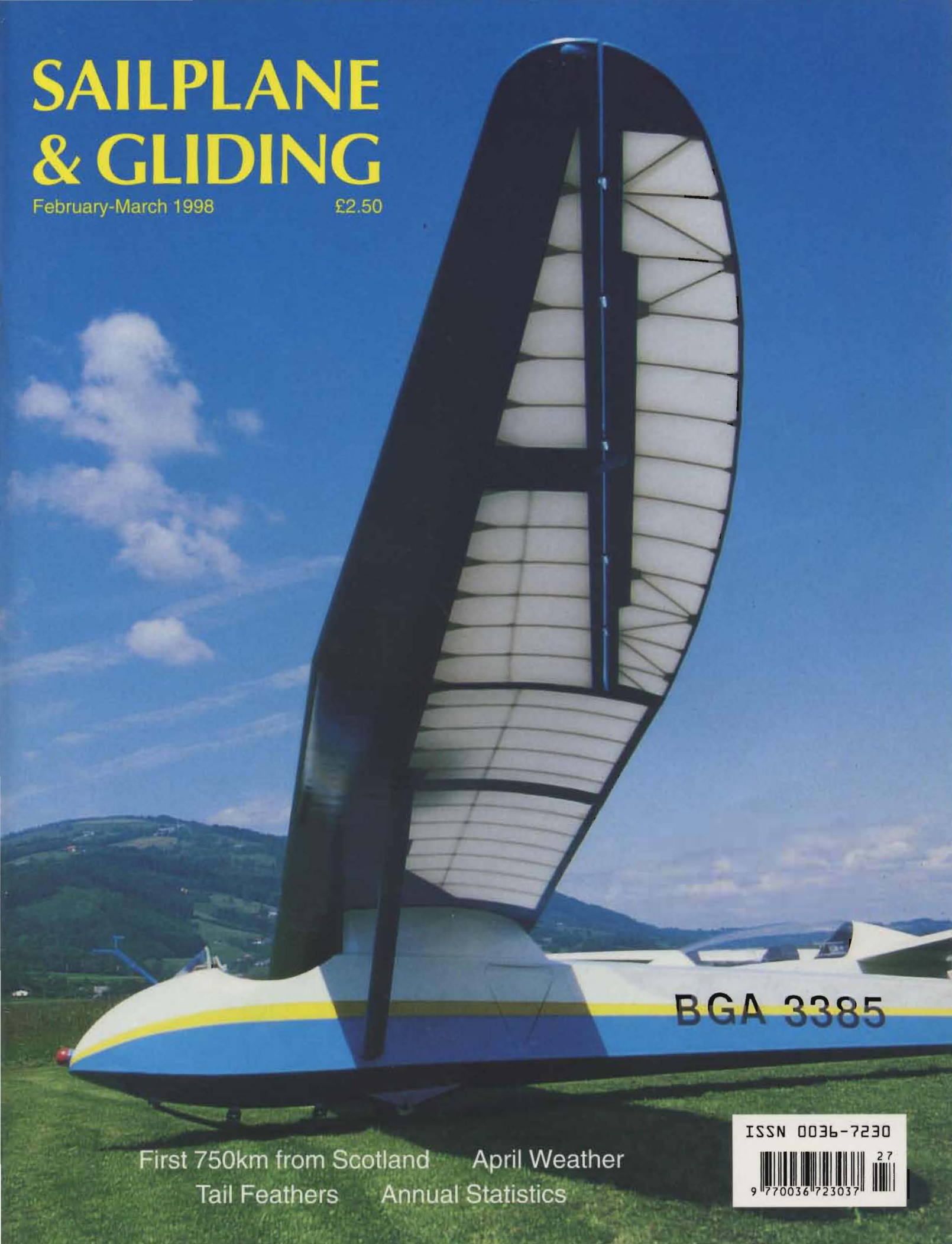
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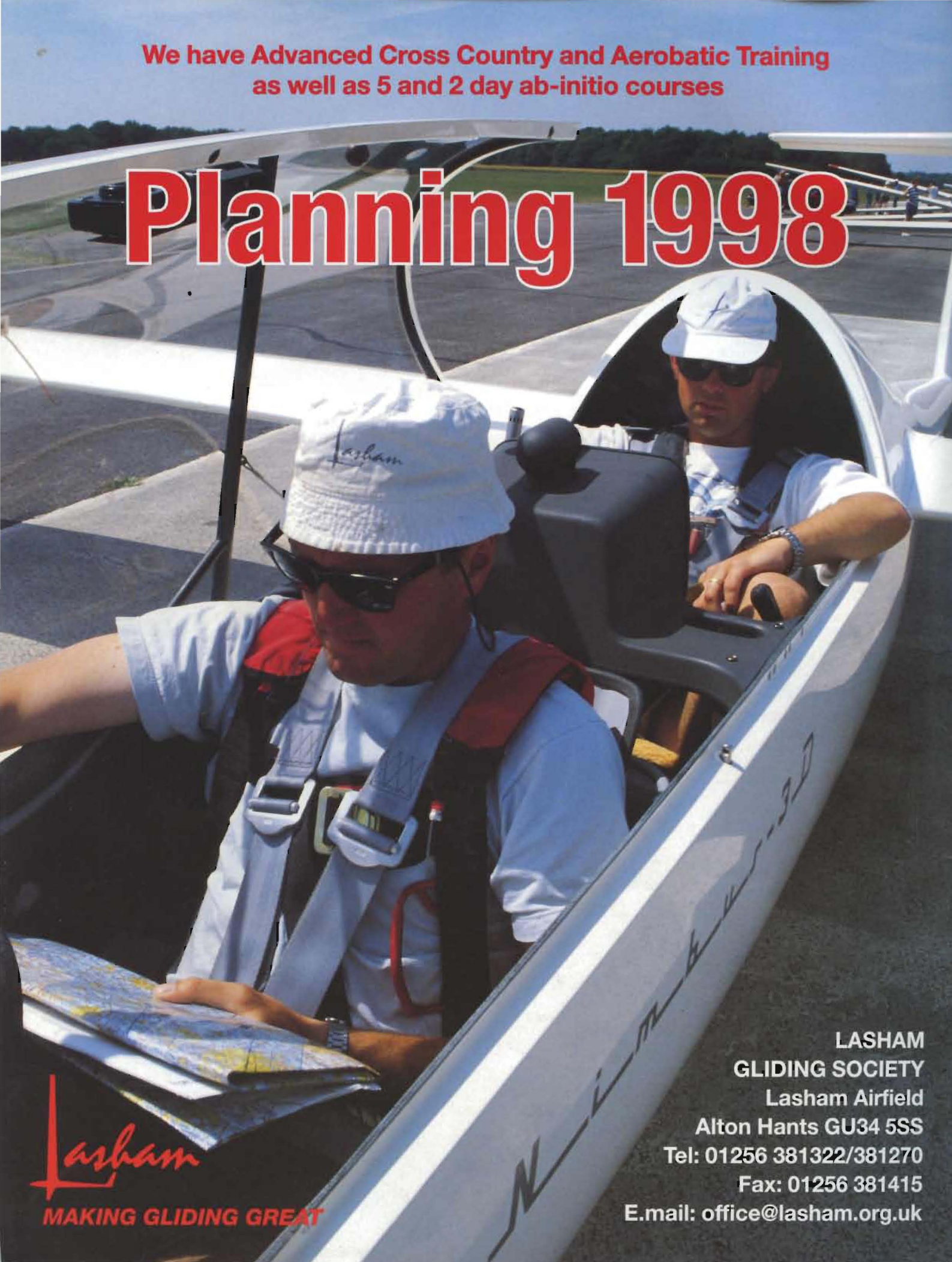


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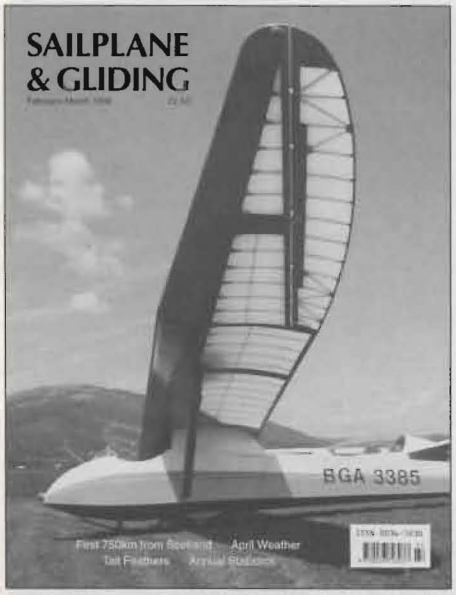
MAGAZINE COMMITTEE CHAIRMAN
C. Pollard

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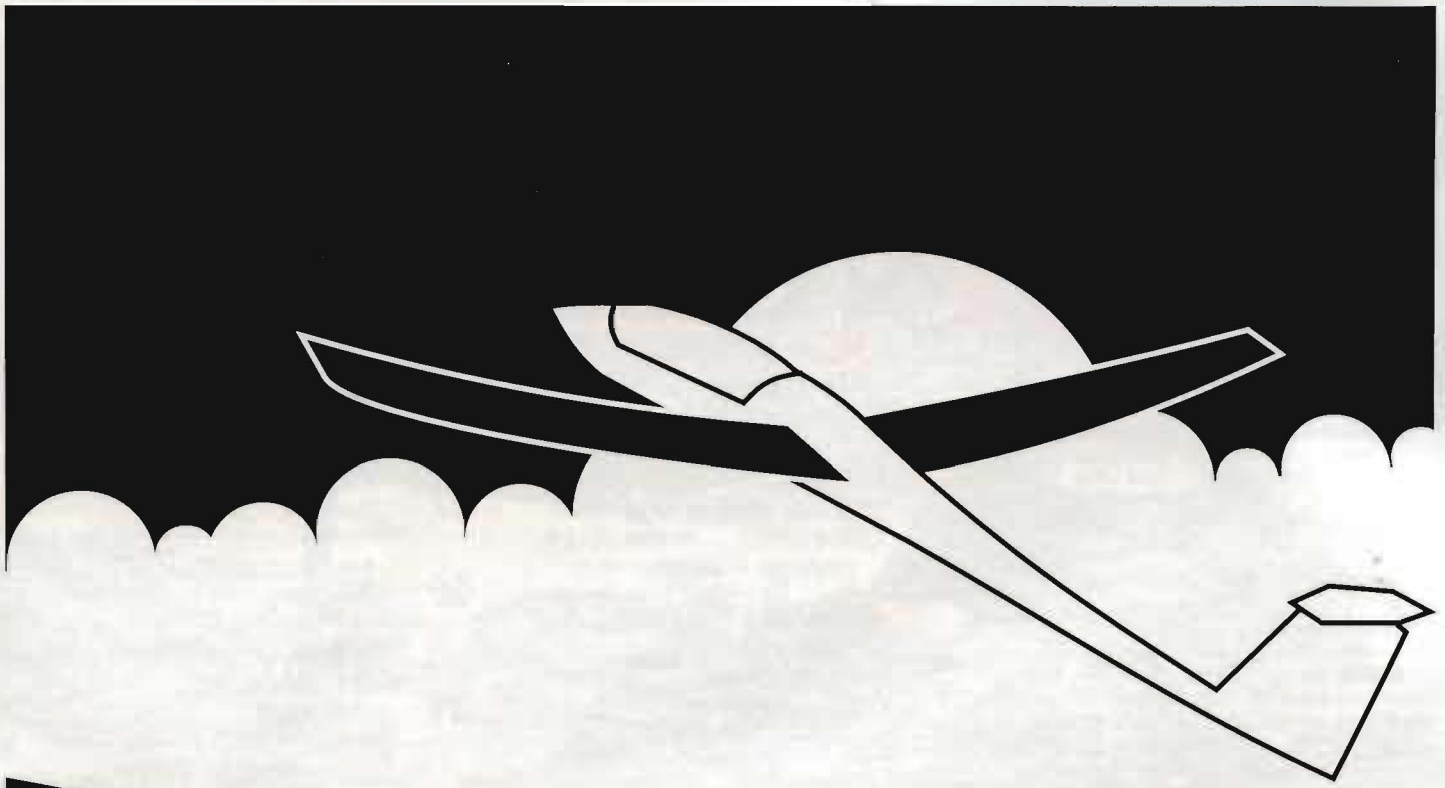
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SAILPLANE & GLIDING

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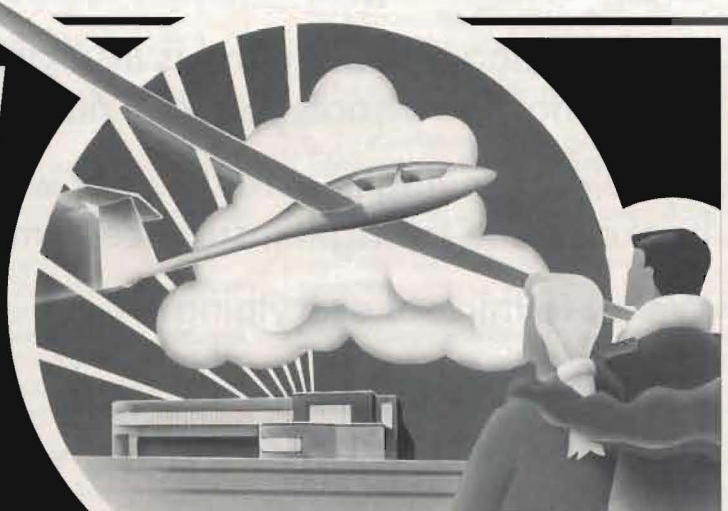
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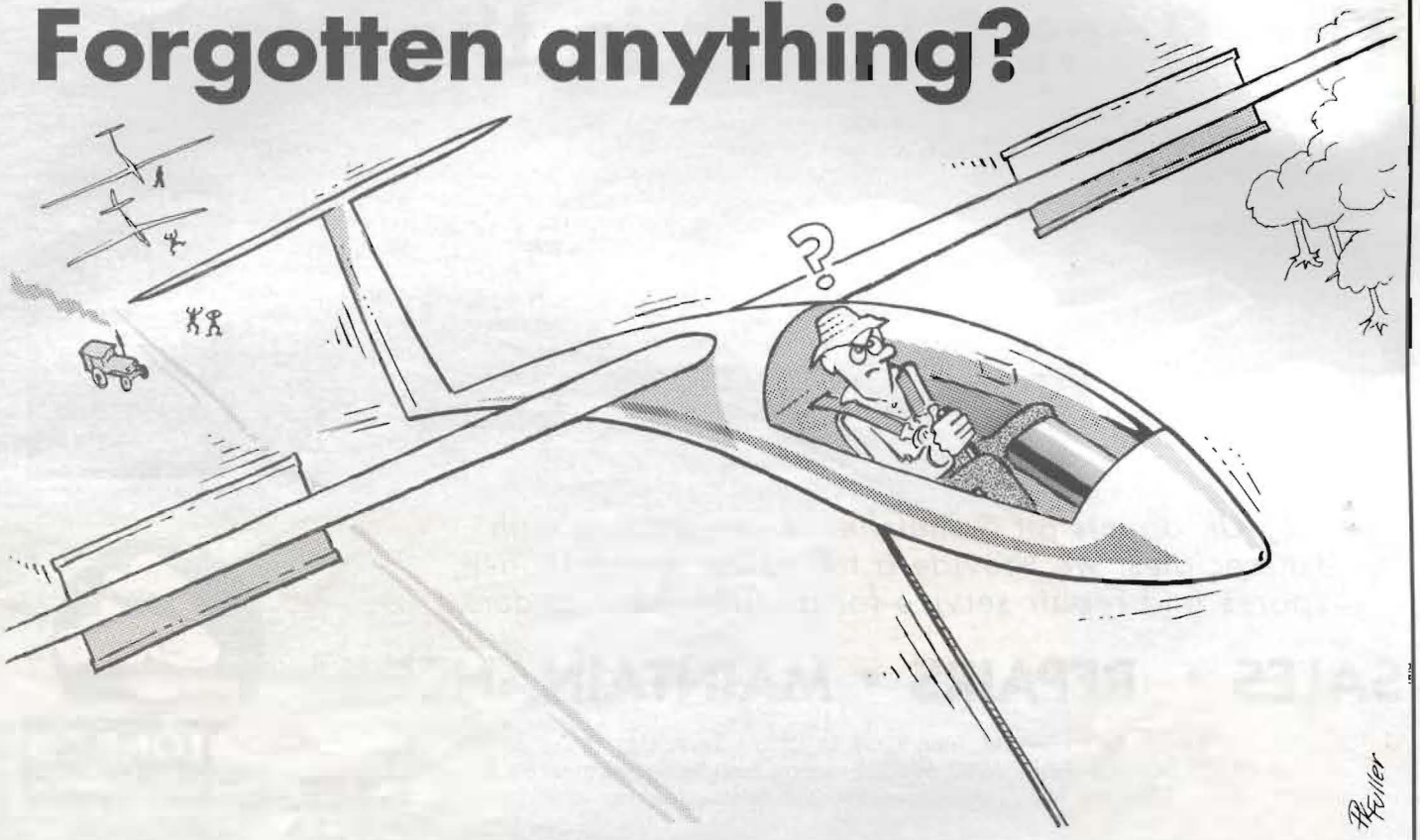
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YOUR LETTERS

ALPS COLLISION CASE

Dear Editor,

We are writing in response to the article on the Alps collision case in the last issue, p361. Let us start by saying that we have been overwhelmed by the support shown by the BGA membership. The funds raised by the appeal permitted us to put forward a strong defence in court last June, as some of you will doubtless have heard from Bill Scull and Peter Hearne. This made the verdict all the more incredible, and has resulted in the current appeal to support a retrial.

It is clearly not possible to present all of the arguments which were considered by the court in a letter of this type. We are sure that some readers, particularly those who have flown in the Southern Alps, will be interested in an account of the court proceedings and written verdict received after the announcement on September 25, 1997.

We have therefore written an article which is posted on the BGA Web Site. Copies can also be posted or faxed by giving either of us a call (Jonathan - 0121 246 1956, Phil - 0117 968 2257). We are also willing to discuss any of the issues raised.

JONATHAN MAY & PHIL WOODRUFFE

WINCH LAUNCH NIGHTMARE

Dear Editor,

I recently had a nightmare of a winch launch in my trusty Skylark. An extra Ottfur hook was fitted three years ago for more stable winch launches. The device was secondhand - "stripped and checked and all serviceable" - and given a test launch. Since then it has, of course, been checked at Cs of A and has had less than 50 winch launches.

From the outset it was a little stiff and became very slightly stiffer to release when checked at the DI - I should have thought of this phenomenon. Normally the cable back releases at the top of the launch and so there has been no attempt to release while under launch load conditions. Another mistake.

Recently the winch driver gave me a launch which went over the permitted speed. There was a cracking sound under the seat while I was unsuccessfully attempting to release the cable. It took me a while to settle down after thinking I might have had to bale out.

Later an inspector checked the release (and the glider) and found it should have been all right. I sent the release hook to Cair Aviation who told me it was "worrying". The securing plate had been slightly bent. More significantly the geometry of the device was incorrect.

Superficially the mechanism seemed serviceable, however on their test rig it was impossible to release under less than winch load conditions. The £75 hook is effectively in the bin and I'm waiting for a replacement.

I don't know whether I'm lucky to be alive but it's certainly a good job the back release worked. So be warned. I believe there could be similar hooks out there, all passed as serviceable in good faith by inspectors. But will they release under full winch load conditions?

"STREB" Strzebrakowski, *Peterborough, Cambs*

Colin Street of Cair Aviation, owners of the design and manufacturing rights of the Ottfur safety release hook, replies: When we received the hook in question for examination we did indeed find it "worrying".

The cause for our concern was the fact that it was a hybrid hook made up from sub assemblies from other units and a mismatch had occurred between the casing and a modified lever. The result was that the over dead centre (ODC) geometry was sufficiently in error to fully lock up the mechanism when under cable load.

The differences between Ottfur sub assemblies are quite small and subtle and once assembled there is no facility to adjust the ODC geometry. This has to be done during assembly and in consequence "in the field" assembly, without the benefit of a suitable assembly and test procedures, carries the risk of an incorrect ODC geometry.

A report on the incident, together with recommended procedures for in the field assembly and test, has already been sent to the BGA chief technical officer and should now be in circulation.

We would like to point out that the Ottfur is an extremely reliable and safe hook as time has proved over the many years since its inception, but modification to the mechanism, however well intended, can carry risks.

Many of the hooks in use today were manufacturer a long time ago and we are finding that some of the original laminated hook beaks are suffering from international corrosion. This is difficult to see and in bad cases the beak can snap. New and reconditioned exchange Ottfurs now come with a CNC machined solid beak and are complete with their own care and maintenance manual and test calibration certificate.

We are continuing to improve the original Ottfur and develop a new series for the modern glider, but still adhere to the basic mechanism designed by John Furlong all those years ago and to which, perhaps, many pilots owe their lives.

Dick Stratton, BGA chief technical officer, adds: I will be issuing guidance on Ottfur hook maintenance. Streb is over-stressing his risk in that the automatic release worked.

CURRENCY NEEDED

Dear Editor,

No, this isn't a begging letter or a plea for European Monetary Union.

It results from humble (on the basis of "There but for the...") perusal of entries in the BGA Accident Summary. Whilst the BGA Safety Committee does deserve two cheers at least for publishing details of all accidents and incidents in *S&G*, we are left guessing about aspects which other authorities routinely publish.

For example, take the pilot with a four figure total of hours who, flying solo in a basic two-seater trainer, wrote it off failing to cope with increased wind. Had the pilot had a lay-off? For how long? Had the pilot flown the two-seater recently?

Another example was the pilot with 50 or so hours who, flying a competitive modern FRP machine, hit a tree while landing on a Silver distance attempt. How many hours on type had the pilot and how many hours recently? Being on a cross-country, we learn only of the location of the tree; other issues might include the launch site.

To examine causes accurately (in the interests of not making the same mistakes), I suggest the reader needs not only an indication of a pilot's total time (as given now), but just how much of this was recent and, in each case, how much was on the type involved in the accident.

CAA and FAA accident reports include data on the flying currency of the pilot so presumably this is available for gliding in the USA and for other sport flying in the UK. If such kindred

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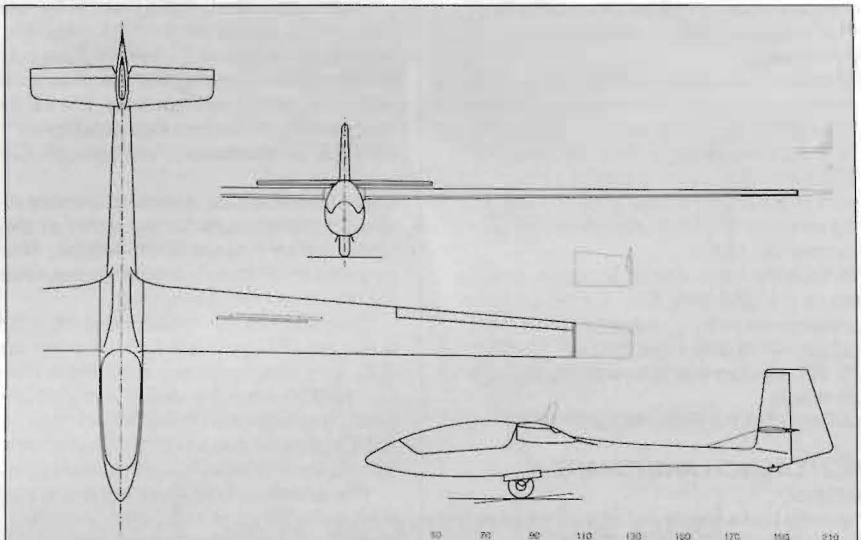
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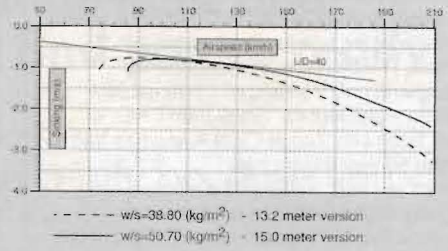
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organisations find it useful to publish these , why don't we?

Publishing the extra data should not cause our space-starved editor too many problems. In the BGA Accident Summary in *S&G,* the column labelled "Hrs" could contain total hours and on type, plus total hours over the last six months and on type during the last six months. An 845hr pilot with 78hrs on type with a total of 59hrs in the last six months, including 32 on type, would get an entry:-

Hours
Total/prev 6 months
On type/prev 6 months
845/59
78/32

Also, why do we no longer get told where "incidents" occur (we used to), on the basis that an incident could easily have been an accident? Local issues may be just as important.

Let's see these extra details; they might reveal problem areas needing attention.
TONY GEE, *Marlow, Bucks*

Bill Scull, chairman of the BGA Safety Committee, replies: Not a bad idea at all. We'll give it some thought.

COURTESY AT ABOYNE

Dear Editor,

I would like to pay tribute to our recent visitors. Autumn at Aboyne is always hectic but this has been one of our busiest, making life for our staff particularly difficult. It was pleasing that even during the most frenzied moments when the cloud gaps closed in and we were subject to Arnhem-style massed landings, virtually everyone kept their cool and showed great courtesy.

The standard of flying was very high (despite one mid air collision and the obligatory two or three wheels up landings) and I applaud you all for your good airmanship, good humour and patience. And well done to those who gained badges.
AL EDDIE, *CFI of Deeside GC*

MORE ON ROLLOCKING (or rollicking!)

Dear Editor,

I read with interest Chris Ellis's fascinating explanation in the last issue, p327, for the term rollocking. But there is another implication of the term which is not nautical.

In the glory days of the British Empire, the common soldier was often a mercenary or recruited by coercion. The need for discipline was often obtained by ritual verbal humiliation - rollicking. The aim, usually achieved, was for the recipient to be more afraid of his officers than the enemy. The result was a superior fighting force.

Verbal humiliation rollocking is particularly unattractive from those younger than oneself, whatever their position of authority, as Doug Edwards pointed out. Forty years of instructing convinces me that it has no part in flight training. Our purpose is to convey to the student an understanding of the principles involved in controlling the craft and using the air's energy and develop the pupil's judgment in their use.

Rollocking induces tensions which reduces the student's concentration to a point of indecision. It creates resentment and often brings about a reluctance to ask questions in case the inquiry releases a further torrent of abuse.

When done to excess, the student switches off and waits for the performance to finish - then carries on as before. I think those in authority who indulge in rollocking are on an ego trip.
CHRIS RIDDELL, *Harrogate, Yorks*

Dear Editor,

I can sympathise with Doug Edwards (see the October issue, p261). When I was less than experienced I used to fly the odd trip with good Comp pilots (one or two Nationals winners) who seemed to take great delight in shouting the odds instead of actually showing me what to do and why.

In later life I have become a CFI and have no hesitation in reprimanding instructors (privately) who partake in these antics. There is simply no need and it shows a poor personality and a distinct lack of "professionalism". It is a shame that some CFIs feel compelled to retain these insecure people as instructors. No one learns from a big head!
JOHN HULL, *Forres, Morayshire*

THOSE COMPETITION REPORTS

Dear Editor,

I am writing in support of David Howse (see his letter in the last issue, p325) but in a different frame. I am interested in Comps, but I also find the excessive reporting in *S&G* boring. More articles for the average and beginner pilots would make for better and more varied reading.

The Radio Society of Great Britain, the association for radio amateurs, surveyed readers and discovered that a little over one per cent were interested in competitions. I would hazard a guess that there would be a similar reaction from glider pilots and readers of *S&G.*

I hasten to add that the RSGB magazine has changed completely since the reduction in Comp reporting and has a much more contented readership!
IAN KEYSER, *Dover, Kent*

Dear Editor,

Thank goodness for David Howse's letter regarding the tedious and self-adulatory reporting of competition results. What a yawn these articles are! The past two editions of *S&G* have bombarded us with reports, whose only missing detail seems to be the inside leg measurement of the pilots involved. There were an incredible seven reports covering competitions in the last issue - and it's the same old faces who appear time after time. Some clearly can't get enough of this reportage and have to include it in their adverts as well - that's guaranteed to bring in the buyers.

Let's have more educational articles about gliding technique, cross-country theory etc. You never know - maybe even the competition pilot still has something to learn!
PAUL BRAMLEY,

Dear Editor,

I refer to the letter from David Howse. I am afraid that I cannot lay claim to the brilliant bit of advertising - it was the work of another Jones. However, at least it went some way to satisfying Mr Howse's complaint in that it eliminated the boring 3rd to 7th places!

I agree that the Comps results and accounts should be in a pull-out section. I would then be able to pull out the pull-out section and bin the rest!
RALPH JONES, *Southern Sailplanes*

(We would just like to point out that individual competitions get far less space than even five years ago. It is just that there are now so many and this was a World Championships year. Even so we managed to condense them (including competition related material such as the promotion lists) into 34 of the 384 pages of the six issues, which isn't really excessive. S&G should be judged over a year, not an issue, and we promise there won't be a hint of a results table until way into the season! Ed.)

We welcome your letters but please keep them as concise as possible and include your full name, address and tel/fax number. We reserve the right to edit and select and point out that views expressed in letters and articles are not necessarily those held by the BGA.

REVIEW

History of the London Gliding Club...The First Twenty Years by Dudley Hiscox, available from the club at £2.50 plus 50p p&p.

In 1972 Dudley Hiscox, who died in 1988, wrote a history of the London GC which was duplicated. Now Ted Hull has had it printed and illustrated with some of the old photographs. And it is a fascinating story.

There is a photo of the club's first meeting at Stoke Park Farm, Guildford in March 1930, the year Dudley joined with a 10s 6p entrance fee and annual subscription of three guineas. He was given a leaflet advertising the club at the Itford meeting that summer when Robert Kronfeld, renown for his 1000m climb and 64 miles flight, was the main attraction.

But Dudley said he didn't realise that the three splendid modern gliders owned by the London GC (at that time the club was based at Ivinghoe Beacon, Beds) were in various stages of disrepair housed in a hired marquee erected beside a petrol station, or that there wasn't enough money to pay for the hire of the marquee after the club's last fiver had gone on the leaflets and entry forms.

But with 60 new members the club was back on its feet.

Dudley describes how some members had an eye on Dunstable Downs as a more suitable site. "To get proof," he wrote "a fully rigged primary was tied on to an open four-seater car and conveyed crabwise all the way down the road in order to try out the hill. I think it came back all in one piece!"

And so Dudley charts the London GC's illustrious progress with many intriguing stories and cameos of the early days. His lively style makes this most readable and enjoyable.

ASW-20'S TOP ENGINE FIVE YEARS ON

In October 1992, p262, Bill wrote about how he wanted a motor glider and yet didn't like the thought of losing his ASW-20. The answer was to fit a TOP engine. But was it a successful ploy?

Since that first article about the ASW-20 conversion a lot of water has past under the bridge and a considerable number of air miles covered.

I have found that the combination of an engine coupled to a glider with a good performance has opened up significantly more flight opportunities. Of course purists will say that an engine in a glider destroys the gliding experience, but to my mind it depends what you want out of your flying. If you want cross-country gliding with the attendant out landing risks, inconvenience and stress then TOP is not for you. If, however, you want to be sure you can get home in time for that special dinner party your wife insists you must not be late for, then this is one solution.

The TOP will help you to get around the countryside

Over the last five years with the TOP, one of the most enjoyable experiences has been visiting other clubs, having a natter and a cup of tea and returning with a long final glide in the evening when the air is like silk and the thermals are no longer present. With the TOP the technique is climb/glide and I have found that the best results are obtained by limiting the initial climb to around 4000ft. Although I have climbed to over 6000ft, I find that after 4000ft the climb rate starts to fade and the engine is less efficient.

Typically three climbs to 4000ft provide an overall height gain of 12 000ft (2nm) with two gallons of fuel expended. With the ASW-20 the glide angle with TOP retracted is around 40:1 giving a range of 80 miles before adding the 1hr of climbing at 50kts. This really does enable you to get around. I have done at least one flight from Booker to Davidstow in North Cornwall on two gallons of fuel. Admittedly with virtually no wind and some thermal activity.

Last year I had a very pleasant flight out to Lundy Isle and back. Some of you will no doubt question the wisdom of a ten mile over the sea flight, however, just consider this. With the ASW-20 TOP the climb rate is around 200 to 250ft/min. At 50kt and no wind this is an effective climb angle of 25:1.

As this is a steeper angle than the glide angle with the TOP retracted of 40:1, it will always be possible in a no tailwind scenario to glide back as far as you've climbed. Hence with GPS to tell you what is happening with the wind you can safety climb out over the sea knowing that in the event of an engine failure you can get back to the land. In addition, with the TOP not retracted and, say, an electrical failure which prevented retraction, the glide angle is still 26:1.

Hence provided you start out with say 1500ft safety margin you can still get back. Clearly the only real problem would be a sudden and dramatic change in wind direction or a structural failure. The former can at least be detected on the GPS and action taken accordingly.

On the occasion in question I started out across the sea with 3000ft above Davidstow QFE, which is 980ft amsl. I climbed continuously until overhead Lundy at 5500ft and then glided the ten miles back to the mainland, losing only 1600ft in the process. It was a magnificent but blue day with exceptional visibility and from Lundy I could see right down to Lands End. I landed back at Davidstow feeling very pleased with myself, having had a very good flight on a day when the thermal activity was abysmal.

The latter point is for me one of the strongest cases for a TOP, for I'm sure many of us have looked out of the clubhouse window on blue days and thought if only I could be sure of going somewhere and getting back. Also on really good thermal days when you want to be a purist you just don't fit it to the glider.

Turning now to the economics, the TOP has been totally reliable. It has never "touch wood" failed to start and perform. It has still only done 50 running hours but several hundred deployment/retractions.

In this time I have had the following minor defects:-

- Worn retraction drive pulley(replaced).
- Superficial crazing of light weight GRP cowling.

The former was not embarrassing as a slight pull back on the stick produced retraction immediately (the manual includes this procedure) and the latter is just a bit unsightly if you know where to look, but does not affect structural integrity. The cost involved in rectifying these items was trivial (*circa* £30).

Under the LAMS scheme the maintenance costs have been very low, the highest item of expenditure being the certificate of airworthiness renewal every three years for which the CAA charge £336 to handle the paperwork.

The decision to buy a TOP has for me anyway proved to be a good one and I would recommend it to any of you who have the same sort of doubts about the conventional gliding scene. Incidentally, if you do decide to fit a TOP (TOP fits ASW-20, Std Cirrus and Astir), I would recommend fitting it to an ASW-20 rather than the other two gliders to avoid the hassle with the CAA. As yet TOP has not been fitted to the Cirrus or Astir in the UK and believe me you don't want to be the first.

If visiting clubs do make sure you let them launch you

On a final note, if you do decide to fit one please, please, please, when you visit other gliding clubs use their launch facilities on the way out, otherwise I believe it's a bit of an imposition. Having said this you will frequently be asked to demonstrate the self launching capability as you leave. In this instance I always make a small donation to the club funds and everyone is happy.

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WALLY KAHN

ROBERT KRONFELD

It was fifty years ago next month that Robert Kronfeld, a gliding legend, was testing a tailless glider near Lasham when he was killed



Bill Kronfeld with his son Simon photographed beside a portrait of Robert. And here we have yet another example of three generations of glider pilots.

It is a remarkable quirk of fate that Lasham, which has developed as the largest gliding centre in the world, should be the very place from which Robert Kronfeld, the greatest pioneer of all time, took off for the last flight of his life. His fatal crash occurred on February 12, 1948, just 50 years ago at Lower Froyle, three miles from the airfield.

Born in Vienna on May 5, 1904, his early passions were his violin, skiing and mountain climbing. He achieved great fame in his kayak before being bitten by the gliding bug in 1927. By the following year he was an instructor at the Wasserkuppe, which was by then the Mecca of all glider pilots.

He was the first to realise that up currents below cumulus clouds could be used to achieve cross-country flights and as the result of a discussion with Dr Lippisch, the designer of his Rhöngeist sailplane (later called The Professor), he developed the variometer. He was also the first pilot to climb in a thunderstorm when in 1929 he doubled the world height record.

When in February 1931 the FAI instituted the Silver badge, Kronfeld, Hirth and Groenhoff were the first three recipients. The accounts of his pioneering flights make fascinating reading for the modern pilot who tends to take high performance and sophisticated instrumentation for granted. His book, **Kronfeld on Gliding and Soaring**, is an absolute masterpiece, the forerunner of books by Philip Wills and Derek Piggott. (It is incredibly difficult to find a copy but well worth the hunt.)

The Austria, designed and built for him in 1932 specifically for very efficient hill soaring with a span of 30 metres, broke up in cloud when violent up currents caused the wingtips to break off, forcing him to escape by parachute. Later, in his beloved Wien (a mere 20 metre span), he carried out a great number of spectacular flights.

He came to England in 1933 as a refugee from Nazi persecution and over the next few years gave gliding demonstrations in the USA and all over Europe. In May 1933 he used a most dramatic thermal by soaring over Mount Vesuvius during an eruption and had by that year completed over 10 000km in aerotowed flights on his way to various assignments. He was the first pilot to soar across the top of the Matterhorn, a feat repeated by his son Bill in 1963.

In June 1938 he was appointed manager and CFI of the new Oxford University & City Gliding Club and at the outbreak of war joined the RAF and soon found himself posted to the Central Landing School at Ringway near Manchester, which became the focal point of the Airborne Forces.

The unit, which owed a great deal of its subsequent success to many pre-war glider pilots, has been well chronicled by Lawrence Wright in his book **The Wooden Sword**. Kronfeld brought a wealth of experience to the work and he perfected the "Angle of Dangle" indicator which enabled the glider pilot to be towed at night or in cloud. He also test flew and evaluated all the military gliders. For his sterling work he was awarded the Air Force Cross.

After the war he joined General Aircraft Ltd as a test pilot to research the flight characteristics of tailless gliders. Four types, designated GA 56 1 to 4 were built which Eric "Winkle" Brown, the famous test pilot, describes in his book **Wings of the Weird and Wonderful** as "...the worst aircraft I have ever flown".

On February 12, 1948, Kronfeld, and his observer Barry MacGowan, took off from Lasham and were towed to 17 000ft behind a Halifax four-engined bomber. Whilst carrying out highly dangerous stall manoeuvres, the aircraft failed to respond and later calculations showed that an immediate negative 5*g* resulted. Both crew "redded out" but the observer came to long enough to jettison his canopy and parachute to safety.

It is certain that Kronfeld could not have recovered consciousness at all, which was probably related to his age. The one consolation is that he certainly did not suffer any fear or pain.

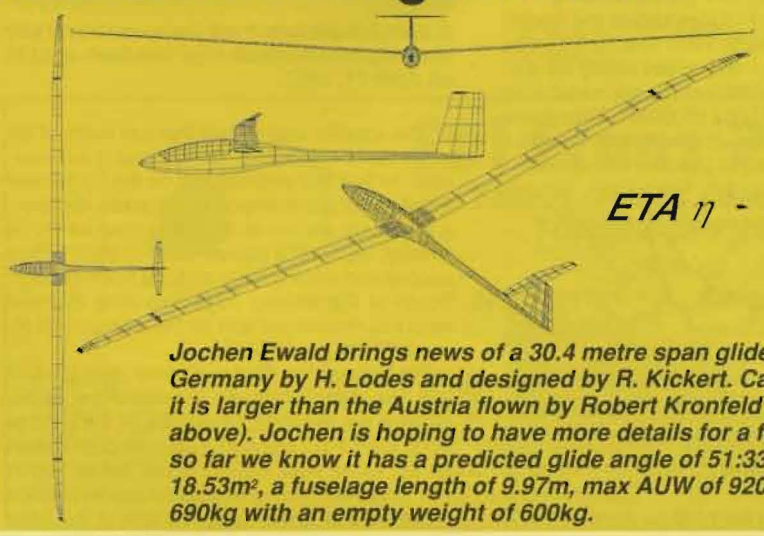
The glider crashed at 1145 into a field. Strangely Robert Kronfeld died just a few days after that other great pioneer of flying, Wilbur Wright. Wolf Hirth wrote a full and very sensitive obituary, which concluded with the following words:-

"After twenty fruitful years of devotion to the cause of human flight this great and good man has been granted an airman's sudden splendid death. His name like his deeds will never be forgotten. Robert Kronfeld lives on in every soaring flight".

He would have been delighted to know that Robert's son Bill and grandson Simon are both very active Lasham based Gold badge pilots - thus the wonderful family tradition continues in safe hands.

Robert Kronfeld's legacy to us glider pilots is incalculable. Soaring techniques, instructing, aerotowing, powered gliders, instrumentation to name but a few were some aspects of our sport which he invented and developed - no man has ever done more.

The World's Largest Glider



Jochen Ewald brings news of a 30.4 metre span glider being built in Germany by H. Lodes and designed by R. Kickert. Called the ETA it is larger than the Austria flown by Robert Kronfeld (see article above). Jochen is hoping to have more details for a future issue but so far we know it has a predicted glide angle of 51:33, wing area of 18.53m², a fuselage length of 9.97m, max AUW of 920kg and min of 690kg with an empty weight of 600kg.

TOM BRADBURY

APRIL WEATHER WINDOWS

With plans and aspirations for the coming season, Tom adds to the anticipation by reminding us that April can bring record breaking conditions and tells how to spot the really good days

Late April sometimes brings the first perfect soaring days of the year but such record breaking weather seldom lasts long.

Many people will have read the account by Klaus Wederkind of his record breaking 1122km triangle on April 21, 1997, in last August's issue, p223. He remarked that perfect gliding conditions seldom last longer than 30hrs. This is often as true for England as it is for Germany.

Here is a summary of what makes a record soaring day in spring.

1. The arrival of fresh cold air from the north. This encourages strong thermals.
2. Moderate subsidence to produce a stable layer at middle levels. This is needed to limit the depth of instability and prevent showers developing.
3. Low humidity aloft so that cumulus does not spread out to form a thick layer under the inversion.
4. A big difference between surface dew point and temperature so that the cumulus has a high base.
5. Light winds (for all except downwind dashes).

How the 1997 window developed

April 1997 was the last month of a drought which had lasted for two years in England. There was persistent high pressure over or near the UK which made it a very dry month. The monthly chart showed the average centre lay near Lands End. The flow downstream formed a trough over Eastern Europe which gave persistently wet weather there.

The record breaking conditions over Germany followed a plunge of fresh cold air from the north. This started in the arctic between Spitzbergen and the coast of Greenland on April 16. By April 18 it had spread down to Finland and the south of Sweden bringing snow and hail showers. By the 20th the main cold front had reached the Alps where it was temporarily delayed. Continuous snow fell over parts of southern Germany and Austria.

At first this air was too unstable. The necessary subsidence began when a ridge of high pressure built across Germany on the 21st. However, the window of fine weather was reduced by the approach of the next frontal system. This was approaching across the North Sea. The satellite picture for 1133hrs shows the frontal cloud across Denmark. Rain reached Kiel by 1200GMT on April 21 and edged slowly SE during the afternoon. Frontal cirrus appeared over Hannover (near TP1) by 1500GMT. Thus there was only one day available for the record and it would have been easy to pick the wrong route.

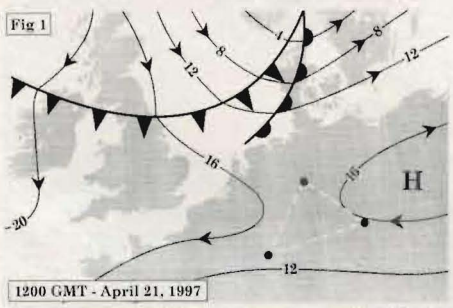


Fig 1. Surface chart for 1200 on April 21,1997.



A satellite picture from Dundee University showing frontal cloud over Denmark at 1133 on April 21, 1997.

The satellite also shows that just north of the route there was rather more cloud than desirable. In fact this encroached on the route near Erfurt causing a diversion to the south. Brocken, a mountain station at 3747ft renowned for its spectre, reported a shower north of track before midday and a many other stations had 6/8 cloud. South of the 850mb ridge axis (Fig 2) cloud amounts decreased and all the cu burnt off towards TP3 by 1500GMT.

Fig 1 shows the midday surface chart for April 21. The dotted triangle indicates the route. Isobars are not ideal as a guide to the wind at flying level. Fig 2 shows the 850mb contour chart for the same time. 850mb is just below 5000ft asl. These contours give a better representation of the wind at flying level. The axis of the ridge crossed the triangle giving mostly very light winds. On the long westbound leg from Tachov (TP2) to St Avold Airport (TP3, west of Saarbrucken) there was a tail component.



Fig 2. 850mb contours for 1200 on April 21, 1997. These show the wind flow just below the 5000ft level. Figures show the heights in tens of metres. 144 = 1440 metres or 4724ft asl.

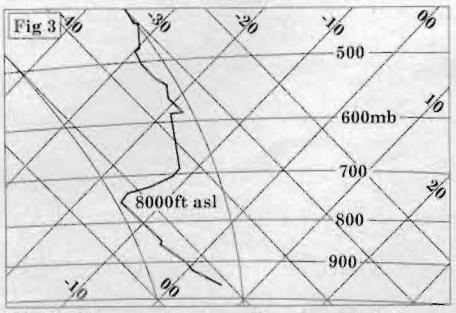


Fig 3. Upper air sounding for Meiningen (50 34N 10 23E) at 1200 on April 21 showing the inversion about 8000 ft asl.

Upper air soundings

On April 21 the midday soundings from stations near the route all showed an almost dry adiabatic lapse rate above the surface capped by a large inversion. At Meiningen inside the triangle (at 50 34N 10 23E) the inversion began at 8000ft asl where the temperature was -15°C and continued up to 10 000ft where it was -12°C. (See Fig 3.) Winds at Meiningen did not exceed 6kts below 11 000ft.

A frosty dawn and low dew points

A clear frosty dawn is often a good sign. At 0600GMT German stations reported temperatures around -3°C. By 0900GMT there was 2-3/8 cumulus. By midday Bamberg (49 53N 10 55E) had a temperature of 8.3°C and a dew point of -11.3°C. This separation of 19.6°C should give a cloudbase about 8000ft above the ground (nearly 8800ft asl there). Such conditions favour strong thermals. Even before the cloudbase became high the pilot found 10kts in his second thermal of the day.

Such low dew points seldom occur unless the air has been dried out by a long land track. The northerly winds which reached Germany had travelled over the mountains of Scandinavia and lost much of their moisture on the way.

Germany is better placed than the UK

The UK is not well sheltered from northerly winds and when arctic winds spread over us in spring the air is usually too moist to give a high cloudbase. Although the air starts out with low dew points the relatively warm waters of the Norwegian Sea and the North Sea add so much extra moisture that our soaring is spoilt by showers or spread out.

England does get some shelter from the Scottish Highlands but the dry zone is too narrow for large triangles. Scandinavia gives a much wider zone of shelter to Germany. The Scandinavian shelter can extend to England when the wind veers north-east but only where the air takes a short sea track.

Dry air leads to cu burning off

One common snag of dry air is that if the inversion sinks down the cu tends to burn off during the afternoon. This happened on April 21. The sounding from Essen (beyond the third TP) showed the inversion was almost down to 6000ft, well below the condensation level of most thermals. As a result the flight had to be completed in blue thermals which became weak towards the end of the day.

Early flights in the spring north-easterlies

More than half a century ago people like Phillip Wills recognised the magnificent opportunities for long flights when spring north-easterlies arrived. In those days pilots planned flights from East Anglia down to Cornwall. No one flew triangles then as old sailplanes like the Minimoa and Rhönsperber (like the venerable T-21 today) were too slow to go far into wind.

More modern sailplanes such as the ASW-12 were still making downwind distance records in 1972. On April 25,1972, Hans Werner Grosse set up a distance record of 1460.6km from Lubeck Airfield (0820 local time) to Biarritz Airfield (2023 local time). See Fig 4. The Met charts showed interesting similarities with April 21,1997.

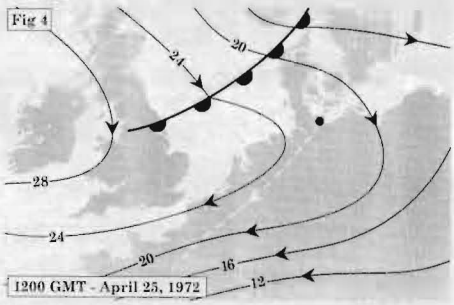


Fig 4. Surface chart for 1200 on April 25, 1972, showing the first part of the route from Lubeck to Biarritz.

Similarities between 1972 and 1997

The 1972 weather was due to an outbreak of cold air which came across Scandinavia to Germany and then spread south-west across France. When this cold air first arrived it brought showery weather but on the night of April 24 drier air arrived.

On the morning of the 25th the first cu formed near Lubeck at 0830 (local) at nearly 3000ft. Towards the south of France the cloudbase lifted to 8200ft

The window of opportunity was confined to that single day when the cold air had subsided and dried out enough to cut out showers. Just as in 1997 the next system came down across the North Sea and brought frontal cloud into NW Germany later that day. Fortunately rain was delayed until the night. The window lasted out the day, but only by a small margin.

The first (undeclared) 750km triangle in the UK was made in late spring north-easterlies in 1976 when the air had first dried out over Scandinavia. As on the other two occasions the first influx of cold air was far too moist and south-east England had an almost 8/8 spread out. Next day the air dried out and gave excellent conditions, but there was a warm frontal system moving over the north of Scotland threatening to cut off the cold air. Once again the inversion sank lower during the afternoon and the day ended with blue thermals.

Early signs of a record day

Northerly winds occur on the eastern side of a high so the first stage is the development of a high close to the UK. This high must persist several days so that the northerlies have time to travel down from the arctic. A fast moving high which just sweeps across the UK does not allow time for the arctic flow to reach Europe.

In 1972 April started very disturbed with deep depressions passing over or near the north of the UK. The Azores high started to assert itself on the 15th and moved over the British Isles where it settled down for several days sending a ridge northward into the Norwegian Sea. This produced the northerly flow across Scandinavia which gave the record breaking weather on the 25th.

In April 1976 the Azores high came across the UK on the 17th and then settled down (mostly) north of Scotland from the 20-27th. This brought arctic winds south across Scandinavia to England on the 27th but though the air was very unstable there was an almost total spread out at first. Then on the 28th the air dried out as a ridge developed over England. Thermals started very early in the cold air and conditions became good for the first UK 750km triangle.

In 1997 the high had been lingering around Britain since the end of March. Several blasts of arctic air swept down across eastern Europe in April but none produced the right conditions until the 21st. As in earlier years the best day was just before the next frontal system arrived.

Ref: August 1997 issue, p223, "April - A Month For Records."



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DEREK ABBEY



The Blanik over the Norfolk coast.

IN PURSUIT OF THE SEASIDE TROPHY

Derek explains how a special trophy has encouraged many interesting flights to the coast like the one he shared with Doug Sadler in a Blanik last summer

Many years ago the Seaside Trophy was presented to the Coventry GC, now The Soaring Centre, by one of its most popular and successful pilots before he left to start a new life in America. It was to be awarded to the pilot who had flown the furthest from Husbands Bosworth to the coast and landed within 5km of the sea.

The object of the trophy reflected the adventurous spirit of the donor and it was intended to encourage that quality amongst others. Also it was particularly aimed at lower performance aircraft, showing there was plenty of fun to be had from gliding without it costing a fortune. Over the years it has encouraged some quite remarkable flights, notably the Tutor's flight to the Isle of Wight, the T-49 to Plymouth, another Tutor to Southwold (Norfolk coast) etc, etc.

The Blanik (G-ATRA) based at Husbands Bosworth has made many flights to the seaside over the years in pursuit of the trophy though not always successfully - in fact in 1996 one of the main rivals won it in the T-49 with a flight to Caister on Sea on the Norfolk coast.

Last summer we were determined to make an attempt, though with the season drawing to a close it seemed unlikely there would be many good days left. However, by leaving it a bit late some of our main rivals were abroad and if we were successful they would have less time to challenge us. It was therefore important to take the first opportunity.

Carefully watching the weather forecasts it looked as though Thursday, September 4, might be the day. There was a cold front going through late on the Wednesday with 15/20kt westerly winds and good soaring conditions forecast for the central and eastern regions on the Thursday.

Looked as though it would be a pretty quick trip

Sure enough on Thursday morning it looked as though it would be just right for a downwind dash to Great Yarmouth on the Norfolk coast. The weather continued to improve with classic, firm looking cumulus to 3500ft agl, forming up nicely into streets, running west to east. It looked as though it was going to be a pretty quick trip.

We launched at 12.40am and were soon climbing in a 2-3kt thermal up to the 3500ft cloudbase upwind of the airfield. We were immediately on our way, looking down at Husbands Bosworth Airfield slipping quickly beneath our port wing. Next stop Great Yarmouth, or so we thought.

The cloud streets worked well and we maintained a comfortable altitude, although in a Blanik you need to keep topping up the height. It just does not pay to get low. We soon passed Corby and the Welland GC site at Lyvden and then flew to the south of Peterborough, now over a quarter of the way to our goal. It was after Peterborough that we realised the cloud streets were diverging from our track. In fact they were turning north-east towards the Wash. Well that was no real problem at that time and we continued on past March and on towards Wisbech, which would mark the half way point.



The pilots photographed on landing. Derek, on the right, has been flying at Husbands Bosworth since 1965. He is a full Cat, tug pilot and a keen cross-country pilot flying his LS-4. He is also the club's safety officer. Doug has been an active club member for 37 years, is an ex full rated instructor and an avid two-seater cross-country pilot.

As we approached Wisbech it was quite apparent that the cloud streets ahead to the east and south were evaporating and the whole of Norfolk was devoid of any reasonable looking clouds. On the other hand the cloud streets to the north of us looked as good as ever, though unfortunately they were all running in the wrong direction.

We were in a bit of a dilemma. Did do we continue on track into the blue and run the risk of not contacting anything and landing out miles from the coast? Or did we try to get to the cloud streets to the north? We reasoned that if we did the latter we might just get to the coast to the east of the Wash and at least claim the trophy, despite being miles away from our original goal.

We were struggling in quite weak lift under a rather ragged cloud to the east of Wisbech.

There was no alternative if we were going to gain enough height to cross the streets to the north but to drop back downwind and find a stronger thermal. This we did and were soon climbing in 4kts up to cloudbase which was now 4000ft.

We set off towards the distant cloud streets to the north. It is at times like this you wish the Blanik had a little better performance. However, after what seemed a very long glide, to our great relief we were soon climbing in a 4kt thermal under the new street which had fulfilled our expectations. This cloud street took us comfortably over Kings Lynn and up towards the coast just to the east of Burnham Market.

We had made it ! Not quite to the place we had planned but nevertheless we were in contention for the trophy. What a view it was, with the Wash on our left and the sandy beaches of the Norfolk coast extending as far as the eye could see to the right. Everything seemed quite straightforward - all we had to do was to glide it out under the cloudless sky along the coast to extend the distance from Husbands Bosworth. There would be no problems with places to land with plenty of nice cut fields all along the coast.

We followed the line of the coast after leaving the cloud street at 3500ft as it veered away north-east out into the North Sea. Of course we were more than comfortable with our height as our altimeters were set to HusBos QFE which gave us another 500ft asl.

After we had flown down the coast for some five miles we encountered broken lift, sometimes surging to 4kts. We tried circling in it with some degree of success but it seemed better just to weave and pull up in the best lift. We began to realise there was a distinct possibility that this sea breeze effect might take us all the way along the coast to our goal! Our spirits rose to a new high; this was wonderful, to be able to fly almost straight and level all the way along the coast.

The views to us land-locked pilots were absolutely beautiful with the vivid blue sea on our left and the green and brown expanse of the Norfolk countryside on our right. Beneath us the intricate patterns in the shallow parts of the sea, the mud flats, marshes and the sandy beaches stretching into the distance. We remarked that there is something fascinating about flying along the coast, particularly in a Blanik where the experience could be shared.

We made really good progress, on past Sheringham and Cromer, on round the coast line turning gradually south past the Broads and Hemsby towards our goal of Great Yarmouth which we could now see clearly ahead. It was at this point the lift become a little unreliable and we started to lose height. Decision time again.

Should we try to press on across the mud flats and marshes at the estuary of the river Yare and around Great Yarmouth, or should we quit whilst still ahead and find a nice field and land between Caister and Hemsby? As we did not care to risk landing in the mud flats we chose the latter.

By this time we had been in the air for nearly 4hrs which is a long time in a Blanik and two pairs of buttocks were beginning to ache. The field landing seemed to be the best course of action as we were now down to just over 1000ft amsl. We found a suitable stubble field. Just the right size, nice and level and on the cliff tops. Fortunately someone had conveniently lit a fire for us which confirmed the wind direction.

It is quite a unique thrill to fly the base leg of your circuit out over the sea. As we came into the field, quite low over the cliffs, there were many upturned faces on the beach and cliff paths. After a good landing we climbed out of the glider feeling rather stiff but highly elated. It had taken us 3hrs 45min to reach "Califor-nia"(not "the" California) just to the north of Caister on Sea, a point on the Norfolk coast which was 195km in a straight line from Husbands Bosworth. In reality we had covered more than 240km with our L shaped route going *via* the Wash and then along the coast .

It had been a superb flight, very interesting, quite demanding at times and not entirely straightforward, flown over areas of breath taking beauty with the most superb of panoramic views. We felt we had entered into the spirit of the Seaside Trophy and there was a better than even chance that we might win it.

What about the retrieve? Well that's another story.

NB. And yes Derek and Doug did win the trophy. Ed.



Map showing the route.

Competition Glider Lands on Beach

A sandy glider appears on a New Jersey beach, photographed by Mary Meagher on holiday last summer in the USA. The town of Surf City had organised a sand sculpture competition.

Incidentally, Mary, who flies at Shenington GC and frequently writes in S&G about her gliding and tugging exploits as the "gliding granny", married Henry Whitrow earlier this winter.



SOARING THE INTERNET

John gives a taste of just what is out there to interest glider pilots and tells you how to get started on your voyage

The Internet. It's everywhere, or so it seems. You can't watch a TV programme without the odd reference to a Web site popping up. If it's not in the programme, it's in the adverts. And even *S&G* articles! "What's your e-mail address? Which browser do you use? Do you prefer to write in Java or ActiveX?" But what's it all about?

The Internet grew out of a plan by the military to produce a network linking their computers which had to be, quite literally, bomb proof. They used telephone connections instead of co-axial cables, and if a functioning phone line survives an atomic war, the computers somehow will find a way to communicate.

To connect to the Internet you need a computer, a modem, a telephone, an Internet Service Provider (an ISP, a place to call up) and some software, usually supplied by the ISP. And then, the world's your lobster. But what's in it for glider pilots? Assuming Santa was kind to you and you now have an "Internet Ready" computer, is it worth taking the plunge? You bet it is!

What's available?

Back in the early seventies, when I first met the Net, e-mail was a rather tricky system to use, and the Net was only understood properly by scientists and academics, or really determined users, and so its main users appeared to be love-sick science PhD students talking across continents to their partner who had moved to a different university. Now it's so easy, anyone can use it to post electronic mail to Australia or the person sitting next to them. Or even to send articles to the editor of your favourite magazine. And it usually gets there within 5 - 20 minutes. If the address is wrong, it bounces back and tells you just as quickly, unlike snail mail (sometimes known as the Post Office).

A popular place to visit is the newsgroups. Here people post notes for general discussion, to ask or answer a question, to seek opinions or even present entire articles and reviews on a topic dictated by the newsgroup's name. There are a dozen such newsgroups of interest to pilots, with names like rec.aviation.soaring (r.a.s.) and rec.aviation.piloting.

If you are new to using newsgroups, the best advice is to read but not to reply to any posts for several days until you get a feel for what is and isn't acceptable in a particular newsgroup. Some treat character assassinations as normal behaviour, others ban posting of picture files (especially r.a.s.). The main rule in the rec.aviation subset is posts must be on aviation, and polite. Remember, the whole on-line world can read what you say here, so make it sensible.

There are over 30 000 newsgroups, covering any topic you care to discuss (and a few you wouldn't openly admit to discussing). Most are great fun, interesting and used by friendly helpful people. The dubious ones are all in the alt subset. Groups under this subset are not automatically dubious, in fact many are very entertaining, it's just that the dodgy ones also happen to be under this heading.

To read a newsgroup, you need a newsreader (preferably an off-line reader), supplied by your ISP, but Web browsers like Netscape and Explorer also have such facilities built in. You pick from the vast list of available newsgroups the ones you are interested in, and you are offered only these from then on.

Don't confuse newsgroups with chat lines, where sad silly childish people post pathetic one-liners trying to act cool and talk dirty while hiding behind equally pathetic nicknames.

The Web

The big explosion of interest in the Internet came about with the invention five or so years ago of The World Wide Web. The first time I managed a look at the Web (*via* illicit links through several universities' computers I should not have had access to!), I was amazed at what had sprung up out of nowhere in just a few months. Now every man and his dog (literally) has a homepage. Apart from scientists, and Star Trek fans, aviation enthusiasts have taken to the high technology of the Net in general and the Web in particular in huge numbers. (But not as huge as the number of Star Trek fans!)

To use the Web (which TV programmes imply is the only way to use the Net) you need a piece of software called a browser, such as Netscape or Explorer which are both free. You visit sites with strange weird URLs (computer addresses). Web sites are collections of documents and pictures you can access, sometimes files you can download (*ie* copy), Web pages are just individual parts of the site and can be a single screen full of data or 20 screens worth (not simply a printed page full).

A homepage is usually the first page you go to on a site, like a contents page, leading to other pages (sections) on the site. Although the Web is the ultimate in vanity publishing, especially for those with strange theories, it is also packed full of useful information.

So which URLs should a glider pilot start with? Many British gliding clubs have their own Web pages, often maintained on a voluntary basis. Rather than list every one of them, I'll give you the URLs of a couple of other sites which list them for you.

The BGA has its own Web site at www.gliding.co.uk, which under Club Info lists contact details for every British gliding club, plus 28 clubs' Web sites, and six of these plus four others with no Web site have e-mail addresses for contacts. The BGA site provides many other useful items. Under Newsletters there's a full copy of many of the recent BGA newsletters. 1997/8 events is a list of competitions and BGA courses. There's a safety page, the National Ladder, a picture gallery, the TP database and links to weather sites. There is even a link to the recently formed Inter National Ladder and the glider database.

Obviously this is a good place to start your Net Soaring. All this is provided free thanks to Blot Publishing. (Almost every Web site gives free access; the commercial ones use advertisers' fees to pay for the facilities you use for free.)

Student clubs

If you're searching for student gliding clubs, have a look at Imperial College GC's site at www.su.ic.ac.uk/clubsocs/rcc/gliding/index.html where 13 university clubs' Web pages are listed. ICGC's site includes links to many other good sites. York Gliding Club also has a very comprehensive set of links to over 60 clubs in the UK, USA, Europe and elsewhere, so have a look at www.york.ac.uk/~mdci/ygc.html. Either of these will help you track down many electronic places of interest. No list of gliding Web sites would be complete without a mention of the Soaring Society of America's huge, comprehensive and very well organised Web site at acro.harvard.edu/ssa/ssa_homepg.html. It's well worth a visit.

The style of the clubs' Web sites varies a lot and many people have clearly worked hard to present info of various sorts in a number of ingenious ways. If you are thinking of setting up your own club's site, have a look at as many others as you can find.

Most clubs include on their Web site data such as details of the fleet, membership charges, flying fees, flying days, contact phone numbers for club officials, number of members and instructors, details of where it is and the postal address It would help if they included latitude and longitude, OS map reference and sheet number, (these are handy for Autoroute users, and I've got a list available), and possibly a map of the immediate vicinity.

Those with tricky access by road could even include detailed instructions of the best ways to the site, and the routes to avoid. And finally, the last time the site was updated is often listed.

Because many Web sites are maintained by volunteers, often at universities, this last point can be important as the student may have left and the data could be out of date. Some sites just disappear when their creator moves on. So all sites listed here were checked out at the time of writing.

I hope this has wetted your appetite for the Internet, and perhaps your club will soon join the growing list of those with Web sites. For an ISP's fee of between £5-10 a month you can have a world wide advert! Future Net Soaring articles will look at individual topics of interest and where to find them on the Web.

If you know of good sites or want a topic mentioned in this occasional series you can e-mail me at john.wright@midkent.ac.uk

TAME YOUR CAMERAS

Having helped develop the TP photos at the Gransden Regionals a couple of times, Martin was moved to make some observations about turning point cameras.

Occasionally, when in deeply philosophical mood - a state of mind easily induced by spending hours in the dark - I found myself contemplating one of life's eternal verities. The pilot who is flying this year's model of the Flatus 3 with 47m winglets and three Oxford Znavs, puts it in a Viper trailer, and uses a Rolls-Royce Carte-Blanche as a towing vehicle, is also likely to be using a 1911 Thornton-Pickard bellows camera and glass-plate negatives. He is easily identified in a gaggle because he has to put a black cloth over his head to photograph every TP.

Sometimes these people use more modern equipment that has been judiciously selected from the wide range available at last year's Salvation Army jumble sale, but such extravagance is tempered with thrift. If there is still an old film in the camera when he buys it, our pilot will probably use the remaining bit for his 300km attempt. This explains the presence of horse-drawn buses and gentlemen with walrus moustaches at the beginning of a film which then goes on to show roundabouts on the M1.

However, you don't have to be rich to put your faith in some fairly rickety photographic equipment. Those who turn up for a Comp with a Cayley Mk 1 are also unlikely to be using two Hasselblads for their snaps. But why spend money now? No doubt most people have already seen the star in the east that announces the Age of the GPS, and those of impecunious means (skint) will feel little temptation to buy a decent camera instead of saving for the small plastic boxes that make it fruitless to deny that you have been in the TMA.

I fully understand. However, until you have enough money, you might like to consider the following advice, which is aimed at helping you to get the best out of the equipment you have.

(NB. I have tried to imagine the actions of the Organised Pilot, but it should be noted that this is a completely hypothetical being.)

1. Go and buy two films and, if your camera is less than thirty years old, two sets of batteries. (For older devices, re-charge with gas, oil the clockwork, or get some new rubber bands.) "Expensive!" you say. I say: "How much will you pay for your aerotow? How much for a re-light? How much is your time worth? Will you have another opportunity to do your 300, 500 or Silver distance?" If your camera has a data-back, it is well worth replacing the battery for that as well.

On the subject of film, I would advise you to avoid buying anything unusual. At a Comp it can make life difficult for the photo processor, who will probably leave the damned thing till last if it requires radically different processing times. It is also worth remembering that a lot of modern cameras set film speeds automatically, but may only be designed to recognise a limited range of speeds. If the camera does not detect that you have used an ISO 50 film, for example, it will not be exposed correctly.

While modern emulsions are remarkably resilient and will usually tolerate fairly inaccurate exposure and processing, it is as well to give yourself the best chance of success. Films such as Ilford FP4 and Jessops ISO 100 are two of the most popular and reliable choices.

2. Take your camera in your clammy hands. If you haven't done this for a while, note how light and fragile it seems. If you recall, the round glass bit faces **towards** the thing you want a picture of. Now clean the camera. Clean the lens **carefully**, preferably with proper lens tissue. I know your canopy is scratched, but this is actually a good reason to make sure there are no greater obstacles to visibility on the lens of the camera.

Examining it carefully means you may actually spot something wrong with it

Next, open the back and remove all the sand, confetti, Christmas decorations, and spiders left over from the last few times you used the device. A small soft paint-brush such as those used for watercolours is ideal for this job. This rigmarole is not just for the sake of godliness: holding the camera and examining it for once means you may actually spot something wrong with it.

3. Open the battery compartment and throw away the old batteries, even if you have only had them for ten years. (I actually heard these words at a Comp: "I can't believe the battery in my GPS gave out. I only put it in yesterday. Mind you, it had been in my briefcase for a year...")

It is senseless to keep batteries until they show signs of failing. They may decide to give out right in the middle of a task. Even unused spares ought to be thrown away after a year. Make sure the battery contacts are not corroded. If they are, the electronic circuits inside the camera may be in similar condition, which is not good news, and ought to encourage a trip to the repairers. If they are merely dirty they can be cleaned with a typist's eraser (the sort that looks like a pencil) which is useful for reaching into tight corners.

4. Insert the batteries and film, following the maker's instructions, which are in that little booklet you didn't bother to read when you bought the camera, and is now in the attic with the box. If you have an older camera with a manual rewind, make sure the film is **reasonably** tight by **gently** turning back the rewind knob after you have closed the back.

5. Check the film is winding correctly, if possible. This cannot be done with most modern cameras, which swallow a film whole, and smugly refuse to give you any reliable information about what is happening inside until it is too late. With older cameras you can see the rewind knob turning as you wind to the next frame.

6. Now use a piece of gaffer tape to secure the back so that it cannot be opened unintentionally. Write the words **"Rewind the film, idiot!"** on the tape. (NB. Some modern cameras use a cunning system of spooling the entire film out of the cassette, then winding each newly exposed frame back inside, which protects the already exposed film. This obviates the need for taping the back shut.)

7. Take a couple of test shots at the beginning of the film. This will give you some idea of whether the camera is actually working. If it makes the right noises, you are probably in business. Moreover, it protects the first important frame in case of light leaking into the film cassette, or too much being cut off the leader in processing, etc.

8. Fit the camera to the mount in the cockpit. Make sure it is close enough to the canopy to eliminate reflections from the perspex, and prevent anything from getting between the lens and the outside world. I have seen some cases of fingers obscuring TPs.

9. You are now ready to fly. Carry out the normal photographic procedures for your task. Take two shots of everything. You never know. (The reason why professionals get such good photos is that where you take one frame, they take anything from three to several hundred.)

10. After the flight take another couple of shots at the end of the film as a "buffer" between the end and the important frames.

11. Read the words you wrote on the tape. Reflect on them. Now rewind the film.

12. Take off the tape, open the back and extract the film cassette.

13. Put some wing-tape around the cassette and write the flight details on the tape. This is particularly important if your camera leaves the tongue of the leader protruding from the cassette. The tape will prevent the film from being pulled out, and will also stop you from using the same film twice. It has been done. By me, actually. As an alternative, write the details of the flight on the tongue of the leader, or cut it off.

14. Celebrate your 300, 500, etc? Oh, no, no, no! That was merely a test run! When the film has been developed, and you have hard evidence that everything has worked, **then** you can go and do your badge flight.

After reading this, you may think I am an insecure pessimist (I suppose that makes me the type of person who always carries both an umbrella and sunblock), but just ask around and see if anyone you know has ever "had problems with their photos" on a badge flight.

PS. I am not expecting anybody to do any of this. I merely wrote this so that parents would have something to read to their children at night.



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HENRY REBBECK

Competing In The PW-5

Henry and Jay Rebbeck represented the British in the first World Air Games in Turkey last September (see report in the last issue, p348) with their brothers Matt and Luke crewing. We asked Henry just how successful he thought the glider was as a one Class design competing on equal terms



Jay's photo of Henry flying over the site.

The interesting question the contest poses is whether this new Class will prosper or fail. At the beginning of the competition, many felt that the idea of a cheap one design Class was fantastic, yet the choice of glider was questionable.

Former World Champion Leonardo Brigliadori described a flight he had in a Discus when he had "danced through the wisps of cloud along a street" and commented: "You can't dance in a PW-5". By the end of the contest, this view had changed in many people's minds.

Karl Striedieck did not have a good contest, yet he told me that it was the same as any other he had flown in; the start tactics, thermal choice and routing decisions were all identical. I certainly agreed with this view. The skills are the same, you just don't go as far or as fast. The problem with the PW-5 is, of course, that one of the joys of gliding is going far and fast.

The common argument against the PW-5 is that for the same money you could buy a better performance second-hand glider, like a Libelle or an ASW-15, and compete in the Club Class. This is true, yet it is very satisfying when everyone flies the same machines. All that bother of handicapping, which can never be totally fair, detracts from true competition.

I flew two Club Class competitions last summer and there is nothing more depressing than flying the fastest speed only to find pilots in lower performance machines eventually end up beating you.

As for the price/performance argument, well, ask Standard Class pilots why they spend £40 000 on a top glider when for the same money they could buy a second-hand Open Class glider with far superior performance - the simple reply is to be competitive.

With that same logic you would buy a PW-5 rather than a Libelle to be competitive. This will only happen though, when there are enough gliders available to have a one design contest.

Realistically, I think it is unlikely that in the near future the glider will become popular enough in the UK to have a Class to itself. It is a shame as it could be a way of removing some of the elitism that is prevalent at the top end of competitive gliding.

I thoroughly enjoyed flying the PW-5 and would hope to see clubs adopting it in the future as an inexpensive fun glider that can be used up to World Championships level.

Many thanks must go to Terry Joint and David Innes for the loan of one PW-5 and to John Scott for the loan of the other. These people make gliding the fun friendly sport that it is.

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TAIL FEATHERS

Peers of the Realm



Cobbled together similar looking devices.

There was this Londoner whose desire to be associated with the rich and famous so exasperated his friends that eventually one of them said to him "You are the worst name-dropper in the world!" "You're right" he sighed "The Queen was telling me off about it only the other day."

Whatever my faults, name-dropping isn't one of them. Mainly because I don't know anybody famous, unless you count Brian Spreckley. So it is merely in the course of making a deeply relevant point about our great sport that I mention in this edition my sole encounter with Royalty, which took place all of ten years ago.

At The Banqueting House in Whitehall in 1987 a Royal Aero Club reception was held at which aviation heroes were honoured. The line-up of parachutists, balloonists, aerobatters, record breakers *et al* to receive diplomas from HRH Prince Andrew and the Duchess of York included, for hazy reasons into which I did not inquire too deeply, me.

After the presentations and speeches, while we were getting stuck into the champagne, Prince Philip came up to me (this occasion was just loaded with Royals) and asked breezily "What did you do to be invited here?" I think he routinely asked this of anybody who was clutching a framed piece of paper: I don't believe he



"What did you do to be invited here?"

had spotted a freeloading charlatan, with a view to getting me slung out.

"I'm not sure" I replied "but it might have something to do with all those articles I write about how to have a pee in a glider." Now I know that the most important part of a Royal's training is to appear interested when they are trying to stifle a jaw-dislocating yawn; however I am sure Philip found this truly riveting. Maybe it's because royal personages have to stand around for hours at ceremonies under the gaze of thousands - or millions if it's on TV - absolutely longing to go to the loo, but with no relief in sight. So we discussed most of the printable options.

Pushing water uphill was a problem, we agreed: lying prone (that's on your chest, as distinct from supine, on your back) would help. By the time the Duchess came round that topic had been wrung dry, so to speak, which on reflection was a pity, since she has an earthy sense of humour. If my invitation to that reception had occurred ten years later I could have illustrated one plain and simple solution, by producing from my tuxedo pocket my review copy of the sturdy and dependable Uribag by Manfred Sauer.

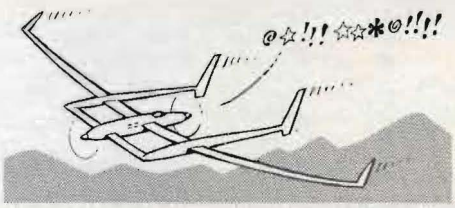
This is the best answer yet to the mature male pilot's besetting cross-country problem. In its present stage of development it's not for using in front of the TV cameras, but it's just right in a glider cockpit - or even in a car in a traffic jam (so long as a busload of Japanese tourists doesn't pull up alongside, each one armed with a digital video camera for recording quaint old English customs).

In the past I've cobbled together similar looking devices from plastic bags, rubber bands and lavatory paper rolls, but such home made gadgets are flimsy, unreliable and disaster prone. I've decided, by the way, that for very long flights I need two Uribags, so I bought a second one with my own money, which is a vote of confidence in the product.

When I had only one, my attempt to empty a full Uribag out of the front clear vision panel after six hours was not an entire success, as the young lady sitting in the rear seat will bear vivid witness - if she can be persuaded to talk about it at all after she emerges from a long period of counselling. Solo pilots can be less squeamish, of course.

Which reminds me: the two most distinguished, deserving and heartily applauded guests at that 1987 Royal Aero Club Banqueting House do were Dick Rutan and Jena Yeager, who had astonished the world by flying round it non-stop on one vast load of fuel in the slender twin-boom canard designed by Burt Rutan.

I'm told that before the nine day circumnavigation (that's 36 times as long as my ordeal) the couple were what the 1990s would call An Item. Certainly they were devoted to each other and could not bear to be apart. After being cooped up in less space than an ASH-25 cockpit with all their bodily functions to perform for more than a week - well, it shouldn't surprise you to be told that the romance went clean out of that relationship. But being by now celebrities, they were obliged to accept endless invitations to receptions and media interviews, and to hold hands, smile and hear the same thing being said to them over and over again without looking bored.



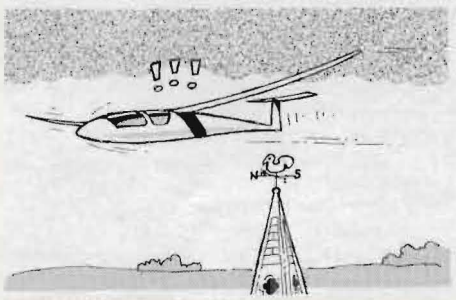
Romance went clean out of that relationship.

There's your reward if you do something truly heroic: all the tedium of being royal without the money. A pretty good definition of Purgatory. Well, they say no good deed goes unpunished.

Stop press: I'm told that Mary Meagher will review a female version of the Uribag soon. Madame Editor, tell the printers to keep the presses running overtime: this one will be a collector's edition, even if it is done - as it certainly will be - in the best possible taste.

Never give it away

Nearly ten years ago a television programme was shown which was exclusively devoted to a flight in our syndicate two-seater, flown by the legendary pilot, JJ. The film crew, who knew nothing about gliding, just pitched up on the appointed day and said to JJ "OK, we'd like you to do a cross-country flight with one of our cameramen aboard" as though this sort of thing could be laid on at any time, regardless of the weather.



The weather was awful.

The weather was awful. JJ crept around chiefly between 600 and 2000ft, which gave an admirably close view of grand country houses and rolling woodland, and quite delighted the producer. Shortly afterwards we received a cheque for nearly £1000 for the loan of the glider. Add ten years' inflation, let's say £1500 in today's money. A nice day's work, you must admit. And JJ had a challenging little 100km task to put in his logbook on a day when ordinarily we would not have bothered to rig at all.

This last summer another camera crew turned up with the same apparent intention. Really lovely people. More important, it was a really lovely day, worthy of at least 600km. And you know how rare such days were in 1997.

By this time I had made a dreadful mistake. I didn't ask for a penny for the use of the glider. Having grown older but not one whit wiser, I decided that the good of the gliding movement and the glory of my club were more important than receiving a contribution to the hideous cost of running a big glider.

It was a fantastic day. Cloudbase was 6000ft, thermals 5 to 8kts. The cross-country flight we did was effortless despite the fact that Plat was the pilot this time. Tiny modern cameras were everywhere, poking their little eyeballs into or out of every orifice. Lenses on cables festooned the glider and several were in the cockpit. There were more cameras on the ground, and there were cameras in the tug. Miles of video tape were shot. All went home happy, even me, despite the missing 450km that had been there for the asking.



I charge such stiff fees.

No, they didn't broadcast it.

As a management consultant and grey-haired guru to publishing companies, the only reason I charge such stiff fees (or so I tell my clients) is to ensure that they actually heed my advice. Advice, no matter how wise, is generally disregarded if it is given free. Only if you send an invoice that brings tears to their eyes will they feel bound to act on your profound and knowledgeable counsel.

It seems to be thus with television programme makers too. If some accountant had screamed "What's this bill? 'To farting about in Plat's plastic when he could have been doing a 600km record on the day of days, 1500 smackeroos'?" they would have said, "Don't worry, we are going to screen it". But as it was free, it ended up on the cutting room floor.

Take it from me, don't ever let them use your sailplane without paying a substantial fee for the privilege.

However since I gave you this advice free you will doubtless go right ahead and ignore it.

Awful thought: could it be that JJ is more charming, handsome and telegenic than moi, and that is why they used him and not me? Heaven forfend. I prefer the more materialistic explanation.

Make the BGA Conference a must

In this column I have often contrasted sparsely-attended British gliding conferences very unfavourably with American soaring conventions in numbers of visitors, though I realise this difference is partly due to the need for the widely scattered glider pilots of the USA to meet each other in a "club" atmosphere. Indeed the BGA Conference appeared in the early 1990s to be withering away entirely. But last year saw a magical upturn, thanks to the efforts of Claire Thorne and Sylvia Bateman. That's all it takes: persistence, charm and a lot of hard work.

Guest speaker before a standing-room-only audience last year was Gerhard Waibel of Schleicher's. Our visiting speaker this year will be Tom Knauff, whose privately run site in the Pennsylvania mountain ranges is one of the best locations in America from which to attempt 1000kms or more at tree-top height - not for the faint-hearted. Tom, who has set six world records and over 50 national records, will tell us how it's done.

The Hopcroft Holt Hotel near Oxford is not large, so put Saturday, March 14 in your calendar. Get your booking in early - if it's not too late already!

PS. Platypus will be the after-dinner cabaret, but don't let that put you off.

Tail end

In case we are feeling sorry for ourselves with our very patchy UK summer John Good, whose record-breaking flight was featured in the August issue, p225, e-mails on September 2: "I've just returned from a contest at Harris Hill (Elmira, NY). They had a great summer there, but it was the usual contest weather story; we flew just two days out of seven. I finished first (in part because some pilots left early), but it is not an official contest (for which three flying days are required). I seem to have a talent for that sort of performance."

My e-mail address is:
TailFeathers@compuserve.com

Safety Corner

BILL SCULL

Spring is round the corner

Bill commends those pilots who have stayed in practice throughout the winter but gives advice for the majority who start the season a little rusty

At this time of year thoughts are turning to flying again. For most the winter has meant a limited amount of gliding and these comments may be helpful.

Have a look at the training barometer in the the April issue, p89. While your general handling skill will return immediately, the most likely problem will be dealing with an emergency - an awkward height of cable break or an aerotow launch failure. Concentrate your mind, be alert to the possibility and, maybe, cope just that little better as a consequence.

Another factor which could impair your performance is limited time on type (see my article on p31). I have talked to a number of experienced pilots recently and they reckon they need 100hrs on type before feeling properly in control. A particular problem in this context is that if your sole objective is soaring, then you may have many hours but few launches and landings.

What is your average flight time? I remember a pilot at Lasham when I was CFI there. He had a new Kestrel 19, went soaring every day and did circuits off car launches in the evening. This says it all. Practice the routine tasks. Quite a lot of accidents happen to pilots new on type, typically with 20hrs and ten launches.

Spring madness shows up in other ways. Keen to soar, and sometimes after a poor launch, pilots tend to scrape away from too low a height. They did when they were in practice last season so why not now? Rusty on handling, you may just slightly mishandle the controls enough to cause a spin. Can you recover from 400 to 500ft? You might like to think so but I doubt it and the accident record supports this view.

Another spring feature may be strong winds and associated turbulence. The combination of enthusiasm, invulnerability and conditions may be enough to make life difficult - drifting too far downwind if you are limited to local soaring and stretching the final glide or making a mess of the field landing.

The main causes of accidents in 1997 were;-

- Winch launch failures/cable breaks 18%
- Approach control 13%
- Field landings 18%
- Poor soaring airmanship 11%

It is worth noting that the annual figure for winch launch failures/cable breaks was up from a long-term average of 10%. While such "spikes" must be expected one must not be complacent. The four categories of accident above account for 60% of gliding accidents.

Safety awareness is a state of mind. Accidents happen and may happen to you. Very few people are as good as they think. Some obvious safeguards are practice launch failures (dual), practice field landings if your club has a motor glider and playing safe by not trying to scrape away from low down or letting yourself drift too far downwind.

Have a safe season!

ANNUAL STATISTICS OCTOBER 1, 1996 TO SEPTEMBER 30, 1997

GLIDING CLUBS	AIRCRAFT				ALL LAUNCHES	NO. OF AEROTOWS	HOURS FLOWN	KMS FLOWN	MEMBERSHIP		
	Club 2s	Club 1s	PO	Tugs					Full Flying	Estimated No. of Temporary Members	No. of Female Members
Angus Gliding Club	3	1	5	0	1 424	0	181	400	39	140	2
Aquila Gliding Club	2	3	25	2	1 575	1 448	957	12 720	81	171	2
Bath, Wilts & North Dorset Gliding Club	4	4		1	3 414	630	1 527	20 000	115	227	8
Bidford Gliding Centre	3	3	30	2	3 556	3 556	3 419	70 000	135	642	3
Black Mountains Gliding Club	3	1	21	1	1 688	1 688	2 346		73	164	6
Booker Gliding Club	7	7	85	5	9 903	9 903		350 000	280	1 590	38
Borders Gliding Club	4	1	22	2	1 523	1 473	1 012	3 850	69	242	1
Bowland Forest Gliding Club	2	3	25	0	4 264	0	1 513	750	148	162	8
Bristol & Gloucestershire Gliding Club	4	5	63	2	7 210	2 238	4 340	130 000	221	971	17
Buckminster Gliding Club	3	2	19	2	2 283	1 805	1 260	5 300	72	257	7
Burn Gliding Club	4	3	26	1	5 392	1 264	860		128	457	8
Cairngorm Gliding Club	1	0	11	0	1 200	250	0	0	35	98	2
Cambridge Gliding Club	4	6	64	3	10 110	2 030	6 400	213 000	249	1 204	12
Carlton Moor Gliding Club	1	1	2	0	696	0	155		13	6	1
Channel Gliding Club	4	1	3	0	3 799	0	462		33	963	4
Connel Gliding Club	3	0	7	0	645	251	301	4 305	20	155	2
Cornish Gliding Club	2	2	10	1	2 366	2 065	8 043	2 010	46	415	3
Cotswold Gliding Club	3	5	43	1	9 416	183	3 432	31 500	183	829	13
Dartmoor Gliding Society	3	2	16	0	3 589	0	701		60	495	4
Deeside Gliding Club	2	3	18	3	5 175	5 100	5 735	10 000	143	619	13
Derby & Lancs Gliding Club	4	3	37	0	6 611	0	3 211	15 000	187	980	18
Devon & Somerset Gliding Club	4	3	39	1	6 842	713	2 757	7 938	196	875	16
Dorset Gliding Club	2	3	5	1	3 367	653	429		44	367	3
DRA Farnborough Gliding Club	2	2	5	1	688	357	287		34	25	2
Dukeries Gliding Club	3	2	10	0	2 652	0	506	850	48	225	4
Dumfries & District Gliding Club	1	1	3	0	580	0	212	475	18	18	0
East Sussex Gliding Club	4	4	20	1	5 160	186	1 582	6 500	118	855	2
Enstone Eagles Gliding Club	2	1	7	0	2 590	122	999	5 000	48	324	3
Essex & Suffolk Gliding Club	3	3	22	0	5 389		1 782	11 923	83	350	4
Essex Gliding Club	3	1	25	1	2 000	1 000			95	303	2
Glyndwr Soaring Club	4		8	1					34	30	
Herefordshire Gliding Club	1	1	8	1	685	685	510		23	75	1
Highland Gliding Club	1	1	11	0	2 028	227	968		70	176	18
Imperial College Gliding Club	1	2	0	0		5 000	10 000	50 000	24	120	2
Kent Gliding Club	4	3	28	1	7 268	2 433			174	887	18
Lakes Gliding Club	3	3	6	1	1 386	1 327	670		44	137	2
Lasham Gliding Society	12		165	5	26 986	10 233	9 643	246 250	489	2 737	161
Lincolnshire Gliding Club	2	1	7	0	4 152	26	570		75	126	15
London Gliding Club	6	4	95	5	19 201	6 909	6 528	91 579	332	6 166	26
Marchington Gliding Club	3	1	13	2	1 717	1 717	922		87	242	6
Mendip Gliding Club	3	2	10	0	2 979	50	847	3 951	81	200	3
Midland Gliding Club	3	3	45	1	10 796	485	4 391	18 178	197	714	16
Nene Valley Gliding Club	2	2	5	0	3 592	18	776	3 366	47	252	5
Newark & Notts Gliding Club	2	3	13	0	3 451		681		78	199	8
Norfolk Gliding Club	3	2	35	2	3 960	2 750	3 470	72 300	157	538	14
North Devon Gliding Club	1	0	7	1	301	301	161	450	12	50	
North Wales Gliding Club	2	3	4	0	2 112	0	415		53	250	0
Northumbria Gliding Club	2	2	16	1	2 793	836	861	3 000	54	335	1
Oxford Gliding Club	4	3	17	0	3 748	25	1 312	12 770	92	398	14
Oxfordshire Sportsflying Club	0	0		0	0	0	1 200		35	22	4
Peterborough & Spalding Gliding Club	3	3	19	2	1 863	1 863	1 240	7 000	70	255	4
RAE Bedford Flying Club	1	0	4	0	126	20			14	6	0
Rattlesden Gliding Club	4	2	18	1	2 848	382	1 047	8 351	72	320	8
Sackville Gliding Club	2	2	12	1	1 303	645	989		34	48	4

GLIDING CLUBS	AIRCRAFT				ALL LAUNCHES	NO. OF AEROTOWS	HOURS FLOWN	KMS FLOWN	MEMBERSHIP		
	Club 2s	Club 1s	PO	Tugs					Full Flying	Estimated No. of Temporary Members	No. of Female Members
Scottish Gliding Union	3	3	41	1	8 914	377	5 500		222	614	8
Shalbourne Soaring Society	3	3	29	0	4 868	0	1 614	7 500	98	686	8
Shenington Gliding Club	3	3	35	1	10 173	474	2 079	18 400	138	451	23
Shropshire Soaring Group	0	0	13	1	328	328	526	4 200	24	0	1
South Wales Gliding Club	2	3	19	1	2 720	845	1 137		85	450	6
Southdown Gliding Club	3	3	43	3	6 371	4 364	4 075		202	631	18
Spilsby Soaring Trust									25		
Staffordshire Gliding Club	4	3	20	0	6 282	100	1 180	3 500	138	270	9
Stratford On Avon Gliding Club	4	3	23	0	7 861	0	2 104	14 418	131	746	12
Strathclyde Gliding Club	1	2	6	1	477	126	83	0	20	43	1
Surrey & Hants Gliding Club	0	11							178	145	
Surrey Hills Gliding Club	4	2	2	0	5 454	0	781		61	364	3
The Motor Glider Centre	0	0		0			581	2 500	22	21	4
The Soaring Centre	5	7	89	4	16 892	9 125	8 753	86 000	317	1 400	21
Trent Valley Gliding Club	3	2	14	1	4 291	1 139	1 705	9 850	61	235	7
Ulster Gliding Club	2	1	15	1	1 664	1 644	1 168	450	54	175	1
Upward Bound Trust Gliding Club	2	1	5	0	2 363	0	401		25	30	4
Vale of Neath Gliding Club	2	1	5	1	459	268	190		25	17	1
Vale of White Horse Gliding Club	2	2	14	1	1 790	541	770	9 847	58	180	4
Vectis Gliding Club	1	1	5	1	850	850	392		35	84	3
Welland Gliding Club	3	3	14	1	4 091	276	1 015	5 700	70	241	8
Wolds Gliding Club	5	4		1	9 898	1 083	2 353	15 000	204	1 050	18
York Gliding Centre	5	3	22	2	5 969	2 248	1 461	10 000	155	819	14
Yorkshire Gliding Club	3	5	40	3	7 228	4 709	3 090	26 684	262	719	5
CIVILIAN CLUB TOTAL	219	185	1 668	80	327 345	101 344	142 568	1 632 765	7 972	37 783	717
Anglia Gliding Club	3	3	1	0	2 334	29	649	4 177	41		
Bannerdown Gliding Club	3	2	4	2	4 800	100	1 600	14 100	60	150	5
Eagle Gliding Club											
Chilterns Gliding Club	3	4	10	0	7 847	45	2 428	14 292	110	140	14
Clevelands Gliding Club	2	4	11	2	4 882	2 059	2 028	24 241	80	330	9
Cranwell Gliding Club	3	3	10	1	5 969	594	1 728	16 780	101		16
Crusaders Gliding Club	3	1	0	0	3 178		372		39	830	4
Fenland Gliding Club	2	3	8	0	3 997	71	1 329	13 050	60	115	7
Four Counties Gliding Club	3	4	16	1	7 567	611	2 929	42 430	92	150	6
Fulmar Gliding Club	2	2	1	1	803	457	303	1 895	50	50	14
Heron Gliding Club	2	2	5	0	1 176	22	455		62	20	2
Kestrel Gliding Club	2	2	3	0	3 060	96	948	2 950	39	175	5
Phoenix Gliding Club	3	4	4	0	5 000	0	6 000	5 000	35	20	10
Portsmouth Naval Gliding Club	5	5	5	3					148	297	6
RAF GSA Centre Bicester	6	4	13	3	14 500	5 500	6 500	120 000	150		8
Seahawk Gliding Club	3	3			1 700	32	320	100	50	103	10
Two Rivers Gliding Club	2	4	2	0	1 372	0	454	3 535	19	114	1
Wrekin Gliding Club	2	3	5	1	3 352	582	1 221	2 800	58	144	12
Wyvern Gliding Club	2	4	7	1	4 794	25	1 169	12 000	59	153	6
SERVICE CLUB TOTAL	51	57	105	15	76 331	10 223	30 433	277 350	1 253	2 791	135
CIVILIAN CLUB TOTAL	219	185	1 668	80	327 345	101 344	142 568	1 632 765	7 972	37 783	717
GRAND TOTAL	270	242	1 773	95	403 676	111 567	173 001	1 910 115	9 225	40 574	852

NEGATIVE *g* - POSITIVE FEEDBACK

Writing about a flight in a K-13, Rob says the more negative *g* experienced the more his pupil pushed the stick forward



Rob started gliding at the Long Mynd in 1973, then went to Oxford GC followed by Buckminster where he was CFI for 4½ years. He now flies a Glasflügel 304 at The Soaring Centre in between instructing and tugging. He has more than 1100 gliding hours and 180 power, a Silver badge and a Diamond.

Dave and I were bungy launched over the edge of the Long Mynd into a strong westerly wind. We had the usual gentle but short ground roll before the K-13 was airborne and the bungy rope fell away. In time honoured Mynd tradition we waved our thanks to the bungy crew as we turned south along the ridge. Dave, my P2, had done about 70 launches and was coming up to solo. He needed very little prompting from me as we soared close to the crest of the ridge, laying off for drift and positioning further out for the best lift as our height increased.

In my eight years at the Mynd, a bungy day always seemed to bring out pilots and gliders like moths from the woodwork. Perhaps it still happens. Anyway, there was a lot of ridge traffic that day, which was a good test of Dave's lookout. It also allowed me to check that he passed and overtook other gliders according to the ridge rules. At the end of each beat his turns were well co-ordinated and by the time we reached 1200ft above the ridge, I had seen all I wanted to see.

It was time for something else.

I told Dave to fly upwind away from the ridge. He had practised stalls before, so this was a good opportunity to practise some more. Part of my briefing went something like this: "I want you to demonstrate a gentle mushing stall. Bring the stick back very slowly, letting the speed bleed off at about 1kt/sec until the stick is hard back against your seat. As the speed decays, point out all the stall symptoms to me. When I tell you to, recover by releasing the back-pressure on the stick".

"I was fairly relaxed - too relaxed as it turned out..."

When we were well away from the ridge and its traffic, we went through the HASSLL checks, ending up facing roughly into wind. This was a straightforward and oft repeated exercise, so I was fairly relaxed - too relaxed as it turned out.

I had my elbows on the edge of the canopy frame and my hands loosely clasped together. Dave eased the stick back slowly until he produced the slightest hint of pre-stall buffet. When he felt this he immediately moved the stick forward again. We still had flying speed, so initially this produced reduced *g* and a nose down attitude. "I need to demonstrate this to him again", I thought to myself as I waited for him to bring the nose up to normal flying attitude.

But he did not bring the nose up. Instead he moved the stick further forward producing distinct negative *g*; and the more negative *g* we experienced the more he pushed the stick forward. My mind jumped out of its relaxed state, adrenalin started to flow and the next few seconds seemed to pass in slow motion.

The sheep dung, dirt and debris from the floor and footwell of the K-13 floated round our heads as my shoulders strained against the straps. Worse than that, as the muck settled firmly upwards on to the canopy, my previously relaxed arms and hands were also flying up to the canopy. In what seemed like a near vertical dive, and with VNE approaching fast, I could see the fields near the village of Wentor getting worryingly large. This was a "take control" situation, but first I had to get to the controls.

I struggled to get my hands down against the still increasing negative *g*. I had to look down and locate the controls by eye. With my body riding up against the straps and with the increasing negative *g*, they did not come automatically to hand. I concentrated on forcing my left hand down to the airbrake lever and opened the brakes 5kts short of VNE. Then I got my right hand down to the stick. "I have control!", a strangely calm voice said. Was that my voice? It couldn't be because I was not feeling at all calm.

I eased out of the dive while putting the airbrakes away, converted the speed back to height and settled down to 45kts at an indicated height of 300ft. What was our low point? I do not know because I was not looking at the altimeter, but I am glad it happened over the valley and not over the Mynd. I turned right and flew downwind, waiting to be embraced by the comfort and security of the ridge lift. There was silence in the cockpit for a few seconds while both of us calmed down and collected our thoughts.

"Dave, what do you think went wrong in that exercise?", I eventually asked as the ridge approached.

"I didn't get the stick forward fast enough", he said.

"Didn't you wonder why all that rubbish was floating round your head?", I asked.

"I thought the glider was breaking up", he replied. He obviously could not work out what had really happened to us.

Positive feedback

So what did really happen? If the nose does drop in a stall the pilot gets a light feeling in the stomach due to reduced but positive *g*. Dave could not distinguish between this and the negative *g* of a bunt, which can only occur if an aircraft has flying speed, *ie* if it is not stalled.

He was disoriented by the increasing negative *g*. The more he pushed the stick forward, the greater was the magnitude of his misdiagnosed "stall symptom". In his mind, moving the stick forward was supposed to remove the "symptom". However embarrassing it seemed when discussed in the bar, he thought he was becoming "more stalled" and pushed the stick further forward in response, thus closing a positive feedback loop. Had he got into this situation on a solo flight I believe he would have dived into the ground at an airspeed above VNE. Alternatively a late pull-out would have over stressed the wings.

Positive experience

Prior to this flight I was comfortable that a pupil could do nothing to me at 1200ft which I could not cope with easily from my off-guard position. I was wrong and, as always, Murphy's Law was correct. If there is something unexpected and dangerous that pupils can do in a given situation, then eventually one of them will do it to you.

A fellow instructor at my current club said recently, "Always assume the guy in the front seat is trying to kill you, then you won't be far wrong." This may be poetically over dramatic, but it makes the point that instructors should always be prepared for the unexpected.

I should have been guarding the stick against excessive forward movement during the exercise. However, if I had been guarding the stick I would not now be such a strong believer in negative *g* disorientation.

Positive demonstration

This flight took place many years ago, and my vivid memory of it was prompted by the review of Derek Piggott's book **Sub-Gravity** in the August issue, p206. I have talked to instructors who doubt the benefit of "alarming" their pupils with a positive demonstration of negative *g*, but I am sure that it is important for a pupil to be able to distinguish between negative *g*, and the "weightless" sensation that might occur in a stall.

Perhaps not everyone is susceptible to negative *g* disorientation, but I am sure Dave is not unique. I can imagine other scenarios: a susceptible early solo pilot has a winch launch failure, or he notices that his approach speed is low. He pushes forward rather vigorously, producing reduced *g* then negative *g*. In both cases, witnesses on the ground would see an inexplicable high speed dive straight into the ground.

Pupils must be shown that a wing produces negative *g* when it is flying, not when it is stalled. Negative *g* disorientation is not just a theory - it can and did happen!

Postscript: Dave (not his real name) did recover from his experience and went on to fly solo. He was still gliding when I saw him ten years later.

Chris Pullen, chairman of the BGA Instructors' Committee, adds: I believe that the number of students taking stall recovery action by continually moving the stick forward is more common than is realised - I have flown with three such people.

The problem starts with us instructors. Like most current pilots we become desensitised to the falling feelings associated with reduced *g*. Air experience instructors will agree that their students seem to make comments about even the smallest bump, many of which the instructor won't have noticed. The more flying we do the more we become exposed to these feelings and the less it bothers us.

When we start to teach stalling we don't mention anything about the reduced *g* or the falling sensation. We spend our time illustrating the symptoms of the approaching stall and following this with the correct recovery action. What we forget is that the student may still have a strong sensitivity to this most unfamiliar and unpleasant falling feeling. So much so, they may often ignore completely what you are saying and concentrate on their stomach.

The net result is students teach themselves that this falling or reduced *g* sensation is associated with the stall and its physical effect on them can result in this symptom being uppermost in their minds.

This is why we have developed and teach a further stalling exercise to illustrate that this falling or reduced *g* sensation is not a reliable symptom of the stall. This exercise is taught after the student has become familiar with basic stalling so they can take more notice of what is being said.

Attention must be paid to the ASI and the effectiveness of the controls, as well as to the stomach, in order to decide whether you are stalled or not. The recovery actions couldn't be more different. In many cases the wrong decision could be fatal!

Instructors please note Rob's comments about hands in front of the stick. Remember rule one - "Bloggs is out to get you".

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How Do They Do It?

Brian writes about that elusive 300km



Brian, a member of Newark & Notts and Buckminster GCs, started gliding after Mike Cuming's course at Hinton in the Hedges. He has over 300hrs including 50hrs SLMG.

How do they do it? Other people - how do they come to get their 300km? That was the question that was beginning to get a grip on me. There are quite a few of them about - I think, but I've never known anyone at the time their name appeared in that list in *S&G*.

And would you go up to a club colleague and say "Have you done the 300 then? Tell me about it." What if you were to ask some admired senior instructor - who, it turned out, hadn't?

This was my fifth year of gliding and I was feeling a bit frustrated. I wanted to fly cross-country - and also get that 300km to finish the Gold badge (and what I considered to be my "apprenticeship"). But four years had passed since the Silver and it wasn't happening. I knew what the obstacles were, and there were loads of them.

And at the back of my mind I had strategies to deal with them. I would have to give gliding priority for it to have a chance against the natural dominance of family, work and indolence. Make space; watch the weather; be there; take a second membership in a seven day club; volunteer for the Inter-Club League; learn "how to" at BGA cross-country courses. And so the master-plan evolved - hire a club glider and use the BGA course weeks for a frontal assault. Just like Eisenhower on June 3, 1944!

Eisenhower managed to get a launch on June 6. But the June 1997 weather allowed no cross-country when the BGA came to our club. The July week at Bicester was good, but it showed that a 300km triangle can need a bigger chunk of sky with soaring conditions than a small island can always supply. So, after two frontal assaults, where were we?

Four cross-country sorties completed that season; 600km added to the book - doubling the existing total. But how to interpret the national coach's end-of-course assessment - "You're all right, you just need to get faster". Must try harder? Right, you're not taking the usual holiday abroad in August, book in for the club's August task week!

No one else turned up early on Day 1. The weather was hot, humid and unpromising. Day 2 stayed that way and on Day 3 it rained. Day 4 and the first task was set to the south (SBY-CAX-MOR-SBY). Approaching cirrus caused this to be changed, finally, to SBY-TIC-GRL-SBY. In the event everyone did an O/R to either TIC or, in my own, slightly more cautious case to RFD (105km). ("You chickened-out!", said the Nationals pilot.)

Driving to the club on the final morning afforded an hour's reflection. The master-plan isn't working. But I'm already averaging 50hrs a year, probably as much as most people. And I've signed-up for three cross-country weeks this year. It's just not going to happen - and perhaps it never will. Try again next year? Hope for a string of record breaking UK summers? Last resort - go to Australia? Whinge on again about not starting gliding 35 years sooner?

Only two of us, persistent hopefuls, were at the airfield to help the CFI and tuggie open the hangar doors. It was 11.30am by the time we got our aircraft on to the runway ("You need to get faster"), by which time the sky was looking uncharacteristically good as I paused for breath from dashing and fumbling back and forth to "stock" the Astir's cockpit.

Derek Sear's forecast gave a Day 5 - "moderate to good" rather than "300km plus". Thermal cut-off was predicted as 1700 to1800hrs. So, setting off on task at 1230 I was convinced that the day would be too short for a first, slow 300km.

But such thoughts about the long-term future were crowded out by more immediate concerns - how to go over or around the on-track MATZ at RAF Cottesmore which butts right up to Saltby, and is then followed immediately by RAF Wittering.

And there were the first thermals to "read" and the atrocious visibility in the heat haze - and the navigation. And then the first TP was coming up. Stay high - "click" - better go round and take another. Now, on the second leg, heading for TP2 even further away from base, I felt beyond the point of no return and relaxed enough to start thinking. "An hour and a half to CAX - it's now 2pm - say 2hrs each for legs two and three and I could be back by 6pm - so if I can get to MOR by 4 o'clock..."

Quotes from BGA courses helped

Looking back on the flight, I remember popping up from my mind a couple of stored quotes from BGA courses which helped in particular. One was psychologically supportive - "Four o'clock is only half way through the soaring day". That was reassuring with 65 miles to go from MOR. The other was vital for the successful outcome - "You don't need thermals for the last ...(half-hour?)" - this only came back to me as I was contemplating an almost cloudless sky (and a precautionary landing at HB) at about 1715. A slow climb to 4600ft was more than ample as it turned out to final glide the last 20 miles.

But what will I say now if someone asks me - "I see you've got your 300km. How do you do it?". Woody Allen said "Ninety-eight per cent of success is 'being there'".

So maybe I'll say - "be there and be lucky".

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1998 Newsletter available with details of new site in Central Spain

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★ *Early May – June.* Ontur – new site 250km SE Madrid – flatlands soaring or explore the Sierras. The area offers thermal, ridge, wave and sea breeze front soaring, boasting 300 days sunshine per annum. On site accommodation, camping and large new hangar. Cheap flights and car hire from Alicante.

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THE ROAD TO SPAIN

Brian suggests that pilots wanting a gliding holiday should try a newly developed Spanish site which has great possibilities and been recommended by Tug Willson

I have wondered for many years what it would take to raise UK glider pilots' interest in the wonderful flying conditions to be found in Spain. There are, of course, many opportunities to be found in Europe ranging from France (currently still suffering from some bureaucratic complications for UK pilots) to the Eastern European countries of the Czech Republic and Slovakia. Indeed many of the Dutch and Belgian clubs now take their summer camps in former Eastern bloc countries. Most of these countries are two days' drive from the UK and the weather outside July can be just as "iffy" as in the UK.

If you wish to be sure of the weather and good ambience the best alternative is probably Spain. The drawback is the lack of sites and facilities. There is the centre at Fuentimilanos in the north central part of Spain run by the German centre from Oerlinghausen and there are a few clubs in that region which can offer facilities to visitors. As the season north of the Sierra Guadarrama is about the same as ours with the most reliable weather during July and August, there is no full time operation in the area before July.

The southern plain provides cross-country conditions from March to October and one can fly at Ocana - the government run site south of Madrid. The real excitement of Spain is in the south and south-west, the area flown extensively by Tug Willson in his Stemme 10. Tug has reported marvellous conditions in the inland area from Alicante, with thermal flights being possible out into the central plain, cloudbases of 10 000ft being common and the area has abundant outlanding fields.

Marvellous conditions with cloudbases of 10 000ft

He has also found excellent wave conditions in the coastal region and along the mountains to the north-east. For the real adventurer and to supplement all this other soaring there is usually a sea breeze of epic proportions which penetrates up to 70kms inland.

The problem is that there has been nowhere to fly in this region - until now that is!

For some years there has been a small club operating from a dirt strip next to the town of Ontur, 50km SSE from Albacete. The club has a visionary in its midst called Eusebio Perez-Pastor who knows how good gliding conditions are in this region. He works for the local authority and knew how to get the club a grant aimed to develop facilities to bring tourism into the Spanish interior.



Tug Willson's photo of the site at Ontur.

With this money he has overseen the development of the club site which now boasts a 1200m long hard runway 2500ft asl and a new 1200 square metre hangar with glider parking areas. Six maisonettes and camping facilities being built on the site will be available for visiting pilots and their families and there is plenty of accommodation in the local town.

The site is at the southern most part of the plain with ridges extending north-eastward toward Castilla. To the west are the foothills of the Systemas Bistecos, which are several Sierras extending for about 300km to the Sierra Nevada, a mountain range with tops up to 9000ft. The 1000ft ridge adjacent to the site provides a handy parking place whilst waiting for a thermal.

This site offers a range of soaring of interest to the most experienced pilot whilst affording good open flat cross-country flying for those shy of the high ground. The area is well known for its wave which many local pilots have reached from a winch launch *via* thermals.

The best conditions in the area are probably in the spring and autumn, from March through to June. The prevailing weather is from the north and west bringing good soaring airmass - and good ridge conditions. In July and August the *levante* blows from the south-east. This can bring blue conditions and an inversion around 5000ft. This is ideal for northern European pilots who can enjoy their main season and extend it with forays to the south. The ground temperature is probably too high for most pilots in July and August as it can often be over 40°C.

It takes under two days drive to get there via the Channel

The region is well known for its tourist attractions with many beautiful towns and castles. It is only one hour from Alicante providing cheap access *via* charter flights and hire cars in tourist Spain are the cheapest in Europe. Travel with a trailer takes under two days *via* the Channel ports or a day's ferry journey to Northern Spain and a short day's drive through Spain.

At the moment there is no full time operation at Ontur but the European Soaring Club will be there through May, June and during September and October. I would expect there to be a permanent operation by the beginning of 1999. I anticipate that when the word gets around this will become one of Europe's most popular soaring areas. If you are interested in flying at Ontur this season contact the European Soaring Club.



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WAY BACK WORLDS - SPAIN 1952

Mañana rules OK, is how Ann, British team captain, summed up this contest which gave us a Champion

The British team drove the 1000 miles to Cuatra Vientos Airfield, Madrid, with five new Slingsby Skys, six new Standard Vanguard estate cars, a strong team and high hopes - in spite of a shortage of information from the organisers.

Much work had been done since 1950 in Sweden when none of the team managed to climb out of the bottom half of the results list with their three elderly Weihes and a 15m Gull 4 retrieved by a mixed collection of private cars including a classic open Bentley - not ideal for overnight retrieves in the direction of the Arctic Circle.

This time it would be better. All but one of the pilots had competed before; Philip Wills, Geoffrey Stephenson, Lorne Welch and Jock Forbes, with BEA pilot Frank Foster as the new boy and David Ince as reserve pilot. The journey was uneventful apart from Lorne's trailer smiting a cork tree, but the team still had to learn about *Mañana*.

There was still a week of practice for the 37 single-seater and 18 two-seater pilots to work on organisers often conspicuous by their absence, but the Brits were lucky in that Jack Rice had brought his Messenger to Madrid and was more than happy to get them into the air - while the crews repaired two trailers and Philip's Sky slightly bent landing on a football field.

The rules, found to be incomprehensible, were re-drafted in four languages

On June 30 the Championships were opened with a flourish of speeches from men in dark suits only to be followed by two days of no flying. The practice days had revealed that the rules were incomprehensible. Pirat Gehriger, director of the 1948 Internationals in Switzerland, took charge of the re-drafting in four languages.

In a room where the temperature equalled the 40°C outside the committee of team captains endeavoured to stay awake until words in some known language penetrated their heat treated brains. At the end of this marathon Wally Setz of the SSA disappeared with piles of paper to return next day with duplicated copies in English for all. It was the first and last miracle.

There were to be three types of task; free distance, pilot selected goal and speed to a set goal. Launching would start at 0930 (it never did) and the organisers insisted that there would be a rest day after every task - and should launching be delayed until 1300, siesta time, the day would be cancelled!

Finally, three days after the opening, on July 3, the first task was set, for free distance, and Philip won the draw for first launch at 1208. By 1308 everyone was away with those going to the north not knowing that the distant line of cunim which looked so attractive was not only unreachable but was producing a cold front in the form of a very shallow gale right across their track. On coming into land the wind was swinging violently around without warning.



The 1952 British team, left to right, Frank Foster, Geoffrey Stephenson, Philip Wills and Lorne Welch. The fifth member, Jock Forbes, was in the RAF in Germany.

Three gliders were written off, including Frank Foster's Sky which was flung into a telegraph pole 220km from base. The other two were Lasch, South Africa, and Schachenmann, Switzerland, while Dick Johnson's remarkable little RJ-7 was damaged, as were several others. The day was won by Gerard Pierre, France, with 300km, while Jock flew 260km into 4th place. Philip came a lowly 17th.

This flurry of aviation was followed by prolonged siestas, even in the hangar where workman vanished into the roof to sleep and could only be brought down to supply repair materials by drastic measures like tearing up plywood to sound like a crash.

Two days later, on July 5, pilot selected goal was set and Pierre won again, flying 290km to the NW, but both Philip and Jock reached their goals at Zaragoza. This bounced Philip right up into 2nd place and Steve to 19th from 38th. Inevitably, another rest day followed but it gave an opportunity to sort out the remarkable food situation.

About an hour before siesta time an open lorry would appear containing two men and a load of paper bags, which would be thrown to team captains and any crews who happened to be nearby. There were two bags for each person, for lunch and supper, both containing an enormous tomato, a hunk of bread and a stuffed, tepid, omelette.

If eaten quickly it was hoped to avoid food poisoning but no one wanted to risk the contents by supper time, so team funds were stretched to cover evening meals in a spotless Swiss restaurant in Madrid, not far from the hotel. This was an amazing building being in a hollow square with both bedrooms and staircase on to it; going down in the mornings provided fascinating views of residents still in bed!

The next contest day was July 7 with a little race to Torresavinien, 121km, in dream weather. Philip made the fastest time of 84.4km/h having released into a strong thermal to bring him within 14pts of Pierre, whose speed was only 41.6km/h. Jock came 4th and both Steve and Lorne made goal, happy to avoid a small problem that had occurred with some outlandings; the Guardia Civile would arrive in no time at all to guard the glider and sit in the shade under the wing until the crew came. They would then stand up in welcome forgetting that their bayonets pointed upwards.

By now the airfield had lost any grass it had

started with so aerotowing took place in the nearest thing to a dust storm outside the Sahara. The problem was that most of the gliders had droppable undercarriages which when released remained bouncing around invisible to those still to go. As well as wheels, tugs and gliders the fog contained a good sprinkling of crews desperately searching for their wheels. The tug pilots seemed to be quite unbothered; like competitors they just wanted to fly.

By now teams were becoming vociferous in their demands for more tasks so, reluctantly, the organisers agreed to fly the next day, July 8. The weather was perfect with beautiful cumulus and launching began smoothly, but after the first four had taken off it stopped. Mystified team captains were told "the weather is not good enough". Mystification turned to fury but then to hilarity when the tugs sent to signal the gliders to return were unable to catch up with them!

On July 9, one week after the start, task four was set, for free distance. It was won with 248km by a surprised and smiling Feddersen, Denmark, down in 29th place, but Philip flew 237km which gave him 1st overall. Jock moved up into 3rd place while Pierre lost his lead having flown less far than any of the British team.

Needless to say the organisers succeeded in winning another rest day but on July 11, as a sop to frustrated competitors, they let them choose between pilot selected goal or a race. They chose the latter, unwisely as it turned out, as Torresavinien (again) was given and there was a large cu-nim growing right across the line. Jock and Philip went into it hoping to turn great height into speed, talking together as they climbed.

Philip achieved 23 500ft for Diamond height and top place, but Jock, who had expected to fly at normal heights, had left his oxygen behind and became increasingly incoherent the higher he got. His attempts to get down by spinning did not work too well either as his dive brakes froze out, but he made goal, only 2min behind Philip.

This should have given him 2nd overall but Dick Johnston flew his fast little repaired RJ-7 to goal at an unheard of speed of 107.5km/h which depressed the speed marks, leaving Jock 3rd by just 5pts.

Without any British entry frustrations in the Two-seater Class had passed largely unnoticed but everyone was pleased that Spain's Luis Juez, flying a Kranich in his first Worlds, won. Perhaps being experienced in the ways of *mañana* he had quietly climbed to top from 17th on the first day and resolutely stayed there.

As July 11 was also the last competition day Philip was undisputed Champion, but *mañana* still persisted as prizegiving would not be until July 13, two days away. When it finally arrived the finishing feast was also remarkable; a hundred yard long table on the airfield completely covered in food and wine.

Sadly, by the time the salivating crews were let off parade the townspeople had already got there and it was necessary to form a thin red line through the wall of locals to pass food and drink back to hungry pilots.

In spite of the frustrations, the heat, dust and flies, the British team had all come within the top eleven of the 37 entries, only poor Frank Foster losing out on the first day's meteorological quirk. Slingsby's Skys did better than all the 14 Weihes with the exception of Gehriger who came 5th.

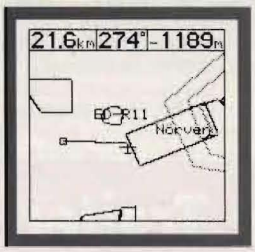
Standards also added to the team success with their comfortable dust free cars - infinitely better than the open Unimog trucks loaned to the Americans and others. Not only were they slow and hot, but the Unimog end of the tow hitch had been welded to both the chassis and the suspension giving a most interesting ride on dirt roads.

Although some teams found their sense of humour wearing a little thin by the end of these Championships the British drove home happy. Leaving the dust prairie of Cuatra Vientos behind no one knew that in future it would become Madrid's prestigious international airport.

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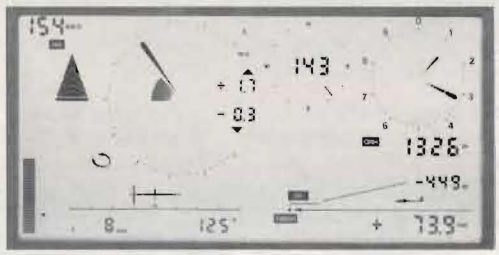
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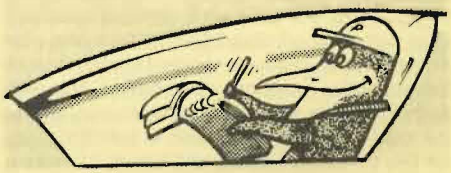
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WAY OFF TRACK



Freedom Regained

There are never-ending assaults on our airspace freedoms. The brasshats' requirement for airspace goes up in inverse proportion to the decreasing threat as the Cold War fades into memory. The commercial airlines' airspace clamour grows with almost every Joe Soap aspiring now to fly on holiday to Antalya or Acapulco. Well-shod townies are fleeing inner city and suburban areas to impose themselves, and their version of peace, on hitherto unsullied countryside.

So there hasn't been much good news on the planning front for gliding in recent years.

How heartening, therefore, was development officer Roger Coote's news in the last *S&G*, p360. It is of inestimable value to us all: the Essex and Suffolk GC has *won* its appeal against very restrictive operating conditions at Wormingford imposed in 1992.

After gliding's reverses elsewhere, such as Bowland Forest GC's costly but fruitless pursuit of permission to aerotow at Cock Hill Farm, I find it hard to sympathise with the Wormingford objectors who, a spokesman claims, spent £38 000 on the planning inquiry. They reportedly declared their objective to be the complete cessation of ESGC operations there.

I thought they were clutching at straws and almost inviting defeat when one of their objections was to the very *sight* of sailplanes soaring overhead.

As far as the "visual intrusion" of gliders into a landscape and skyscape immortalised by Constable is concerned, I bet every one of these aviaphobes has some time driven or ridden in a car past Flatford Mill and down the lanes travelled by his Hay Wain.

Mind you, I'm with them all the way if they are now to use their recently honed courtroom skills to oppose the erection of an obtrusive mobile phone mast to dominate Dedham Vale, a lovely stretch of countryside.

Chances are they won't, for they probably use the pestilential things themselves.

Forever Amber

For four years I've been flying a Jantar 1 without ever knowing what the name meant, simply assuming that, like other Polish sailplanes, it was named after a bird.

Now I know it wasn't, thanks to Alan Self's monumental research in chasing up the derivation of the names of some 800 types from the earliest days of gliding to the present day. (See the last issue, p350.)

Jantar, to Poles, means amber. This sounds rather more impressive than the Sparrow I thought it probably was, or the Jamjar which I have carelessly slipped into using as a callsign recently.

Amber suggests elegance and beauty: I'll have to think of something more fitting now.

Alan told only half of it in defining amber as a mineral: it is actually fossilised resin, one of the world's chief sources of which is Poland's Baltic beaches.

But I'll have to keep quiet about that when I come to sell the aircraft on type-converting to a bathchair in a few years' time. Potential buyers will be able to see all too clearly that, if it is not actually *fossilised* resin it is certainly ageing epoxy.

Devonian Talk-down

Having received far more "rollockings" in my gliding life than I've ever had the chance to give, I was very impressed with the learned Chris Ellis's etymological discourse on the origin of the word in Letters last time round, p327.

I was also mightily taken with his knowledge of maritime lore: his aeronautical knowledge, of course, I take for granted.

It costs me some effort to say these kind things about a Myndmate I haven't had the pleasure of meeting now for many years. The last time was, perhaps, in 1982 when I was flying my Phoebus 17c in Competition Enterprise at North Hill.

I was rather low and punching into wind but was only about two miles or so short of the TP, Okehampton. Beneath me was Chris and his Oly 460. In a field.

The trap was seductive and, for Chris, very easy to spring. "If you're looking for a field, Bob, this is a good one," he radioed helpfully. Two minutes later I was rolling up the field's gentle slope to bring my aircraft to a halt beside his.

A few minutes later we were joined by a third, the pilot of which, in those pre-mobile days, strode off to phone a landing report for all three of us to Comp control.

While he was away a fourth aircraft appeared - overhead. It was a lowly K-8 in which a determined Paul Wheatcroft had ignored its lousy penetration, resolutely battled against the wind, turned Okehampton and was now happily speeding downwind to Exeter to come 2nd for the day on handicap.

Chris Ellis is a lovely, gentle, kind and courteous fellow - but I have never been able to rid myself of the niggling suspicion that he downed me with a sucker punch.

That evening my younger son, then only 14, further demolished me in North Hill's crowded bar. Someone asked whether I'd ordered a pint, or a half. "It's a pint," the pipsqueak piped up. "My dad never does anything by halves - except his O/Rs."



Maiden Flight For Genesis 2



After six years of development, testing and refinement, Group Genesis 2 had a successul maiden flight in November. Sportline Aviacija test pilots reported excellent control response, normal in-flight handling characteristics and an improved roll rate over the G1 prototype. At low speeds there was a marked improvement with airflow separation beginning aboiut 6kts slower than the G1. The first deliveries will begin early this year.

Could This Be The Solution To Plat's Problem?

MICK WILSHERE





In the April 1996, p79, issue Tail Feathers had a cartoon sketch and a paragraph by Platypus about the difficulty of lifting the tail end of his ASH-25. I had a similar problem put to me by a Stemme 10 owner and came up with the unit, shown in the photographs above, which provide some 15in of lift and will take the best part of one ton. I have used it to raise my LAK-12, fully assembled, under the nose and lifted it clear of the floor to do some work on the wheel doors. The unit is wide enough to be stable under any condition. What isn't shown in the photos is the strap that holds it to the fuselage to stop it jumping out of the cradle. It's not a particularly commercial product but an aid for the elderly and weak in the back. I can provide them at a nominal cost on request. If interested contact Mick Wilsheratf 3A Nascot Wood Road, Watford WD1 3RT.



Vintage Days Ahead

Sandra Gillmeister's photo (left) of the beautiful replica of the Zlin 23 Honza, a Czech primary owned by Josef Ott from the Slovak Replublic, taken at the International Vintage Glider Rally at Bar sur Seine, France, last summer comes as a reminder that there is a busy programme ahead for the vintage enthusiasts. The International Rally will be at Nitra, Slovakia from July 29 and Ian Dunkley says they will again have the Camphill Vintage Rally at Derby &Lancs GC, this year from May 23 to 31.

THE SKYLARK 1 - The First Modern Sailplane

Chris Riddell recalls owning and flying it for five years

In his excellent book, **Slingsby Sailplanes,** Martin Simons is rather dismissive of the Skylark 1, saying that two were made: one was sent to Pat Beatty in South Africa and the other prototype was sold after Tony Deane-Drummond had flown it in the 1953 Nationals at Camphill. What Martin did not appreciate was that it had been sold to me.

The Skylark 1 was very exciting to fly with well co-ordinated controls. It was positively stable in all three planes and easy to fly in cloud. It was very responsive and performed well in hill and wave lift. The airbrakes were of the DFS type and gave a good positive descent control. The landing skid and these powerful airbrakes made it relatively easy to land in small fields.

It was diminutive with a 13.5 metre wing span. The three piece high speed wing - a novelty for those days - used the laminar flow wing sections that had just been developed. A further innovation was that the wings were covered in gaboon ply on a spruce spar, making them very smooth and rigid. The ideas were adopted for all subsequent Skylark designs. The fuselage was made from Prefect frames modified to give a wider connection to the wing's centre-section. Unlike the Prefect it was fitted with a closed lift off canopy.

Thermaling was more difficult. I found it flew best in thermals at 45kts. At this airspeed, turns were wide until the bank was increased to 45° and more. It was then possible to stay in the thermal core and sometimes outclimb other sailplanes. In strong conditions it was very fast across the country for those days. It had an invaluable characteristic - it could flick roll. Application of top rudder in a turn caused it to rotate rapidly into the opposite heading so direction could be changed very quickly.

The instrumentation was by modern standards very rudimentary. Besides the ASI and altimeter, I had an electric T&S and a COSIM variometer. The COSIM was a wayward instrument which was not very reliable as the little red and green balls were inclined to stick in damp weather. I think I had a compass and I know I had a secret weapon - the speed-to-fly pencil.



The Skylark 1 being connected to the winch cable at Sutton Bank in 1956.

This was Philip Wills's invention. A six sided pencil had the speed-to-fly set at certain thermal climb rates against the six typical thermal strengths stamped at the base of each of the six faces. You flew at the speed indicated by the height of the red ball in the tube. It proved invaluable.

Being light and easily transported, I visited many sites by road. I took the Skylark to the Mynd and Tebay was another favourite site. We went on safari to Connel Ferry Airfield with others from the SGU. For some time I kept it at Sherburn in Elmet when running a branch of the Yorkshire GC there. I did a number of cross-countries, of which perhaps the most enjoyable was a flight to the west in dry thermals to Squires Gate Airport, Blackpool. Undoubtedly the most important flight was in the helm wind.

A group of us had wanted to soar the helm wind - the lee wave over the river Eden in Cumbria - for some time. It had been flown before the war by members of the Newcastle GC. They had winched out of a field above Bank Hall Farm. So, in March 1960, we took our mobile winch there and launched the Skylark.

On the second launch I formated on the local buzzard at 800ft over the farmhouse and found myself in wave. The lift was strong and at one point I timed the climb and found that we had risen 2400ft in one minute. The Skylark 1 was not fitted with oxygen, so I broke off the climb just above the top of the wave cloud at 9200ft. I flew south in the wave to land at the Tebay Club.

My logbook records 127hrs and 970 miles cross-country in the Skylark 1. I owned it for five years and had some memorable flying without significant mishap. Times were moving on and I felt I needed a better ship. We turned our group into a syndicate and bought a Skylark 3F. I sold the Skylark 1 to a syndicate at Doncaster but they did not keep it long before they too bought a 3F. I do not know who owned it after that.

At the 1953 Nationals at Camphill in mixed weather, Tony Deane-Drummond did quite well flying the prototype Skylark but commented that it was a big step forward. However it was difficult to keep up in weak conditions. Philip Wills won the meeting in his Sky. The consensus was that the Skylark was a good try but needed to fly 10mph slower for British conditions.

I felt that the opinions were too cautious. It is never easy to compete on equal terms in a new and untried sailplane. Established competition pilots' ideas are influenced by their previous experience. At that time this was confined to the low flying and sinking speed with low glide angle of the Sky, Weihe and, of course, the Olympia. In this company the Skylark I was something different.

Fred Slingsby saw the opportunity that laminar flow airfoil sections gave to improve sailplane performance. He explained the reason for the Skylark 1 as a design to exploit these new laminar flow sections with their promise of low drag at higher speeds. Changes in the ARB rough case requirements for sailplanes that came in at this time had the effect of increasing cruising speeds as well.

In the UK the enthusiasm for very long cross-country tasks was waning. Competition pilots were looking for a different task format than that which emphasised distance flown. In Germany the racing tasks over a closed circuit were being developed. It was a genius of Fred Slingsby that he saw these trends and designed the Skylark 1 to meet them. It was the first modern sailplane.

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THE MANAGEMENT OF TYPE CONVERSIONS

Accidents, which may be serious or even fatal, happen because instructors don't recognise the problems of flying a new type and fail to give proper conversion supervision. Here Bill Scull, the chairman of the BGA Safety Committee, looks at some of the factors involved

As instructors it may be difficult or impossible to remember the problems we faced when we first flew a new type. Beyond a certain number of different types in one's logbook a further new type may not be a problem anyway. But think back. My first experience (and problem) was after training on a T-31 and flying solo in a Tutor; neither glider had spoilers. My ninth flight in the newly acquired Skylark 2 has the logbook entry: "Final turn on S-turn approach carried out at too low an altitude. Starboard wingtip struck ground and aircraft groundlooped. . ."

Why S-turns? Because that's what we did in the other gliders; even the CFI did S-turns. Total experience at the time 235 launches, 18hrs and 49min with nine flights and 54min on type. No further comment is necessary.

Much later on I remember flying a Pirat for the first time. I liked it; a big, roomy cockpit may have influenced this impression but by this time I had flown more than 30 types, 40 including aeroplanes, and type conversion was not a problem.

But my assessment of the new type was largely subjective which was a problem for briefing others. Only much later was I able to assess the glider more objectively, noting individual points that were not critical on their own but might combine, such as a powerful trimmer and airbrakes that were not easy to close if the speed was too high. These two may combine to cause an undershoot if not trimmed correctly, flying faster than briefed to be on the safe side and then not being able to close the brakes.

There are numerous other examples. One of the first GRP gliders in the country was the Phoebus which had upper-surface brakes set well back. I remember a very experienced instructor landing well down the airfield and saying "you might have told me about the airbrakes!" - and so we should, but a quick look at the glider might have given a clue that it wouldn't have the same airbrake power as a Skylark.

Sit in the glider to learn the position of the controls

The PIK 20B has trailing edge flap brakes which are extended by winding a handle (five turns for full landing flap). The briefing had been to lower the flap to about 15° (one turn of the handle) on the downwind leg, another 15° on the base leg and on approach to use the remaining flap travel as "airbrake". What wasn't explained was that the initial flap adjustments might preclude completing the circuit unless it was closer or higher than usual. The "experienced" CFI ended up making a very, very low final turn. The briefing was subsequently modified.

Does this show the nature of the problem? Difficulties of type conversion may show up in a number of ways, some related to the management of the conversion which will take many flights, even if the programme is structured. Some very experienced pilots will admit needing 50hrs or more on a new type before feeling comfortable in it.

There are some very basic considerations. How different is the new type to those previously flown? If there are too many factors then the conversion might not be appropriate (*eg*, Tutor to Skylark 2!). The ones to consider are complications such as flaps and retractable undercarriage and differences such as airbrake effectiveness and the sitting position.

Some of these can be dealt with by cockpit familiarisation; sitting in the glider for some time to learn the position of controls and, possibly, the reclining seat back. Reach for the ancillary controls until they fall readily to hand, even with your eyes closed. However, beware actually operating them unless it is safe to do so.

I remember a pilot preparing to fly an ASW-19 for the first time. Before he got into the cockpit he asked "What does this lever do?" and duly retracted the undercarriage before anyone could stop him! So much for his powers of deduction.

On a more mundane level the tale of two partners test flying an SHK before buying it is legendary. One landed with the wheel up and the other, to avoid embarrassment, made the flight with the wheel down and then, you guessed, retracted it before landing.

On a more serious note, type conversions can be really fraught and sometimes fatal. Consider the first flight in a GRP glider; even conversion from a K-8 to an Astir might be too big a step. Whether a pilot can convert safely may depend on confidence and, importantly, whether anything goes wrong on the first flight. One obvious consideration is whether the pilot has any previous experience of glass. There is no excuse for not having a flight or two in a suitable two-seater which may also improve confidence, even if this does mean visiting another club.

If the speed control isn't good enough suggest making an approach wearing ear defenders (in a two-seater of course) to make sure the airspeed is monitored frequently enough and the pilot is not too dependent on noise as a guide.

If the new type has less effective airbrakes than the previous one, have the pilot make an approach manually restricting the airbrakes to half open. In this way you can establish whether the pilot will make necessary alterations to the circuit. The only alternative is a lower than usual final turn from the base leg position appropriate to the previous type, which is not a good idea.

Another factor may be the type of launch used. If the pilot flies at a club which only has winch launching then it is likely the type conversion flight will be on the winch. But might it be better to first extend the pilot's experience by getting up to solo standard on aerotow?

Additionally the conversion could take place at an easy airfield. Some restricted sites may pose problems if the cable breaks and the extra workload of the new type becomes just too much for the pilot to cope.

Take their own glider to an easier site for an aerotow

I can recall conversion accidents from winch launches, usually by relatively inexperience pilots (in both hours and number of types), while the more experienced from the same club, who might have supervised these flights, have taken their own new glider to an easier site for an aerotow. If they need these safeguards then the less experience pilot surely must.

So management of type conversion is fundamental to success. The first objective is to take-off and land safely. The flight should be long enough to allow sufficient handling time to get a proper feel for the opening and closing of airbrakes, flap adjustments and associated trim changes. This evaluation should be demonstrated in a two-seater beforehand.

Some factors can be controlled. If the ailerons are slow to take effect then it is better if the first flight is in a moderate wind to avoid the wing dropping. The same would be true if the recommended practice for the type is to change the flap setting during the ground run; a moderate breeze will avoid the necessity to do this.

There is a lot to think about in the management of a type conversion. If you feel the need to give a comprehensive briefing then maybe the pilot isn't ready. You can be sure that he or she will remember the wrong points rather than those which are vital.

Again I remember a pilot, a professional, being converted from a Swallow to a Phoebus at a restricted site. The key point was the less effective airbrakes. The pilot overshot the normal landing area and had to turn through 10-15° because of the airfield layout.

The result? The wingtip touched the ground before the main wheel.

RICHARD ALLCOAT

WAVE GOODBYE TO SCOTLAND

SGU pilots Neville and Richard Allcoat (father and son) made Scottish gliding history on September 8 with the first 750km from Scotland, flying their DG-500 with winglets which also took them on a speedy 500km last autumn, see *S&G*, February 1997, p55. This time the write up is by Richard



Richard and Neville photographed by Bob McLean after their landing at Rufforth, the wave still clearly visible over York at 6.30pm.

Having just watched the video once again, it never ceases to amaze me how many things conspired to make September 8 a remarkable day. Our 750km diploma is in the bag, a first from Scotland, and we have a 45 minute video film of the flight.

Diary, Sunday, September 7

The BBC 1 forecast was for the south-westerly gales to veer west at ground level by morning and to remain at 25kts, with a maximum daytime temperature of 18°C and a rising pressure of 1013mb. This usually spells good wave as the winds veer with height, so I rang my boss and begged Monday off. So far so good. At 7.15pm I 'phoned Dad, confirmed the forecast and made sure the batteries were charged and that he would be up with the lark.

Diary, Monday, September 8, 9am

The forecast was correct and we met at Portmoak Airfield with wave already visible to the north-west. We uncovered our DG-500/20 metre winglets, loaded her up and were ready to launch at 9.50am. Our declared task was Portmoak caravan site (PCS), Edzell (EDZ), Helensburgh pier (HEL), Aboyne clubhouse (ABO) and then free distance.

Declaration signed, photos taken, we winch launched at 9.52am to 1500ft. Having climbed overhead Bishop Hill to 2500ft we pushed west for a mile, contacting wave over Loch Leven. With 4kts of lift at 4000ft it was off the clock at 7000ft. Climbing through 10 000ft with a wind strength of 45kts NW we set off for EDZ, a distance of 75km. Progress was slow but the wave well formed and we turned EDZ after 75min, heading for HEL 165km away.

The wave was set up parallel to the Grampian mountains running 070/250 but the wind was from WNW, giving a strong into wind component along the wave running west to the next TP. For over 2hrs we battled along the wave bars into wind towards HEL.

Cloud cover had increased from 3 to 7 octas from the east to west coast, forcing us to climb to 12 000ft to see the few gaps ahead. The last visible gap to the west was fortunately just beyond Helensburgh and, having lost 4000ft getting there, we were pleased to round the TP in lift, then head rapidly north-east towards ABO 170km away.

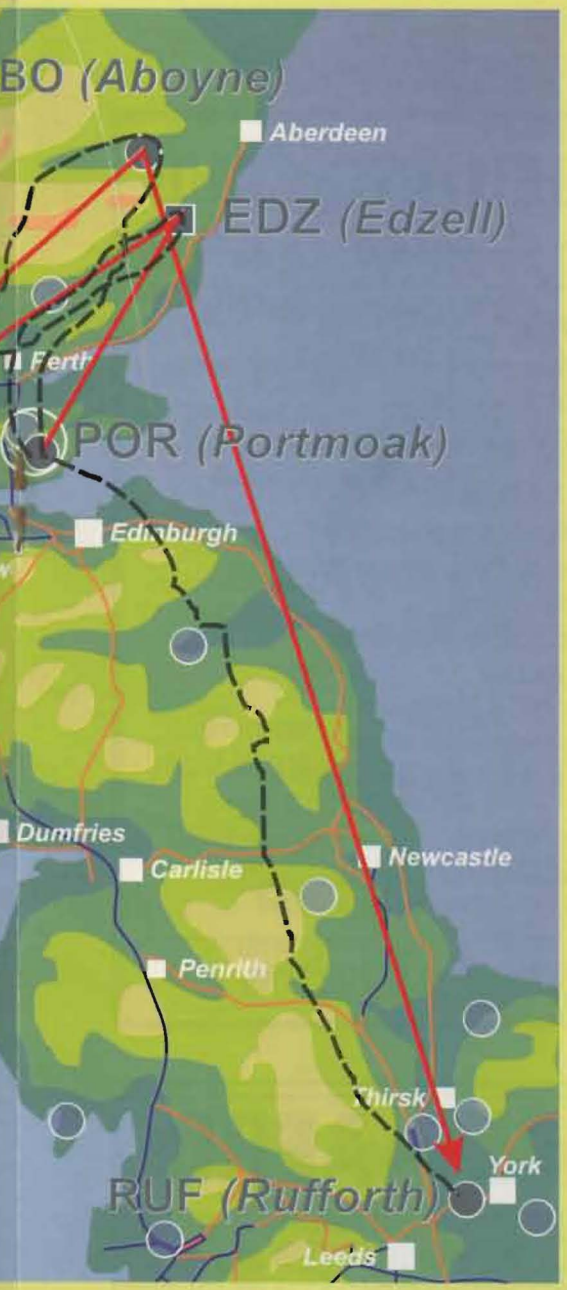
Now we had the advantage of a tailwind component along the wave and progressed quickly to ABO in clearer air and strong wave, maintaining 8000 to 11 000ft. We were careful to keep Callender on our right to avoid Glasgow airspace. Cloud cover was now reducing and we were able to stay between 7000-11 000ft, flying fast to ABO.

Round the TP we called Aboyne gliders to say hello. It was 2.30pm and at 10 000ft Portmoak was easily within reach, but rather than flying very fast we decided to conserve height and arrive back at Portmoak as high as possible, hoping that we could get clearance from Scottish FIR to transit across Edinburgh towards Jedburgh and Rufforth.

The next problem was organising a retrieve from the Yorkshire area if we were heading south because with a 45kt tailwind we would not be coming back! Gavin Goudie was flying his Discus locally and valiantly volunteered to land, hitch up our trailer and head down the A1.

Scottish FIR could not get clearance from Edinburgh for us to transit overhead but suggested that we routed east along the Fife coast to Buckhaven, cross the 12 miles of the Firth of Forth to North Berwick and report when clearing East Fortune Airfield. This we complied with and NATS wished us a safe onward journey.

The wave was well formed over the Scottish Borders so we made good progress at groundspeeds often in excess of 120kts. Slight diversions east to avoid the Otterburn danger area



then south-west to miss the Newcastle airspace, we waved goodbye to Scotland.

John Ellis in his Nimbus 3T, flying from Sutton Bank, radioed to say hello and suggested the Pennine lee wave was very strong over Derwent reservoir and then to the south, so we headed towards him. Twenty minutes later he passed us, heading north at over 200kts closing speed, 8000ft high still showing 4kts of lift.

With less than 200km to run to Rufforth and 10 000ft back on the altimeter, we could sit back, enjoy the evening sunshine and watch the Pennines and the Yorkshire moors roll by. By 6pm we were over York letting down from 5000ft to a welcoming committee on Rufforth 24 west runway. Bob McLean helped us park our glider and his wife provided us with very welcome cups of tea - after all one of their DGs had come home.

The crew arrived at 9pm and we were heading north by 9.45pm. After 8hrs 17min flying a total of 770km and a 5hr drive home, we were back at Portmoak overjoyed, needing more than a little sleep but already planning the next adventure.

(NB. Why, we asked, didn't they go on when 900km looked possible? It was simply a lack of time. Richard had an early morning meeting in Edinburgh the next day. And, as Neville said, it will give another goal for the future. Ed.)

STEVE OLENDER

THE ROUTE OF THE CASTLES

We have another account of a 750km, this time in Spain and likely to whet the appetite of anyone planning a gliding holiday

I was beginning to think that 1997 was not going to be a good year for me gliding-wise. From March to May I was working in southern France with little spare time and I missed the Overseas Nationals (so close yet...). Next, came almost two and a half months in Tasmania (in their winter - what wonderful wave they have!) arriving back in Spain (where I am now based) in mid August. But some discrete arm twisting gave me time off work and I drove down to my club at Santo Tomé to rig the LS-7.

The next few days saw a 500km and a couple of flights over 400km. The club was only operating until the weekend so my "crew" Mercedes (my wife) and I decided to go to Fuentemilanos 60km down the ridge (with an elevation almost 3400ft asl) so that she could use their swimming pool, allowing me to do some more gliding!

The next day, August 19, Ingo Renner gave the forecast of a good day with thermals so I decided to try the "Route of the Castles" which is a 750km yo-yo with - yes, you guessed it - a castle at each TP. I did not get a launch until after 1pm and pulling off tow near the airfield, I climbed straight up to 5200ft and set off for the hills about 12km away. Here the thermals were going nearly 2000ft higher at 5kts. (Data from the EW.) The mountain ridge line rises above the high plains of central Spain and stretches from almost Plasencia in the south-west to the Sierra of Alto Rey to the north-east, a total of over 250km, and with the combination of mountain peaks, ridges and connecting high ground it is an impressive source of thermals.

I pushed on down the ridge line towards Santo Tomé arriving in time to catch the "club" thermal above the slopes of La Cebollera (7000ft asl). It was looking good ahead so I continued on past the winter ski station at La Pinilla (7400ft asl) and the Sierra of Ayllón in quick succession,

Continued on p36.



Steve is an ex (civilian) member of Clevelands GC and now flies his LS-7WL at the Loreto GC, Santo Tomé, which is some 100km north of Madrid. He has 1800hrs with all three Diamonds.



The first TP - The castle at Berlanga de Duero.



Above: The second TP - the castle at El Barco de Avila. Below: The third TP - the hilltop fort at Gormaz. Photos by Steve.



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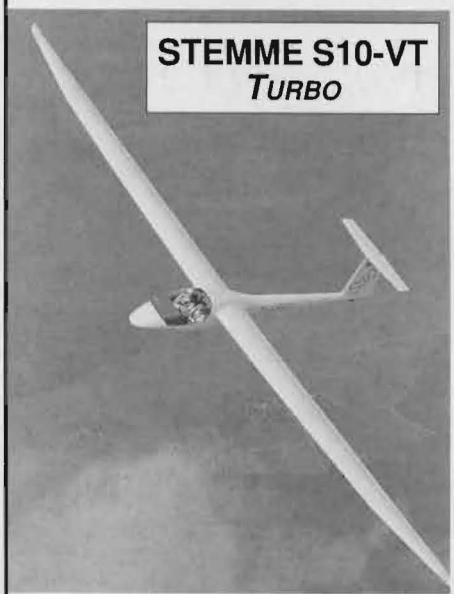
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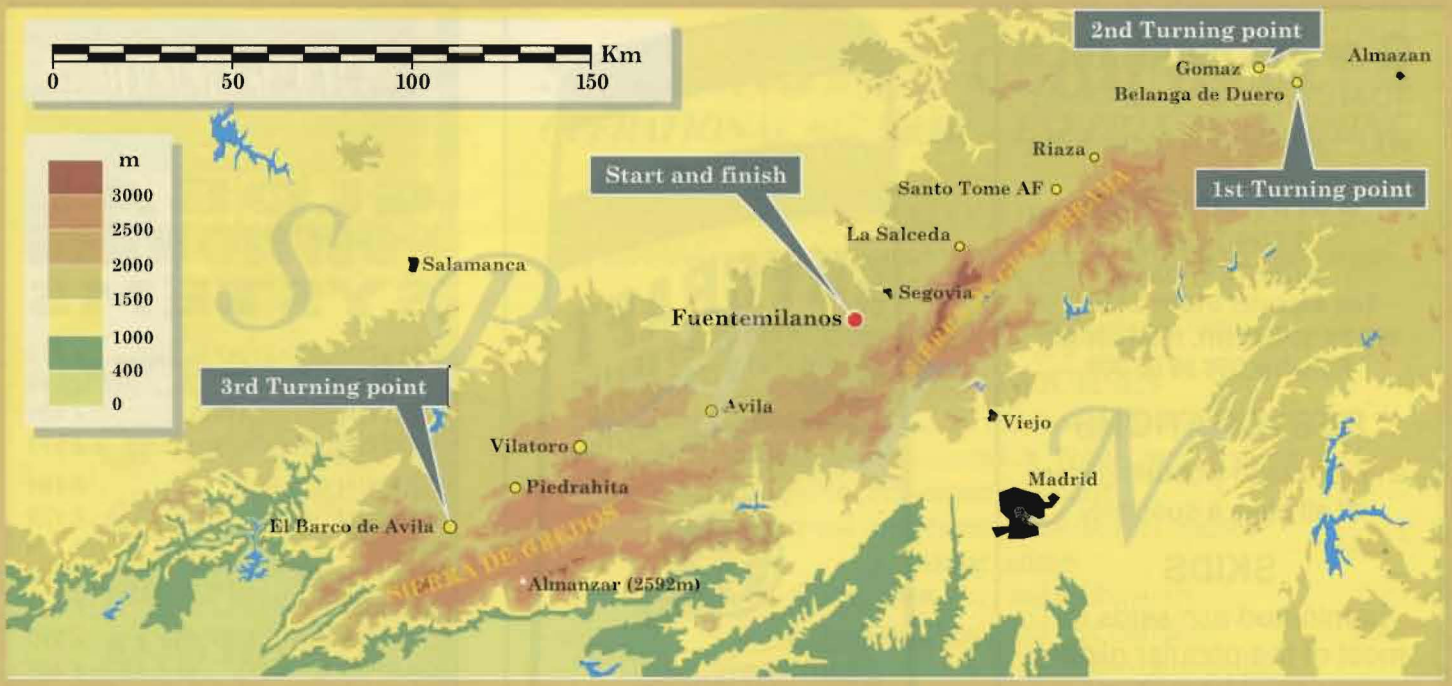
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A map of the task area. This and all other graphics in this issue are by Steve Longland.

eventually taking a more northerly heading out into the plain and towards the turn. The average speed to the turn was 106km/h and following the 20km glide around the hill top fort overlooking Berlanga de Duero, another good thermal lifted the LS-7 to cloudbase which was now almost 8000ft. I was soon back at Santo Tomé, again taking the club thermal to glide out along the ridge line and back to Fuentemilanos.

A fast run took me past Avila and along the northern of two Sierras which eventually converge at Villatoro (on the way achieving the best climb of the day at 8.5kts). This was the best part of the flight and I was able to fly for 80km, turning only in good lift at an average speed of over 115km/h. I was amazed at the progress although it was now 4.20pm with more than 400km still to go. In the next flat valley beyond Villatoro the airmass appeared to be quite different and there were few clouds.

On other days a convergence line develops and gives some of the best conditions here. To the south I could clearly see the peak of Almanzor on the Gredos (the highest on this chain of mountains at 8500ft asl), which still had patches of snow on its north facing slopes.

I pressed on cautiously over the high ground to the end of the wispy cloud street which almost took me to the TP, rounding the square, turreted castle of El Barco de Avila at about 5pm. The average speed for the first 385km was holding at 106km/h. Although the prospect of reaching the third turn was still a possibility I had to escape this valley quickly and get back to the good conditions. Returning to the clouds on the inbound route would have meant arriving with very little spare height over the high ground, so I flew over a lower ridge line more to the north towards Piedrahita and some small wisps of cu. Reduced sink helped me arrive there at 4000ft (now at about ridge top height of the inbound leg).

> *"With time being of the essence I kept on pushing towards the turn..."*

Over the town a weak thermal gave enough height to reach the higher ground back at Villatoro. A further climb with a DG-600 gave enough height to get to the next good looking cu which went to nearly 9000ft. This allowed a fast 50km glide back to Fuentemilanos where 6kts took me back to cloudbase.

It was now just after 6pm with 250km to go and it still looked good ahead . Often the day can appear to be dying and then suddenly re-cycles or a convergence line forms and there can be thermals until darkness. I was given some encouragement by Ian Stromberg who was near cloudbase in his big Nimbus under a street about 40km to the east of me and could see another cloud street heading out towards the area of my third TP at Gormaz. Joining the first street I climbed to nearly 9000ft and set off for the good looking but distant clouds ahead.

Following a 40km glide across the blue gap, I arrived at the huge billowing clouds with reasonable height but unable to find a strong core. With time being of the essence I kept on pushing towards the turn, but was not able to find good lift or to reach cloudbase. I eventually set off at 8000ft, 25km out to arrive at Gormaz castle at 7.10pm, the average for the third leg having gone up to 109km/h. The TP is a spectacular stretched out fort on an isolated hill top on the inside of a meandering loop of the river Duero, which warranted a later tourist visit - taking an exact GPS fix of course!

Back on track, the sky had deteriorated and the only choice was to return to the dying cloud mass but now much lower. The next 20min seemed to go very slowly, but a couple of weak climbs eventually took me to cloudbase where a few drops of rain on the canopy told me it was time to leave. I was 100km out and just below max glide, but I convinced myself that the grey spread out clouds ahead would give something.

On a marginal final glide some 40km out, one of the grey cells gave weak but steady lift and a welcome safety margin for a more relaxed end to the flight, arriving back at 8.30pm. I had flown 755km at an average speed of 104km/h.

This was not a record breaking flight by any means, but for me it was so very special as it brought together the knowledge I had gained flying in this incredible area over the past couple of seasons, and rewarded me with my very own personal record. Besides, I was fed up with Mercedes constantly asking me "When are you going to do a 750km?

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CRITICISING CRITICISM

Gordon, CFI of Vale of White Horse GC, thinks instructors should be more positive



Gordon, CFI since 1993 with one Diamond, flies a PIK 20B and describes himself as a "keen type hunter". He has flown some 70 different gliders with ambitions to add a Monerai to his list.

How many times have you overheard something like this from an instructor, "You let the speed build up around the bottom half of the circuit..." followed a couple of minutes later by, "...and try to spend more time looking over the nose during turns, keeping the attitude and bank angle constant"?

How often have you read in a logbook about relatively advanced exercises been "well flown", followed on the next line by "turns poor"? Logbooks of slow pupils or those whose training has been protracted often have any number of anomalies about their ability. I wonder if that pupil's flying had been highly erratic, or is it the instructor's method in detailing the faults?

Having had the privilege of being a CFI for the past few years, and being keen to try to improve my assessment of instructors through their pupils, I have come to the conclusion that criticism is often prioritised by what frightened the instructor most - the proximity of the ground rather favouring particular exercises in what gets mentioned to the pupil after landing. The list of the instructional exercises attempted, even on a five minute winch launch circuit, can be impressive. Is this right?

Consulting the **BGA Instructors' Manual** for clues or a guide to structuring criticism didn't reveal anything very useful except lists of the most common faults to look for.

My next step was to dig out my notes for my assistant instructors' course in 1982. The advice given then was "...concentrate on not more than three major faults..., but always find one or two points to praise or encourage to limit any serious loss of confidence". (Unless they **really** frighten you, when the positive points tend to get somewhat overlooked.)

I then interrogated my newest instructor to find out what was said to him on his course (last September) re criticism technique. Just about word perfect *circa* 1982. There's progress.

So I went away and tried to make some sense out of it. A possible answer is that maybe we should be prioritising our criticism according to a more formalised (and hopefully logical) system.

I believe the method of selection for points to criticise should be based mostly on the training sequence, putting basic safety first.

Elementary flying skills and airmanship would take pole position, simply because if the pupil cannot handle the aircraft then nothing else is likely to go very right.

Errors associated in the stall/spin regime of flight get my second place on the grounds of their immediate effects on life expectancy when near to the ground.

Thirdly I propose that only after approach technique, take-off and landing is dealt with should circuit or failed launch shortcomings be discussed.

Unless the pupil can fly instinctively he can't be expected to plan the circuit sensibly as well. Where is the instructor's time best spent in talking to the pupil? It certainly isn't in berating him on how the circuit wasn't handled, despite it being uppermost in the instructor's mind.

Here I will digress a little

Looking slightly more deeply into these matters, the question that begs to be answered is why the instructor was trying (in the above case) to teach circuits before the general flying was at a decent standard?

There is probably a belief by many instructors that they should introduce something new on every flight. After all, there has been plenty written over the years on further exercises to demonstrate and teach, and when you move to the next item on the syllabus card you must have enhanced the pupil's progress or at least offered improved value for money. Not necessarily.

I think many flights would have achieved more by doing just the opposite, covering less but with more practice. How many would not benefit from turning or speed control consolidation exercises? It does take rather more inventiveness on the part of the instructor.

Try these - picking and rolling on to a heading, or one turn at 20° bank and then steepen it to 40° for the next half a turn before reducing the bank angle back to 20° for the next. It's just like thermalling really!

Now, getting back

I suggest that instructors prioritise the pupil's failings according to this sequence, still within the frame of, say, two or three faults, and find something to be positive about. It is surprising how often you do not get beyond basic flying faults before you start talking of the praiseworthy items.

In print, this all seems very obvious, but it should not be forgotten that criticism is an important part of all instructing. What's said needs to be valid and pertinent to the stage the pupils are at in their training. A slightly more formal way of going about this take will, I believe, pay dividends for instructors and pupils alike.

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AN INDICATOR FOR SUPACAT

Gordon is from Devon & Somerset GC, home of the Supacat. In this article he describes a device built by David Cottingham which has simplified the use of this winch, making it easier to operate and the launch safer and predictable

A measure of the energy offered to each glider should help to improve the quality of launches. The power lever on a torque controlled diesel dictates the fuel injected into each cylinder. Its position therefore reflects the tension that can be sustained in the cable and does not vary much with speed

Over the years we tried to display the position with simple gadgets. The first was a roll of sticky plaster and the second a line of paint spots. A row of coloured lights was derisively compared to Christmas decorations.

Each gave consistent high quality launches for the K-13 but lacked the flexibility needed to cope with the wide variety of gliders and conditions. Now a meter gives the graded measure needed.

David Cottingham built it using a milli-ammeter to measure the change in current flowing through a transducer fixed to the fuel pump - 500 units is full power.

Advantages

The device has transformed teaching new drivers. The slow learning curve has gone. An old hand not in current practice no longer needs two or three launches to get the feel back.

With little understanding and even frank misunderstanding of dynamics, 11 999 launches in every 12 000 end without mishap. With clearer application of theory and adequate instruments winching will be safer than aerotows. It should be as a winch launch is dynamically stable after the first 5sec, while an aerotow remains unstable throughout.

At present a robot will not replace the winch driver. Timing the changes of load still depends on wind strength. There remain the pilots who throw away the choice of peak height by their genteel climbs. The experienced winch driver will still adjust to pilot demand.

The proof of the pudding

I chose to show the advantage for a K-6. The ground run was crisp but not violent. At the end of the controlled rotation the ASI nudged 60kts but increasing backwards pressure on the stick brought the speed back below 50 in 4 or 5sec. It only needed a slight easing of this pressure to jump the speed by 2kts.

It was hassle free. A steady airspeed was easily held until I pulled off at the 1400ft cloudbase.

The winch driver applied 300 units at all out and backed off to 200 as the engine surge showed the glider was airborne (but still out of sight on our domed field). He increased the power back to 300 when the engine note slowed as the glider dominated the winch.

Similar launches occurred before but not regularly. Now fixed power settings give predictable launches.

Background

Forty years ago David Clayton taught a simple truth. If the winch pulls harder than the glider the cable speeds up and vice versa. So who should do what? As the pilot has the ASI it is logical for him to control the speed against a measured load from the engine.

Powerful winches give higher and safer launches. Too much energy simply results in speed that exceeds the placard limit, flies the glider at a poor L/D and forfeits the bonus of the headwind.

In his early books Derek Piggott included the famous "Some people tell you the glider can slow the winch by pulling back. It does not work. You will succeed only in breaking the cable." Well, it worked on our first winch where the maximum cable tension was 640lbs. All gliders can pull harder than that.

Now engines of 300bhp or more are common place with the loads multiplied by torque converters and gearboxes. Trying to contain these monsters with the elevator is foolish but now Derek leaves the warning out of his updated books!

Theory into practice

Over the past ten years *S&G* have published erudite papers full of graphs and formulae which spelt out the dynamics of winching.

I hoped to give the impression that I had used these to calculate ideal energies for all gliders. It would not have washed. We have not calibrated the scale nor is the change in load linear.

We recorded the readings used by our best

NOTES ON OPTIMUM LOADS FOR LAUNCHING

This gives the recommended values at various stages of the launch for wind strengths up to 10kts

1=Ground run; 2=Start of rotation back off; 3=Leading to steady climb; 4=Max value; 5=gliders

1	2	3	4	5
380	250	300	350	K-13 (pupil), Junior
380	250	420	500	K-13 (Experienced pilot)
300	200	300	340	K-6
300	200	300	420	K-8, Oly 463, SF-27
500	350	500	500	K-21
380	300	380	420	Astir, LS-4, LS-8, ASW-20, DG-101, Pilatus B-4, Discus
420	330	420	500	Ventus, PIK 20
350	250	310	350	DG-100 & 200, Pegasus, ASW-19

These in no way replace the need to look, listen and respond accordingly. Backing off 80pts in the top 100ft or so makes life much more pleasant for the pilot.

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drivers. The indicated pull used by these pundits fell inside a narrow range.

Failure to wag or complain does not mean the launch was perfect so we asked pilots precise questions. What was the speed at 100ft and halfway up? Was it easy to control the speed at first but not at the top when placard limits must be obeyed? Armed with this information we drew up a list of preferred readings (see the box on the facing page).

As the energy offered becomes more consistent the pilots' lives becomes sweeter and their use of the stick more positive. We can move away from the old teaching that the pilot climbs "sensibly" and the driver controls the speed.

Changing the style of launching is interesting. With pamphlets and briefing there are always those who stay with the old and familiar. With a mixture of belief in pilots and drivers there are four combinations.

Of course I will report that where both are converts the launches are consistently good. They are reasonable when both pilot and driver claim the role of speed controller. In this case the glider gets a powerful start so the pilot climbs positively, making the driver's role simple.

When both follow the old ways the launch remains as before. It gets interesting when the driver offers the optimum pull to a pilot in a leisurely climb.

This report is not to belittle the discipline in our club. The quality of launching even without an indicator was at least as good as I see in some clubs.

Discussion

Many clubs say a petrol engine is more responsive. Heavy wind-on gear and large iron drums add inertia. We have shown that in a good launch the load remains constant most of the way. Get it right and there is no need to change it.

In the rotation to full climb inertia is a bonus. For example, geometry converts a horizontal speed of rising 40kts into a safe 60kts at full climb. It is another 4sec before the firm backwards pressure pulls the speed back to 50 at a comfortable 200ft for old wooden gliders.

Many clubs opt for engines of 300 or even 500bhp. Even modern single-seaters only absorb two thirds of the energy offered by our 180bhp engine and the K-21 gets excellent launches. There is redundant capacity in many clubs.

Odds and ends

Why have an indicator when the bow in the cable is the time-honoured measure? Well how bowed should a good bow be? Even if you know it does not help in the crucial first 5sec when the cable is on or close to the ground.

Sometimes drivers, even the professionals, fail to adjust for changes in wind strength. When there is no wind everyone needs the maximum for type. When a wind shift dictates a changed launch direction pilots can be offered a downwind launch. Some prefer a lower launch to walking the glider to the other end.

Maximum power and no back off takes you through the reverse wind gradient. However, you need to chop the launch with the cable at no more than 60°. To take the launch higher with the wind blowing the 'chute towards the winch invites kinks, coils or even a pile of spaghetti.

In strong winds a cut of 50 units and longer back off helps. Once settled, power can be fed back to the optimum as this is independent of wind strength.

Conclusion

Modern winches incorporate guidance for the driver. A torque controlled diesel with an indicator enables any mechanically competent club member to give reliable launches.

One on the Sky Launcher helps in the first 100ft. Ours helps all the way up. Without this help clubs need to employ a professional winch driver or depend on a small band of experienced, dedicated members.

There is only one snag. When I want to play with my new toy there is a queue in front of me.

EUROPEAN JUNIOR CHAMPIONSHIPS

The Championships were held at Musbach, Germany with ten contest days. There were 31 competitors in the Club Class and 37 in the Standard Class, both won by Germans.

Michael Sommer was the Club Class Champion with 8848pts. Peter Masson led the British contingent in this Class with a 9th place (7673pts), Henry Rebbeck was 12th (7438pts) and Jay Rebbeck was 17th (6641pts).

The Standard Class was won by Mario Kiessling with 8356pts. David Allison was the top British pilot in 4th place with 7825pts. Afandi Darlington came 7th (7305pts) and Oliver Ward 31st (5763pts).

EXCELLENT GLIDING SPOT ON TV

I was fortunate to catch the BBC TV News 24 Cable Channel recently which featured gliding as part of their Masterclass series.

It is an excellent production made at the Ulster GC and would be very suitable for clubs to show groups for recruitment. The shots of the Bellarena coastline and hills are superb and the commentary is informative and accurate.

Dick Dixon, BGA chairman, ably puts the general picture in terms of gliding's safety, which is always raised by commentators in this sort of programme. Also, the instructors came over as sound, no nonsense characters who took the mystique out of the sport, making it seem accessible to the uninitiated.

The flying shots from all sorts of angles are very good and only marred in my view with a fleeting glimpse of a K-13 apparently performing an aerobatic manoeuvre on a member's first solo. But that's television for you!

I hope Bob Rodwell, BGA publicity officer and chairman of Ulster GC, will be able to make this film available for all BGA clubs. He says he is bringing it to the BGA Conference in March. And I can predict that he will have a stream of pilots crossing the water to fly at this beautiful site

B. H. BRYCE-SMITH

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BGA & GENERAL NEWS



FROM THE BGA CHAIRMAN

Dick Dixon looks ahead to the turn of the century and beyond and ponders on how the sport should develop and how it can attract more members

To put what I want to say into perspective, I should start by mentioning that to meet the deadline for this issue (earlier than usual because of Christmas) I had to write this on December 9. So although it is tempting to think in terms of reviewing the past year, I believe it is far more appropriate to look forward to 1998 and give some preliminary thought to the year ahead, not that the difficulties and threats the BGA has faced in 1997 have by any means been fully resolved.

But I firmly believe that all the hard work which has focused on the various issues is beginning to show results. Now we need to take time out to look to the future.

It is against this background that your Executive Committee is planning to assemble early in 1998 for a day-long meeting to identify and address those issues which we believe will be of maximum importance to the well-being of our clubs and their members, as we approach the year 2000 and beyond.

As you will be aware, the members of your Executive Committee are all active glider pilots, and are nominated by clubs both large and small from many different regions. I believe, therefore, that the views expressed around the table do broadly reflect those of our membership and I am very much looking forward to the opportunity to step back from day to day issues and focus on the opportunities for the development of our sport.

As I write this, one possible opportunity for recruitment of new members is very much on my mind. I have just returned from a visit to the 1997 International Airsports Exhibition at Telford in Shropshire.

On display were all the latest aircraft and equipment of every description from models through to paragliders, hang gliders, microlights and ultralights, together with every conceivable widget and gadget to inform and delight the enthusiast.

And here's the real point: the vast exhibition hall was **packed** with airsports enthusiasts of all shapes and sizes, ages and sexes. I even met a few glider pilots - but not nearly as many as I would have liked! Are we getting left behind? Should not the BGA be enthusiastically joining in and getting our message over to such an informed and committed audience?

I chatted to a friend who was running a busy stand, doing good business, He made a comment which set me thinking. Many of the now not-so-young devotees of these not-so-new airsports are casting around for new challenges: for a sport which has the potential for literally endless fascination and excitement - and at an affordable cost. Learning to fly a glider is not expensive, and individuals who are already air minded and involved in flying activities tend to pick up the skills quite quickly. So I believe that the BGA needs to be there in December 1998 and to spread the message of what gliding has to offer.

This is just one idea as to how we might take positive action to widen the appeal of our sport. We will be identifying others and deciding where our development priorities lie in the coming months.

NATIONAL LADDER

Neville Allcoat flying from Portmoak in a DG-500 demonstrated the "other" way to soar cross-country with four *very* fast flights to take the Open Ladder by a handsome margin. The struggle for 2nd place was more closely fought with Mike Young just edging it from Tim Macfadyen.

In the Weekend Ladder my confidence that I had done just enough was thwarted by a late rearguard action from London GC's Ed Johnston. Congratulations to those in the prizes but more so to all who took part in this generally difficult season.

If any clubs require information on how to start their own ladder, please contact me through the BGA. Meanwhile, the 1997/1998 ladder is already some months old - I hope to receive your first submissions by the end of March.

Open Ladder

Pilot	*Club*	*Pts*	*Flts*
1. N. Allcoat	SGU	13 020	4
2. M. J. Young	Cambridge	9492	4
3. T. Macfadyen	Bristol & Glos	9152	4
4. J. L. Bridge	Cambridge	8916	4
5. E. Downham	London	8550	4

Weekend Ladder

Pilot	*Club*	*Pts*	*Flts*
1. E. W. Johnston	London	7263	4
2. J. L. Bridge	Cambridge	7136	4
3. G. C. Metcalfe	Lasham	6877	4
4. E. Downham	London	6661	4
5. R. King	London	5885	4

John Bridge, *National Ladder steward*

1999 OVERSEAS CHAMPIONSHIPS

The BGA Competitions Committee are seeking bids from anyone suitably qualified to set up and run the 1999 Overseas Championships. The venue must be in mainland Europe and although specific dates are not set, it must not clash with any of the home Championships which are to be run in July and August,

If interested please contact the Competitions Committee *via* the BGA office.

BGA 1000 CLUB LOTTERY

The **November** draw results are: First prize - Mrs S. M. Eastell (£50.50) with the runners up - J. Scibor-Kaminski, R. Barrett, L. D. Howell, R. H. Dixon and B. Bateson - each winning £10.10. **December**: First prize - Mrs Y. B. Rozycka (£49) with the runners up - P. J. Fincham, R. S. Maxwell Fendt, A. Galbraith, Z. Marczynski and M. Brockington - each winning £9.80.

BRITISH TEAM SQUAD

The results of the voting panel for the British team squad from which the team will be selected for the 1999 World Championships in Bayreuth, Germany, are as follows:-

1. Russell Cheetham
2. David Innes
3. Steve Jones
4. Alister Kay
5. Tim Scott
6. Peter Sheard
7. Andy Davis
8. Justin Wills
9. Martyn Wells
10. Brian Spreckley
11. Phil Jones
12. Dave Watt
13. Mike Young
14. Robin May
15 Dave Allison
16. Brian Marsh

Two further names will be added after the results of the 1998 Nationals.

Bob Bickers will be the team manager.

OBITUARY

BERNARD THOMAS



We are sad to report that Bernard died peacefully on November 28 at the age of 86. He was one of the early pre-war members of the Derbyshire and Lancashire GC and drafted the Club Constitution and Articles of Association. He was acting secretary and treasurer during the war years and influential in the resumption of flying activities in 1945, holding the joint posts of secretary and treasurer until 1949.

Bernard attended the first post-war meeting of the re-constituted BGA as representative of Camphill and gained Silver badge No. 88 in 1947. By 1954 he was DCFI and later CFI for six years. He was a constant factor in the development of Camphill and was chairman from 1965 to 1969 and was later elected vice-president.

He will be remembered as a prudent treasurer, as befits a professional accountant. He was undoubtedly a firm but fair CFI, a skilful chairman and a charming and kind gentleman when not officiating.

Bernard's generosity, both to the club and to his friends, is legendary and he always held the club close to his heart. In recent years, even when he was prevented from flying on medical grounds, he would still enjoy coming for an hour or two each weekend to enjoy a drink in the bar with his friends and to check that his beloved club was still being properly run.

DEVELOPMENT NEWS



Roger Coote, BGA development officer, asks "Who needs a Sports Development Plan?"

The English Sports Council has reviewed and altered some of the application procedures for Lottery Sports Fund capital grants. A new style of application form will simplify the process for projects costing less than £250 000 but appears to be more demanding upon the larger projects.

More emphasis is given to social and sporting policies and the financial need for a project must be justified in terms of community benefit and measurable sporting gain.

All applications must now include as a separate document a Sports Development Plan, setting out a positive structure of clearly defined targets and sporting goals.

The plan should provide for more participation, increased opportunities for young people and the underprivileged social groups. The aims are improved levels of performance, leading ultimately to success at international competition level.

The main elements of any development programme are:-

- What are you currently achieving?
- What do you want to achieve?
- How are you going to do it?
- Who will be responsible?
- What is it going to cost?
- How will you measure success?

An objective approach is necessary to set structured targets, by which the success of the project can be monitored. It is a sound maxim that "a problem stated is a problem solved".

A clear statement of the objectives to be achieved will frequently identify the means of achievement and also highlight other management weaknesses that need attention.

Dwindling membership numbers are not just the result of poor recruitment. Keeping members is equally important and many clubs have a membership turnover (or churn rate) of 20-30% gained and lost every year. More *ab-initio* members require more instructors and a carefully thought out selection, training and promotion programme will be needed to staff the project.

Gliding clubs generally acknowledge the principles of equal opportunities for all and many are already doing a wonderful job in making gliding available to the young, the disadvantaged and the disabled.

Performance planning

Faced with the task of preparing a formal Sports Development Plan, club officers frequently find it difficult to quantify their ambitions numerically. Realistic and achievable targets, expressed as numbers, are essential.

Current performance levels which can be established and measured as a base line can be re-appraised and set as targets for, say, five years' time. The data can be considered under separate categories, for example:-

Club achievements from BGA annual returns
Full flying members at the end of the year.
Percentage of female members.
Numbers joined and numbers lapsed.
Flying hours.
No. of launches.
Cross-country kilometres.

Badge claims
No. of first solos (A badges).
Bronze badges.
Cross-country endorsements.
FAI badges and legs.

New instructor ratings
AEI; asistant and full BGA ratings.

Competition results of club members
Inter-Club League position.
No. in top 100 places on National Ladder.
No. of entries in Regionals.
No. selected for Nationals.
No. selected for British team squad.

These factrors can be presented in tabular form under the headings;- **Now** (most recent year's results). **Target** (five years ahead) and **Percentage improvement**.

Once reliable data are established, other ratios (*eg*, launches and flying hours per member; cross-country kilometres per member) can be calculated to provide yardsticks or efficiency factors by which to assess one club's performance against another or, indeed, against BGA statistics. Comparable evidence, suitably prepared, will reinforce the club's case in presenting its Sport Development Plan.

Do please contact me if you are struggling with a Sports Development Plan for gliding. I shall do my best to help.

Many Camphill pilots owe Bernard a great debt for his skills as an instructor and all members for his dedicated support of the club for over 60 years. He will be greatly missed by family and friends alike.
MIKE ARMSTRONG

ALPS DEFENCE APPEAL:

On December 12 the BGA had received donations from the following: P. Onn, J.R. Upton, T. Harris, S. Brown (Thermiek), M. Brook, J. Staley, A. Watson, A. Neville, Southdown GC, Devon & Somerset GC, Scottish Gliding Union, Mr & Mrs Pentecost, H. Mills, F.B. Reilly, P. Turner, R. Millins, C. Withall, K. Wolstencroft, Kent GC, Dr G.H.N. Chamberlain and Burn GC.

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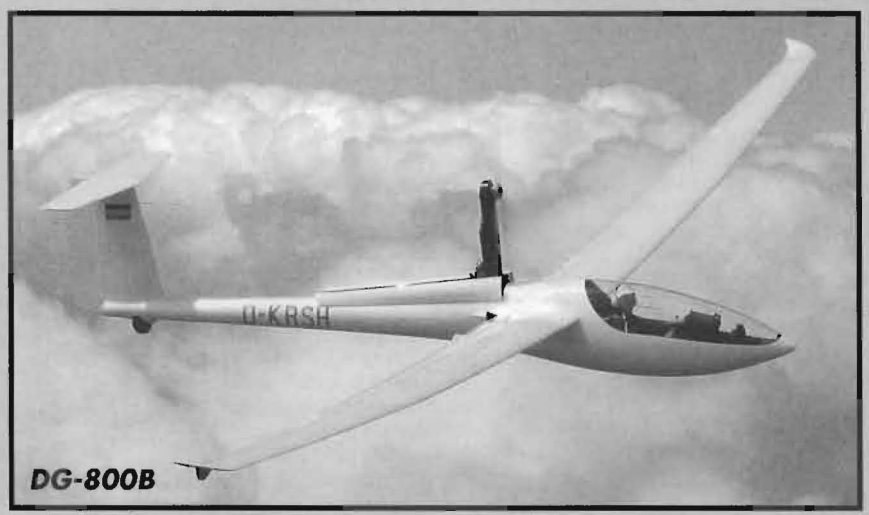


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750KM DIPLOMA

No.	Name	Club	1997
7	Allcoat, Richard Allcoat, Neville	SGU	8.9

ALL THREE DIAMONDS

No.	Name	Club	1997
537	Mossman, Alan	Cairngorm	9.9
538	Lingham, Ian	Booker	3.10
539	O'Regan, Alan	Ex-Pat	3.10
540	Chalmers-Brown,David	Booker	12.10
541	McNamara, Alan	Bicester	12.10

DIAMOND DISTANCE

No.	Name	Club	1997
1/779	Mossman, Alan	Cairngorm	9.9
1/780	Hahnefeld, Eddie	Southdown	19.8

DIAMOND GOAL

No.	Name	Club	1997
2/2580	Busby, Ian	Booker	15.8
2/2581	Munro, David	Norfolk	9.8
2/2582	Stafford Allen, Peter	Fenland	2.8
2/2583	Matson, David	Wyvern	20.7
2/2584	Skinner, Ian	Glyndwr	29.7
2/2585	Jones, Howard	Lasham	27.7
2/2586	Snoddy, Thomas	Ulster	8.8
2/2587	Ambler, Richard	Lasham (in USA)	21.7
2/2588	Farr, Peter	Surrey Hills (in Australia)	21.8
2/2589	Foster, Paul	Yorkshire	29.7
2/2590	Weekes, David	Oxford	15.8

DIAMOND HEIGHT

No.	Name	Club	1997
3/1406	Holt, Richard	Deeside	3.10
3/1407	Carruthers, Ian	Cairngorm	1.10
3/1408	Leech, Gerald	Booker	3.10
3/1409	Miles, Anthony	Lasham	3.10
3/1410	Smith, Alan	Booker	3.10
3/1411	Lingham, Ian	Booker	3.10
3/1412	O'Regan, Alan	Ex-Pat (in South Africa)	16.6
3/1413	Larkin, Simon	Lasham	12.10
3/1414	Jackson, Colin	Booker	3.10
3/1415	Chalmers-Brown, David	Booker	12.10
3/1416	Roberts, Luke	Devon & Somerset	23.10
3/1417	Fox, Michael	Wolds	4.10
3/1418	McNamara, Alan	Bicester	12.10
3/1419	Janzso, Joseph	Kent	3.10

GOLD BADGE

No.	Name	Club	1997
2002	Butterfield, Andrew	Oxford	19.8
2003	Skinner, Ian	Glyndwr	29.7
2004	Leech, Gerald	Booker	3.10
2005	Tagg, Derek	Deeside	12.10
2006	O'Regan, Alan	Ex-Pat	16.6
2007	Foster, Paul	Yorkshire	29.7
2008	Rivers, Leonarn	Norfolk	23.10
2009	Croll, Grenville	Rattlesden	10.10
2010	Weekes, David	Oxford	15.8
2011	Jackson, Colin	Booker	3.10

GOLD HEIGHT

Name	Club	1997
Abbott, Michael	Staffordshire	20.4.96
Butterfield, Andrew	Oxford	19.8
Meier, Stuart	Shenington	2.10
Urpeth, David	Dukeries	13.9
Leech, Gerald	Booker	3.10
Brightman, Gary	Shenington	5.10
Tagg, Derek	Deeside	12.10
O'Regan, Alan	Ex-Pat (in South Africa)	16.6
Rivers, Leonarn	Norfolk	23.10
Croll, Grenville	Rattlesden	10.10
Craven, Donald	Staffordshire	17.10
Jackson, Colin	Booker	3.10
Browne, Reginald	Ulster (in USA)	8.5
Wright, Colin	Angus	22.8
Young, Ian	Oxford	3.10
Verity, Alfred	Kent	3.10

GOLD DISTANCE

Name	Club	1997
Munro, David	Norfolk	9.8
Matson, David	Wyvern	20.7
Skinner, Ian	Glyndwr	29.7
Jones, Howard	Lasham	27.7
Farr, Peter	urrey Hills (in Australia)	21.8
Foster, Paul	Yorkshire	29.7
Weekes, David	Oxford	15.8

SILVER BADGE

No.	Name	Club	1997
10 340	Charatan, Peter	Kent	13.9
10 341	Newman, Jonathon	The Soaring Centre	22.9
10 342	Hobbs, Adrian	London	16.8
10 343	Crabtree, Charles	Bicester	14.9
10 344	Warren, David	Rattlesden	7.9
10 345	Page, Nigel	Derby & Lancs	15.8
10 346	Morgan, Phil	Shalbourne	14.8
10 347	Higginson, Christopher	Sackville	9.8
10 348	Barnard, Nigel	Shenington	15.8
10 349	Pearson, Brian	Staffordshire	19.7
10 350	Bort, Stefan	Kent	13.9
10 351	Roberts, Jennifer	Bicester	27.7
10 352	Done, Andrew	Bicester	14.9
10 353	Lee, Paul	Norfolk	25.6
10 354	Jones, Howard	Lasham	27.7
10 355	Watmough, Colin	Lincolnshire	5.10
10 356	Hill, Keith	Anglia	14.8
10 357	Hart, Christopher	Anglia	8.8
10 358	Hatch, David	Mendip	9.10
10 359	Williams, Jonathon	Deeside	25.10
10 360	Hughson, Hamish	Phoenix	13.4
10 361	Davies, Jeffrey	Bowland Forest	17.9

UK CROSS-COUNTRY DIPLOMA

Part 1

Name	Club	1997
Matson, David	Wyvern	1.6
Harder, Clive	Shalbourne	15.8
Morgan, Philip	Shalbourne	27.7
Patel, Minoo	Booker	15.8
Donovan, Timothy	Shenington	15.8

Part 2

Name	Club	1997
Matson, David	Wyvern	8.7

Corrections: In the interests of cutting down competition space, in the last issue we didn't give Julie Angel's 28th place in the Rolex Western Regionals as she didn't score, not flying on two days. But apparently others are affected in the promotion list placings by the total number of competitors.

Flight Insurance: Apologies to Flight Insurance for the overprinting on his advertisement in the last issue. This was at the printing stage and entirely out of our hands but we are sorry for any problems this caused.



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CLUB NEWS



Stuart Mills of Mendip GC and his wife Julie on his first day as an AEI. Photo: Keith Simmons.



Above: Mike Burnett after being awarded the CFI's trophy at Deeside GC. Below: Bowland Forest GC pilot Walter Postlethwaite with instructor Ian Ashton after going solo.



Copy and photographs for the April-May issue of *S&G* should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 01223 247725, fax 01223 413793, to arrive not later than February 10 and for the June-July issue to arrive not later than April 14.
Or send e-mail gbs.sandg@virgin.net

GILLIAN BRYCE-SMITH *December 10*

AQUILA (Hinton in the Hedges)
We are refurbishing the old clubhouse to provide a briefing room for our venture into full week courses next season. These will be mainly aerotow to give maximum air time for fast progress.

Norman Mills (aged 63 and after only 33 flights) and Jim Goodall have soloed. Tony Ying, Mike Roberts, Mike Love and James Ewence have Bronze badges.

A private ASW-19 joins the club's new 19, both imported in superb condition from the continent. The annual expedition to Aboyne was our biggest ever with some memorable flights. We are having a very active winter season at Hinton.
M. E.

BATH, WILTS & NORTH DORSET (The Park)
After a disappointing year the first weekend in December gave local soaring on our south-west ridge. Bob Bromwich and Alastair Macgregor have done well in competitions.

There is a lot of activity on the ground. Our chairman Mervyn Pocock is restoring his Auster Mark 5 to its original condition when flown by the Army on D day. Bill Niblett has flown his Monerai built from an American kit and is now working on the 250cc two-stroke direct drive engine he is hoping to fit to give self launching power.

Eddie Gunner, Pete Thornbury and Dennis Clack have nearly completed the restoration of their Olympia 2B trailer which was originally used as a trailer cum caravan labelled "Soaring Holidays Glider Hire Ltd". Anyone remember?

More than 70 members came to our annual buffet dinner in the clubhouse when trophies were awarded to Bob Hitchin, Roy Lynch, Nick Bowers and Malcolm Smith. Simon Northway has donated a handsome trophy to be fought for between The Park and Shalbourne,

We were pleased to see Dick Dixon, BGA chairman, on a pleasant day in October.
J. L.

BIDFORD (Bidford Airfield)
We have had a very good year with 13 solos, eight Bronze, nine Silver, one Gold badge, six AEI ratings, an assistant rating and five full ratings. See the display advertisement on p51 for "What's happening in 1998" at Bidford.
P. F.

BOOKER (Wycombe Air Park)
At last we have our new super tug, a completely refurbished late model 265hp Pawnee in gleaming yellow and white. There is delight and admiration at its performance, climbing surprisingly quietly with its four-blade propeller.

Members gathered at dawn recently to arrange the first display photo of the club fleet taken for almost 20 years.

The winter Saturday morning group is as busy as ever, but the weather has bedevilled such training as the aerobatic and Bronze badge courses. Recent analysis has shown that well over 60% of the membership is under 50, which is better than we feared.

Some trial lesson bookings are almost reaching saturation level and course bookings are better than in recent years. We have an open weekend in April and the Regionals in July.
R. N.

BORDERS (Milfield)
We had our first visitors at the new site who stayed to sample our accommodation during our wave weeks. The first group from Pocklington enjoyed a week of wave soaring and the second group from Staffordshire left with two Diamonds and two Gold heights. Bookings are already in for next year.

We learnt lot from their visits and hope to offer better facilities this year when, hopefully, our second tug will be back in action .

Dietmar Poll of the Austrian aerobatics team, visiting the region on business, treated us to an aerobatics display accompanied by Bill Stephen, one of our full Cat instructors. We hope he will have time to teach some of our instructors basic and advanced aerobatics in our K-21

Thanks to Garry Polkinghorn for his hard work in putting it together, we have a web site - http:/www.desim.uk/bgc/bgc.htm
R. C.

BOWLAND FOREST (Chipping Airfield)
The weather hasn't been kind with hours and launches significantly down on last year, although membership is up. We have, however, had much success in expeditions with many cross-countries hours and badge claims.

David Teasdale has taken over from George Wearing on the committee. Our thanks to George for his six years.

The clubhouse entrance and lounge are close to completion. A warm welcome and a high launch awaits all visitors.
S. R.

BURN (Burn Airfield)
Our annual pilgrimage to Aboyne in October encountered the finest Indian summer conditions on record and some of us found the wave.

The dinner-dance was a great success.

Plans to modernise the club aircraft are well advanced. The ultimate aim is to have a glass fleet ranging from early solo single-seaters to a flapped two-seater. The K-21 is having a refit and will look handsome in a new gel coat.

Dave Hobson and Harry Gregg have soloed.
S. K.

CAMBRIDGE (Gransden Lodge)
A fireworks evening saw trophies awarded to Peter Baker (2), Bernard George (2), Mike Young (2), Mike Atkins, Julian Bayford, John Bridge, Fraser Hayden, Richard Maskell, Rhod Turner and Keith Sleigh.

Members of other clubs are welcome to attend our series of winter lectures. The speakers include Ann Welch, Tom Knauff, a leading USA pilot, Chris Pullen and John Glossop. Contact Roger Thorogood (01767 677077) for dates.

Winter is proving a very busy period with some 20 pilots attempting SLMG PPLs.
K. M. B-S.





Left: Burn GC pilots on their expedition to Aboyne. Left to right: Tony Flannery (organiser), Pierre Clayton, Mike Bennett and Paul Wrightson. Right: The members of the BGA instructors' course at Devon & Somerset GC, left to right: Tudor Williams (Kent GC), Peter Roberts (Wolds GC), Dave Bullock (national coach), James Sullivan (Kent) and Simon Leeson on home ground.

CHILTERNS (RAF Halton)
Paul Wilford made a good start to competition flying in the Junior Nationals. Neil Beattie, Peter Smith and Peter Taylor have their 5hrs and Tim Palmer and Declan Fleming have gone solo.

We introduced gliding to more than 250 RAF recruits during 1997, thanks to members' help.

Ralph Hunt, who has retired from instructing, was made a life member at the AGM and presentations were made to two local charities,

The Queen was introduced to some members on a visit to RAF Halton and seemed impressed by John "von" Allison's refurbished Prefect.
D. S.

CLEVELANDS (RAF Dishforth)
A pleasant evening of live fifties music marked our 40th anniversary.

At the AGM awards went to Mark Tolson, Bob Jackson, Doug Stewart, Alan Duerden, Colin Walker, Derek Smith and Dave Moss.
J. P.

CORNISH (Perranporth Airfield)
We are still concerned about the imminent sale of our airfield. The owners have changed agents and are now receiving more signs of interest.

Although the summer weather has been mixed, we have increased our membership and flying hours but not launches. We offer reciprocal membership to any BGA club and this has increased our visitors, which we welcome.

Chris Willey has an AEI rating.
S. S.

COTSWOLD (Aston Down)
Bookings have started for the spring courses, for which Nigel Gilkes has been appointed professional instructor, and we have had many entries for our first Regionals from June 20 to 28.

First solos have been flown by Laurel Brown, Richard Chatham and Bill Payne.

It is with regret that we report the sudden death of Jim Rogers at the tragically young age of 50. An obituary will be in the next issue.
M. S.

DARTMOOR (Brentor)
Although it has been a fairly quiet two months we have had more flying than normal for the time of year and the whole fleet was airborne at the same time in thermals in mid November.

Ken Basterfield has become an assistant instructor. A large working party is refurbishing the clubhouse in time for Christmas. New walls have appeared and the CFI even has an office.

In the new year the best K-7 is spending the remainder of the winter at Talgarth for weekend expeditions.
P. W. W.

DEESIDE (Aboyne Airfield)
December has started better than wet November with Duncan MacKay taking his Oly 2B to 13 000ft and then returning for a flight in his DG.

At the Christmas dinner trophies went to Jack Stephen, John Tanner, Steven Thompson, Mike Burnett Jnr, Al Greensmith, Derek and Frank Cruickshank. Chefs hats for Mike Law and Sarah



Above: Northumbria GC cadet Debbie Johnson with instructor John Hogbin after her first solo.

Below left: Richard Butler, chairman of Chilterns GC, presenting a tankard to Ralph Hunt who was made a life member. Below right: Les Hey congratulates Jo Spence after going solo at York GC.





Slater, plus flying Gromits for Al Greensmith and Iain Donnelly completed the thanks.
J. D.

Obituary - Roy Pearson
Roy Pearson died suddenly at his home in Aberdeen on October 17 aged 51.

Over recent years he was one of our most dependable weekend instructors in all weathers. He was quite willing to sit in the back of a Puchacz all day, encourage members to fly the single-seaters or run the launch point. Roy was one of our most able members and renowned for his helpfulness and good humour.

A self-employed graphics designer, he revolutionised the way the club presented itself by improving our publicity material and his advice and experience was vital for our successful one week exhibition at Aberdeen's main shopping centre.

He learned to glide with the ATC at Portmoak where he got his Silver badge. Roy took an active part in his local church.

We have all been shocked and saddened by this tragic news and send our deepest sympathy to his wife Judith and daughter Zoe.
Ed Colver

DEVON & SOMERSET (North Hill)
We plan to buy a DG-505 and build a hangar if lucky with our Lottery Sports Council application. Already the East Devon District Council have contributed £5688. We have replaced the written off K-6 with a Pegasus.

At the AGM in December Phil Morrison joined the committee with Eddie Bromwell and Ian Anderson re-elected. Trophies were presented to John Pursey (3), Dave Reilly (2), Chris Wool, Phil Morrison, Luke Roberts, John Jowett, Paul Carpenter, Peter Stapleton, Robert Lee and Ian Beckett. Our thanks to our chairman Joe Acreman, secretary John Phillips and treasurer Mike Davies for their contribution to the club.
S. C. L.

DUKERIES (Gamston Airfield)
Despite a relatively poor season we have ambitious plans to extend the hangar and a second lottery grant has enabled us to buy a Janus.

On a recent trip to Portmoak Dave Urpeth twice took his Std Cirrus to Gold height. Andy McKenna and Trevor Pond have gone solo.

Membership is gradually increasing, which we hope is due to our extra facilities. We hope to beat our earliest cross-country flight of the season, currently standing at February 15.
F. A. O.

DURHAM UNIVERSITY (Sutton Bank)
We have had several successful excursions to Sutton Bank and the standard is high within the club with at least four pilots entering competitions this coming season.

Our continuing thanks to Yorkshire GC for supporting us and our special thanks to Seb Schrimpff (Silver badge), Dave Wardrop, Rob Caudwell and John Wells (Bronze badges) for their unending enthusiasm.

Sutton Bank is hosting the Inter-University competition. All universities and gliders are welcome - wood, glass, single and two-seaters.
D. W.

ESSEX & SUFFOLK (Wormingford)
Our new hangar has been built, and it will be a relief not to have to rig and derig the club gliders every flying day.

Steve Jones and Eric Hibbard have gone solo.
A. S.

HEREFORDSHIRE (Shobdon Airfield)
We are grateful to Simon Adlard for stepping in at short notice as CFI. Our thanks to everybody involved, particularly our chairman Leslie Kaye, in responding to the proposed alterations to the airways near Shobdon.

Flying has continued unabated throughout the winter, due to the hard runway, and some interesting flights have resulted.

We are organising a wave week in March and a task week at the end of May. For further information contact Alex Chappell on 01432 265088.
R. C.

HIGHLAND (Easterton)
Helen Chalmers has a Bronze badge and Silver height. David Chalmers went solo three days after his 16th birthday (rain stopped play on his actual birthday) and has eyes on the family ASW-19. The whole of the Chalmers clan are now active in gliding.

Max Beattie has gone solo and Sean McAulay has resoloed after a long layoff. We hosted the Inter-Club League and John Caithness flew to Feshiebridge for Silver distance and the Bomb.

The summer has been very indifferent with nearly all the good days happening when we were all at work. In spite of this our membership continues to grow.
A. G. V

Obituary - Henry Dyce
Henry Dyce, a leading light in the formative years of Highland GC, has died in his late 60s.

He started gliding seriously in the early 1960s at Fulmar GC and, as a keen photographer, amassed a vast portfolio of beautiful views of hills and skyscapes from angles never thought to be possible from a glider. He became an instructor and was Highland GC's first CFI.

Henry worked hard in his quiet, gentlemanly way to build up the club and played a large part in its move to Dallachy, where he had flown Beaufighters as a young boy in the ATC.

He was ahead of his time, encouraging youngsters to take up the sport. He gave up gliding due to ill health in the 1970s, but never lost interest and kept in contact until recently.

Henry was a true gentleman and will be greatly missed.
Angela Veitch

LAKES (Walney Airfield)
The third club outing of the year was to Portmoak in October. There was no wave but Rod Murfitt flew 5hrs in thermals.

Our annual dinner/prizegiving was as good as ever with trophies going to Peter Redshaw (2), Lyn Martindale (2), David North, Neil Braithwaite, Peter Seddon, Dave Bull, Martin Lewis, Andy Tebay and John Burdett.
A. D.

LASHAM (Lasham Airfield)
Graham Skelly has organised a Lasham Web site - http://www.lasham.org.uk/. During the Standard Class Nationals the site was accessed 94 600 times.

A successful expedition to Aboyne, led by Graham McAndrew, Malcolm Hook and Alan Meredith, resulted in Diamond heights for Steve Brooker, Simon Larkin, Geoffrey Lee, Geoffrey McVey, Tony Miles, Tina Render and Mike Roff-Jarrett with Gold heights for Mike Nash-Wortham and Tony Segal.

Sadly we report the deaths of two old-timers. Bob Lintern, a mechanical genius who maintained the winches and motor transport for 29 years in the early days of Lasham, and Ray Duckett, an Olympia pilot who ran the Alton House Hotel where many pilots stayed.

Zubin Randeria, on a course in October, was solo on the Friday with no previous experience.
A. M. S.

Obituary - Michael Willett
It was with deep sadness that Lasham members learned of Mick's death. His rise from *ab-initio* glider pilot to airline captain before his 30th birthday attest to his ability in the air, but his many friends among the gliding community will miss most his humour, humanity and generosity of spirit.

Born into a gliding family, Mick spent his early years at Coventry GC and later soloed at Saltby two days after his 16th birthday. Atracted to all things aviation, a PPL was added to his list as soon as possible. During a period spent working abroad the thought of a career in aviation began

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Daily inspection on a calm and frosty morning at Seighford Airfield, home of the Staffordshire GC. Photo: Alan Self.

to take hold, and the now well beaten path of the self-improver *via* tug flying was embarked upon.

His rise from first officer to captain was rapid, and by the time of his death at the too young age of 36 he had already attained command positions on the F27, 737 and A320.

As passionate as he was about aviation, Mick's primary concern was always for those close to him, and it was fitting testimony to his love of people that his funeral service was filled to overflowing with friends from across the country. Mick will be greatly missed by the many who valued his friendship, but most particularly by his mother Joyce, sister Susan and family.
Graham Gilkes

MENDIP (Halesland Airfield)
Tom Fisher has become a BGA inspector and Dennis Heslop and Stuart Mills have AEI ratings. Stuart's wife Julie was one of his first paying pupils before leaving for Florida to train for his commercial pilot's licence.

Safety officer Clive Brain has a Bronze badge.
K. S.

NORFOLK (Tibenham Airfield)
A trip to Aboyne resulted in a Gold height for Lenny Rivers to complete his Gold badge on the only day it was possible. Mark Panton flew Silver distance soon after his Bronze badge to win the club ladder. David Hill again leads the hotly contested cross-country ladder.

We have put in the footings for a new storage hangar which is to house our winch and other machinery.
B. W.

NORTH WALES (Bryn Gwyn Bach Farm)
Poor weather conditions in late autumn unfortunately coincided with the visit of the Me-7 demonstrator.

Tony Cooper, our chairman, has an AEI rating and Steve Butler is our publicity officer.

We had another enjoyable bonfire-barbecue night, thanks to Dave and Lynda Stephenson and Keith and Jan Lewis.
N. D. J. C.

NORTHUMBRIA (Currock Hill)
Led by our club development plan, we have replaced the club Pirat with an Astir CS from Holland. It is popular with queues forming on good days. We are trying to find a third training two-seater (at the right price).

Cadets Debbie Johnson and David Williams have gone solo and Ken Murphy has a Bronze badge.
D. W. H.

SCOTTISH GLIDING UNION (Portmoak)
Flying has continued steadily throughout the winter with short days restricting cross-countries. Minor refurbishment will make sure the Supacat winch continues its excellent launches.

Richard and Neville Allcoat have won the Open National Ladder with a selection of their hypersonic long distance wave flights in their DG-500.
G. S. G.

SHENINGTON (Shenington Airfield)
Jane Jervis and Kath Barnes have soloed; Kevin Poyser and Dave Heath have Bronze badges; John Vella Grech has an AEI rating and Lu Kennington an assistant instructor rating.

The winter glider maintenance programme progresses well and winter lectures start every second Saturday at 6pm from January 10.
T. G. W.

Obituary - Geoff Webster
We are very sad to report that Geoff Webster died suddenly on November 21. Many will know him from his days at South Staffordshire Skydiving Association - Geoff had many friends who had turns flying his Dragon Rapide at Halfpenny Green.

In later life, when he could no longer jump out of planes due to a heart problem, he became an enthusiastic glider pilot. He rarely missed a weekend or social event and could always be relied on to give a helping hand and a friendly welcome. Geoff will be greatly missed by us all.

PORTSMOUTH Naval (Lee on Solent)
We had an enjoyable Aboyne expedition but no badge claims.

Steve Barber, treasurer, has handed over to Robbie Robertson and Pete Hollamby, Steve's assistant, is replaced by Tony Wahlberg. We thank Steve and Tony for their marathon stints and tremendous efforts, also Geoff Clark who is retiring after many years as glider maintainer.

We are delighted that Southampton University GC have taken a block membership and several have resoloed or had their first solo flights.
K. S.

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SHALBOURNE (Rivar Hill)
The AGM in November recorded a good summer's flying with a number of achievements. And for the first time in many years we didn't come last in the Inter-Club League!

Although there were a few accidents, we are pleased Annette Purcell is recovering well and should be flying in the new year. She obviously hasn't lost her enthusiasm for the sport.

Our expedition to Aboyne in October was disappointing with calm, mild weather.

William Davis and helpers are working on the winches and it is hoped the winch workshop will soon be completed. We held a skittles evening and the annual dinner will be in January.
C. H.

SOUTHDOWN (Parham Airfield)
Northerly winds have given us hill soaring and cross-country flying. The only qualification is the ability to resist frostbite.

Brian Bateson and Jim Heath have bought a splendid Ventus 2CT.

We have a first rate ground school with a Bronze badge lecture course this winter, including radio telephony and introduction to the GPS.
P. J. H.

STAFFORDSHIRE (Seighford)
Work on the club expansion continues and the club fleet maintenance is well organised. A well attended RT course was run this autumn, utilising our centrally heated clubroom, and hangar reorganisation is nearly completed, helped by the new hangar floor laid in the summer.

The BGA Duo-Discus made its second visit in December and despite the weather there were a reasonable number of flights. Dom Bayne, Mel Chapman and Guy Waldron have gone solo, Guy on his 16th birthday with a specially arranged day.

We had a successful Christmas get-together in the new clubhouse.
S. K.

SURREY & HANTS (Lasham Airfield)
A number of members and one of the fleet's Discuses joined the Lasham expedition to Aboyne in October. There were good wave con- ➡

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ditions on several days and Geoffrey Lee, Mike Roff-Jarrett and Tim Render achieved Diamond height and Mike Nash-Wortham Gold height.

Despite some indifferent weather in 1997, the club fleet was well utilised and membership is up on last year. It is intended to base a Discus at Talgarth for the winter.
R. J. B.

SURREY HILLS (Kenley Airfield)
We are building a new operations' caravan and searching for a single-seater (without lottery funds) to add to our club fleet.

We had a good bonfire party and a buffet supper but our best excuse for a party this summer is going to be the 50th birthday of our T-21.
P. E. B.

THE SOARING CENTRE (Husbands Bosworth)
The private members' hangar is almost complete - this is a private initiative by some members to house their "big wing" ships ready rigged, and will take our Duo-Discus, when it arrives.

The improved bunkhouse and showers have been finished, ready for the new course season. An excellent job has been done by members too numerous to mention, but headed by Mike Cater. By using club manpower, and "resources", we have saved at least half the cost of the project. Well done to all involved.

Our CFI Ron Beezer has retired, to go and do some real work. He'll be sorely missed - in his short term he brought in many innovations, new ideas, and changes which will be carried on.

The main peritrack has been completely resurfaced to give the tugs and motor glider an all weather operating capability, however muddy the field might be. We hope to keep cars completely off the track, so preserving its condition.

Once again, another half of the airfield has been ploughed up, flattened and reseeded for the forthcoming season.

We are holding a Regionals this summer.
T. W.

ULSTER (Bellarena)
Free gifts rarely come bigger than a 60ft x 25ft workshop and the club's latest benefaction may be in use when this appears. It will complement our huge hangar well.

The year is ending with record numbers of launches and hours, both well above the previous best year, 1995, due in part to a long and mild autumn, many visitors, an enthusiastic new Queen's University Belfast intake and some growth in membership.

Negotiations underway may result in reduced North Channel fares for glider trailers. Iniquitous rates, sometimes more than double those on comparable English Channel routes, may be coming down. Watch this space.

British team manager Bob Bickers will be the chief guest at our annual dinner on February 7.
R. R. R.



The Booker GC pilots who flew Diamond heights at Aboyne. Left to right, back row, Paul Mellor, Colin Jackson, David Fogden and Gerry Leech. Front row, Bob Sinden, Ian Lingham, David Lamb and Alan Smith.

(unspecified) number of years earlier.

A new Blanik syndicate had been formed and there is much furious activity to prepare one aircraft from a kit of slightly less than two.

Our annual dinner in November as usual proved popular with an enjoyable after dinner speech by Andy Davis.
G. N. T.

VECTIS (Bembridge Airport)
Now flourish the engineers, led by inspectors Neil Watts and John Leonard - the C of A and tug fettling season is in full swing.



Dartmoor GC has the largest concentration of Zugvogels, forerunners of the SF-27. The photo shows two 3As in the front and a 3B at the rear.

VALE OF WHITE HORSE (Sandhill Farm)
We had a successful autumn and early winter. Clare Knock, Bill Bolton and Richard Mansfield have gone solo, Richard on the morning of his 16th birthday emulating his father Paul some

Having so much engineering talent within the club gives us a very reliable, smart fleet and keeps our flying costs amongst the lowest in the land.
J. E. K.

Below left: As tug pilot and faciliticies manager of Southown GC it is a rare sight to see Jim Allin in the DG-300. Right: Derbyshire & Lancs GC members gather together in the new mechanical workshop opened by Mary Dixon. The financing of the building was helped by a lottery grant. ➡





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WELLAND (Lyveden)
At our dinner-dance awards were made to David Evans, Alex Strachan, Howard Barnard and Peter Willcock. CFI Werner Leutfeld also presented his joke awards for various misdemeanours.

We have added a K-7/13 to our fleet.
R. H. S.

WOLDS (Pocklington)
Bob Fox has taken over as chairman from John Paskins. John's aim on taking over more than five years ago was to modernise the club and turn it into a fully professional, properly equipped and well run organisation This he achieved admirably and more, leaving Bob with a hard act to follow. Thank you John.

Our two new K-21s are very popular, but we had to sell our dearly loved K-7/13. It flew almost 50 000 launches at Pocklington and we hope Welland GC will have as much fun from EAU.
S. W. P.

YORK (Rufforth Airfield)
We have been making good use of the BGA's DG-500 throughout the winter with many members gaining experience in flying a flapped glider. We are applying for a lottery grant to buy a flapped glass two-seater and a good cross-country single-seater.

One of the club's most long-standing members, John Jones, sadly died at the age of 79.
M. D. C.

Obituary - John Jones
John Jones, a senior and well respected member, died on November 23 and we are all saddened at his loss to us.

He came to Rufforth with the mass exodus from Dishforth of the Hambletons GC where he had been chairman. He only took up gliding later in life after an illustrious career with BOAC/BA. Before that he served valiantly during the war flying Blenheims and Mosquitoes.

Although self effacing about his wartime exploits, we did draw from him his "The day the war ended" story which saw him in No. 1 uniform about to celebrate when he was called to make a quick recce to investigate reports of a last minute runner in south Germany. The result was that John and his navigator were shot down by our American allies and had to make a forced landing at Ingolstadt.

Many years later, as a gliding instructor, he was to take the same navigator on his first gliding flight. "I hope you do better this time than last, Jones," was the pre take-off comment from the passenger.

We shall all miss John and send our deepest condolences to his wife Nita and family.
G. Mc. L.

YORKSHIRE (Sutton Bank)
Trophies at the annual dinner-dance were awarded to Andy Wright, John Ellis, Steve Hill, Mike Brook and Tim Stanley.

Our winter membership scheme is proving very popular with many visitors.

Mark Dickenson, Tony Roy and Simon Davis have gone solo. Alan Christian has his 5hrs and John Lynos a Gold height.
C. L.

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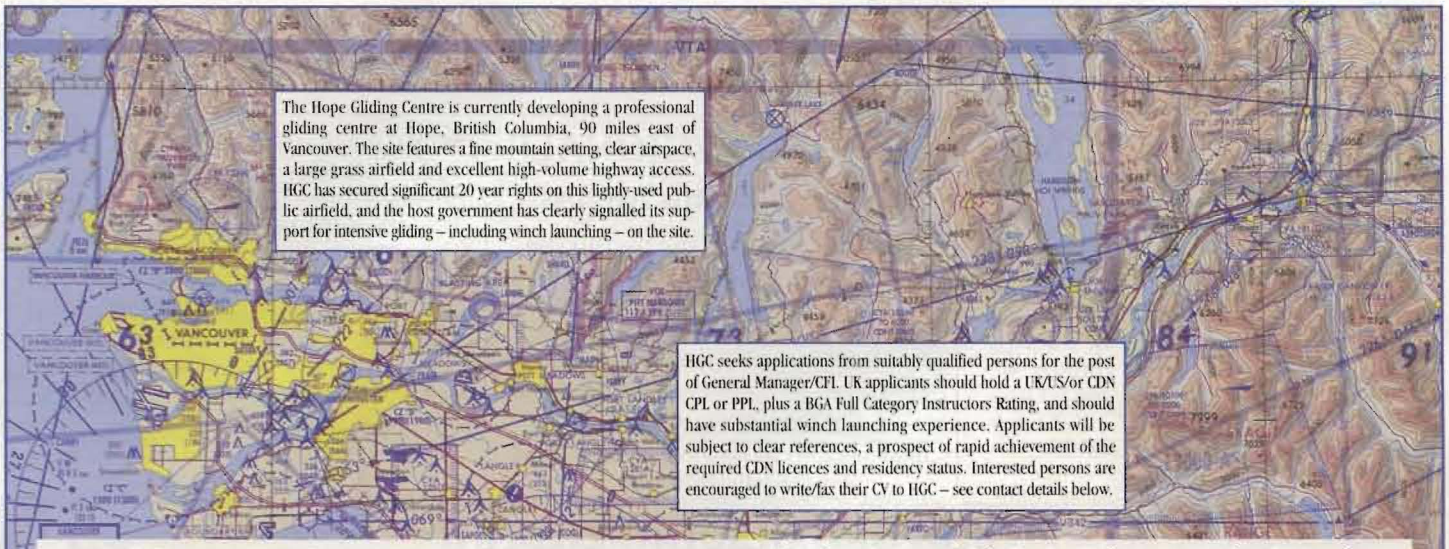


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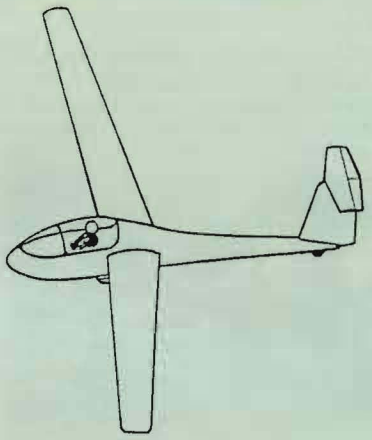
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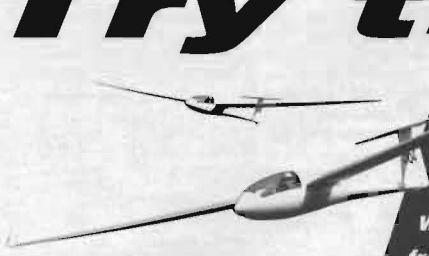
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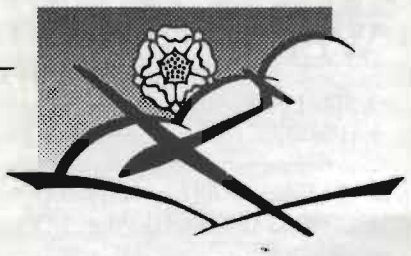
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MIKE THORNE

OMARAMA'S GOLD NUGGETS

Mike made the most of his day's gliding in New Zealand

Not too many glider pilots I know seem to celebrate Silver Wedding anniversaries, but I was lucky enough to be able to mark mine with a piece of Gold when my wife Cathy and I spent ten memorable days this autumn in New Zealand. I was permitted, by virtue of storing up an undefined but marginally requisite number of marital "brownie" points, to plan for one day's gliding during the holiday.

Now I'm not one of those hot-shot competition pilots, just an ordinary weekend and occasional week-away type flyer, with 500hrs after 15 years, and a Gold height short of a Gold badge, so flying in the fabled conditions of New Zealand had its appeal.



Mike, who started gliding in 1982 and flies his DG-300 at the Bath, Wilts and North Dorset GC, photographed after his Gold flight. His son Patrick recently gained his Silver badge and was in October Club News section, p301.

On recommendation, I chose to visit Omarama to fly with Doug Hamilton who runs Alpine Soaring commercially. Omarama is a very small 300 inhabitant village sitting on a T junction in the main road from Christchurch to Queenstown. It probably has as many hotel beds as residents, and makes its living from a thriving tourist industry based mainly on trout fishing, although hosting the 1995 World Gliding Championships is something which the locals remember with great pride, exemplified by pictures in the hotels. The town sits on a flat almost desert-like grass covered plain surrounded by mountains, and has a predominantly dry climate.

With a light south-westerly breeze under a blue sky, Doug was confident about some ridge and thermal flying in the Twin Astir. I was his only customer and had his full attention. During a memorable 3hr check flight we climbed over snow covered mountain ridges to 7000ft, transferring to wave to reach 9000ft, with the first hint of recognisable lenticulars beginning to form.

The prospect of capturing the last nugget of my Gold badge had been tickling my imagination ever since I saw the first wave clouds on the trip, and it was now looking tantalisingly possible. I was soon in the air again in search of the elusive 9800ft height gain, this time flying a Hornet. Having managed it once before (yes, without a barograph of course) on a rare wave day at The Park, I knew I could exploit the wave if I could find it.

Transiting from the strong ridge lift into wave proved to be frustrating. There were well marked wave bars all over the sky, but it took me an hour to begin the climb from cloudbase at 7000ft above the site in smooth 4kt lift.

My secret hopes of Diamond height quietly evaporated as the lift weakened as the elusive 9800ft climb mark arrived. A slave to uncertainty, I then spent 30min scraping another 1000ft to give myself a margin, but at 1830, with great elation, I stood the Hornet on its nose, making full use of its impressive trailing-edge airbrakes - Gold height was in the bag.

In summary, Doug's operation, Alpine Soaring, gave me all I wanted and more than I'd dared to hope for on the day. I'd expected a large operation akin to Lasham, but found something much smaller and more personal. The main Omarama club flies weekends and on weekdays in high season, but the season hadn't begun in October, despite a new 300km speed record having been set there the week before we visited!

What Will You Give For Comp. No. 111?

Yes, this distinctive number could be yours - at a price!



Sadly Martin Seth Smith (seen above with his DG-400) is giving up gliding after his introduction to it in 1950 when he joined the Portsmouth Naval GC after serving as a submarine commander. He was delighted to get No. 111 as he thought it would be simple to put on the tail of his Skylark 2 and it is now one of the numbers registered longest by an original owner. Anxious to raise money for the Philip Wills Memorial Fund in memory of his brother, a test pilot who was killed in a flying accident in 1945, Martin has decided to put it up for auction at the BGA Conference. He is generously matching the bid and has persuaded BGA vice-president Chris Simpson to be the auctioneer.



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THE TIME

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1998 BGA AGM, Dinner & Conference

BGA ACCIDENT SUMMARY

Compiled by DAVID WRIGHT

Ref. No.	Glider Type	BGA No.	Damage	Date Time	Place	Pilot/Crew Age	Injury	Hrs
59	SZD Junior	3951	None	8.12.96 1400	Camphill	42	None	42

The pilot adjusted the ventilator setting when the canopy misted over severely any effect, so opened the DV window. This helped, but his vision was obscured and he was lucky the circuit was clear and he landed safely. The paper pipe for the ventilator had become detatched.

60	K-23	2997	Subst	20.4.97	Dunstable	43	Minor	16

At about 10ft in the winch launch the pilot, on his fourth flight on type, experienced a reduction in speed so pulled off. He "pushed the nose forward" and hit the ground, then bounced back into the air, starting a PIO which ended in a heavy landing when he opened the airbrakes. The fuselage was broken and the nose pushed in.

61	K-8	1458	Subst	24.5.97 1720	Burn	52	None	33

The pilot flew a normal approach except slightly to one side of the runway with his right wing near to crop. As the glider touched down it hit a fragment of concrete paving which threw it back into the air and towards the runway edge. The wing dropped sharply and caught in the crop causing a groundloop, severely damaging the glider.

62	ASW-20L	2640	Subst	13.6.97 1445	Nr Dunstable	41	None	41

On a cross-country the pilot had to land out and selected a suitable field. He thought the landing run was across wind but, after a "slow" downwind leg losing "excessive height", he realised on finals he had a 15kt tailwind. He failed to select landing flap, landed fast and groundlooped to avoid the hedge at speed.

63	PIK 20D	2271	Minor	15.05.97 622	Hockliffe, Beds	55	None	95

During a lead and follow exercise the group had to land out. The pilot decided to land in a field other than the one chosen by the instructor. After rejecting one field as too steep he then chose another which he found had wire fences across it and finally landed in a field of wheat which caused a groundloop. The other gliders landed safely.

64	Pegasus 101	3737	Minor	17.5.97 1600	Dunstable		Minor	39

During a cross-country course the relatively inexperienced pilot was attempting to take practice photos of local TPs in poor visibility. He lost sight of the airfield and, while calling for help on the radio, became too low before selecting a suitable field. On approach he saw pylons so landed in a crop field and groundlooped.

65	ASW-22	3209	Subst	24.5.97 1430	Mitcheldean	39	None	600

During a cross-country conditions deteriorated so, after soaring a ridge and getting behind the hill, the pilot had to land out. He chose an into wind and uphill field. On final approach he failed to take into account the "dead air" behind the ridge and the glider failed to clear the boundary hedge.

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27th Feb: Chris Pullen – Air Accident Investigation
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13th Mar: Tom Knauff – Why MacReady Doesn't Work
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Ref. No.	Glider Type	BGA No.	Damage	Date Time	Place	Pilot/Crew Age	Injury	Hrs
66	SZD Pirat	–	None	–5.97	Incident Report	None		

While rigging the aileron turnbuckle, used to adjust the control tension, was found to have a stress fracture. This was thought to have been caused by stress when lifting the wing centre-section when it often got stuck under the control rod.

67	K-2B	2147	Minor	25.5.97 1820	Camphill	50 42	2410 73	

After a 5hr soaring flight the pilot made a sideslip approach to lose height in the light tailwind. As the glider was straightened for the flare both canopies opened. P2 closed the front canopy but the rear remained open. The landing was uneventful.

68	K-8	N/K	Subst	25.2.97 1215	Shenington	65	Minor	18

The pilot appears to have misjudged his circuit and undershot into a brick wall and fence about 100m short of the airfield. Seven feet of the right wing was severed and the pilot suffered a badly bruised back. He could have easily landed in a good field just short of the airfield.

69	K-13	–	Subst	–.5.97	Incident Report	None		

he glider was carefully picketed with a tyre against the tail and behind the wheel. In addition the wing was held down by a tyre jammed under a parked car. The wind started gusting up to 30kts and the glider was seen to rotate into wind and then roll backwards down a slope into a fence, demolishing the tailplane and fin.

70	Ventus VT	R24	Minor	8.6.97 1158	Dishforth	32	None	870

The pilot took a winch launch with a slight crosswind. As the speed increased the right wing dropped so he applied aileron control. This had no effect so he decided to release but initially could not reach the release knob as it was behind his leg due to the full stick movement. He centred the stick, then released, but a groundloop followed.

71	Skylark 2	814	Subst	03.05.97 1256	Ridgewell	35	None	190

After a modification to fit a rear mounted launch hook the glider was successfully test flown by an instructor. His only comment was that "the stick seemed much lighter". After being briefed a syndicate member took a launch. At about 350ft the speed had increased to 70kts so he eased back and the hook pulled out of the fuselage.

72	K-13	2487	Subst	31.5.97 1735	Ridgewell	63	Minor	1427

After a long tiring day on the airfield, with little rest, food or drink the experienced pilot took a winch launch to position his glider near the trailer. He misjudged his approach and came in too high so "turned to go around again". During this low turn a wingtip caught in the crop and spun into the ground.

73	Grob Twin Acro	3013	Minor	24.5.97	Gransden Lodge	55	None None	231 0

The instructor went through the pre-flight checks with the student and remembers checking that the canopy ,levers were in the locked position. However he did not push up to double check. At about 60ft on the aerotow the rear canopy blew open. The pilot released and safely landed the glider straight ahead.

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A DAY OUT

Ken has been on the wander again visiting another gliding club, but this time he was far more satisfied

Some readers will remember I wrote about a disastrous weekend visit to a gliding club (still to remain nameless) in the February 1997 issue, p54. A bad experience tends to stay with you so taking another visit, albeit to a different club, was approached cautiously. No pre paid course this time, just drop in as a casual visitor. That way at least I could cut and run if I saw something that didn't look good.

The background that allowed this was a family visit to Somerset.

How did I decide where to go? Thanks to a back issue of *S&G* of course. That club directory in the April 1997 issue does come in handy at times. Gliding clubs by their nature are tucked away in quiet places, which is part of the attraction of going somewhere new.

My destination on this occasion was Bath, Wilts and North Dorset GC which takes almost longer to say than find. It was tucked away just a few minutes off the main West Country route on the top of some hills with a magnificent view.

First impressions of a club are important and full marks here - the site was tidy with everything in place. The next problem is always to find somebody who will admit to being the duty pilot or duty instructor; however, this wasn't a problem as they were the first two people I stumbled over. Very soon I was on the flying list and given a conducted tour of the new premises.

Some things never change - there are never enough bodies for manhandling aircraft. At this point I would like to suggest that if you visit another club make yourself popular and help.

In direct contrast to my other visit it was a pleasure to look over a fleet of obviously well cared for aircraft. A mixed fleet of Bocians (all recently overhauled), K-6s and a K-8 were carefully DI'd and at the launch point.

So what of the strip? Well imagine a grass strip on the ridge of a hill with a few trees at one end. Sounds good? There is one slight problem. On one side is an unlandable valley and with my unerring talent for these things, the wind was blowing from this direction and there was a persistent haze. Not enough to stop flying but it wasn't a good soaring day.

Now to the good bit - the flying. At first glance the Bocian is very different if you are used to the faithful K-13. For me it was a double first as the club have a new Skylaunch winch and this was the first time I had been launched by such a powerful beast.

Each club has its own slight variations and once again I come back to a point from the first article. I am under the impression that the agreed checks are CBSIFTCB-E but here I found UD inserted. OK I have no objections to making sure the undercarriage dolly is removed - in fact I am all in favour of it - but a word of caution. It is always better to KISS. For those who don't know, this stands for Keep It Simple (stupid)! The more complex a routine becomes the less it is properly followed. This is no criticism but just a caution against "add ons".

The bottom line was that everything was done well with safety always placed first.

Now the silly bit. For those who don't know the Bocian, the instructor has a good view from the elevated back seat and so looks at the ASI over the student's left shoulder. A system that works well until I get in. Being short in the leg and long in the body, I was in the way. So after removing my cushions the instructor could see the ASI and I could see over the nose - just.

The take-off I enjoyed. The surge from the winch was firm and sustained all the way. Now for the silly point in all this. While we were adjusting the cushions we forgot to check that I could reach the release. Oops! A quick call to the long suffering instructor and at 1300ft we were off. Moral of this is that if you change something re-check.

Flying the Bocian brought home an interesting point. When we look at the horizon we don't just look forwards. Without realising it the sides of the cockpit also make a difference. The Bocian has sloping sides so when you trim out the initial feel is that you are diving so naturally you pull back on the stick...and lose airspeed. This didn't cause a problem on this flight but it shows the need for careful conversion when going from type to type.

In the air the impression was of a very solid aircraft that was easy to keep at a correct flying speed. I had been given a warning about the heavy adverse yaw but the rudder was light and effective so I didn't find a problem.

Landing the beast showed up another mismatch. I was not bothered by the row of trees at the end of the strip, after all my own field is bordered by them, so what I was trying to do was land much closer to the launch point than the instructor wanted. Afterwards I realised that his reference point was at least 50 yards further on than mine. I was trying to land short while he was happy with stopping a lot further on.

The second flight felt much better. With all the preconceptions out of the way I was able to settle down and enjoy it more, especially as I made sure I could reach the release.

After one bad experience of visiting a club it was nice to have my faith restored. Full marks to this one for well maintained aircraft, good instruction and a very pleasant welcome.

I previously suggested that low hour pilots should stay at home. I now modify that view but do suggest that you get a thorough briefing before even getting into the aircraft.

My thanks to the club for the welcome and next time I'm in the area I'll certainly ruin your weather again.

Happy landings.

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It was agreed that the FAI should help develop international contest rules for simulated flying and encourage the formation, within its national member organisations, of simulated flying groups.

A working party was made up of representatives from the FAI Air Sport Commissions (to ensure that simulated flying competitions remain as close to reality as possible) and leaders of national simulated flying federations. The group will help in developing contest rules and defining levels of personal achievement, reporting back to the FAI Council in May. A FAI Simulated Flying mailing list has been established. Anyone interested may subscribe by sending an e-mail message to simflying-info-request@fai.org, mentioning "subscribe" in the subject line.

For further information contact Fédération Aéronautique Internationale, 93 Bd du Montparnasse, 75006 - Paris, France.

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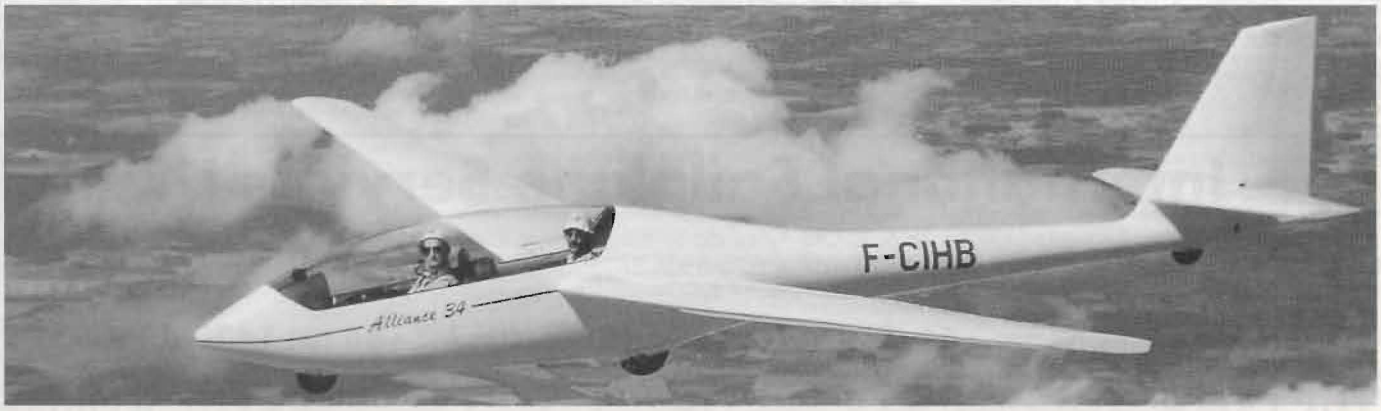


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