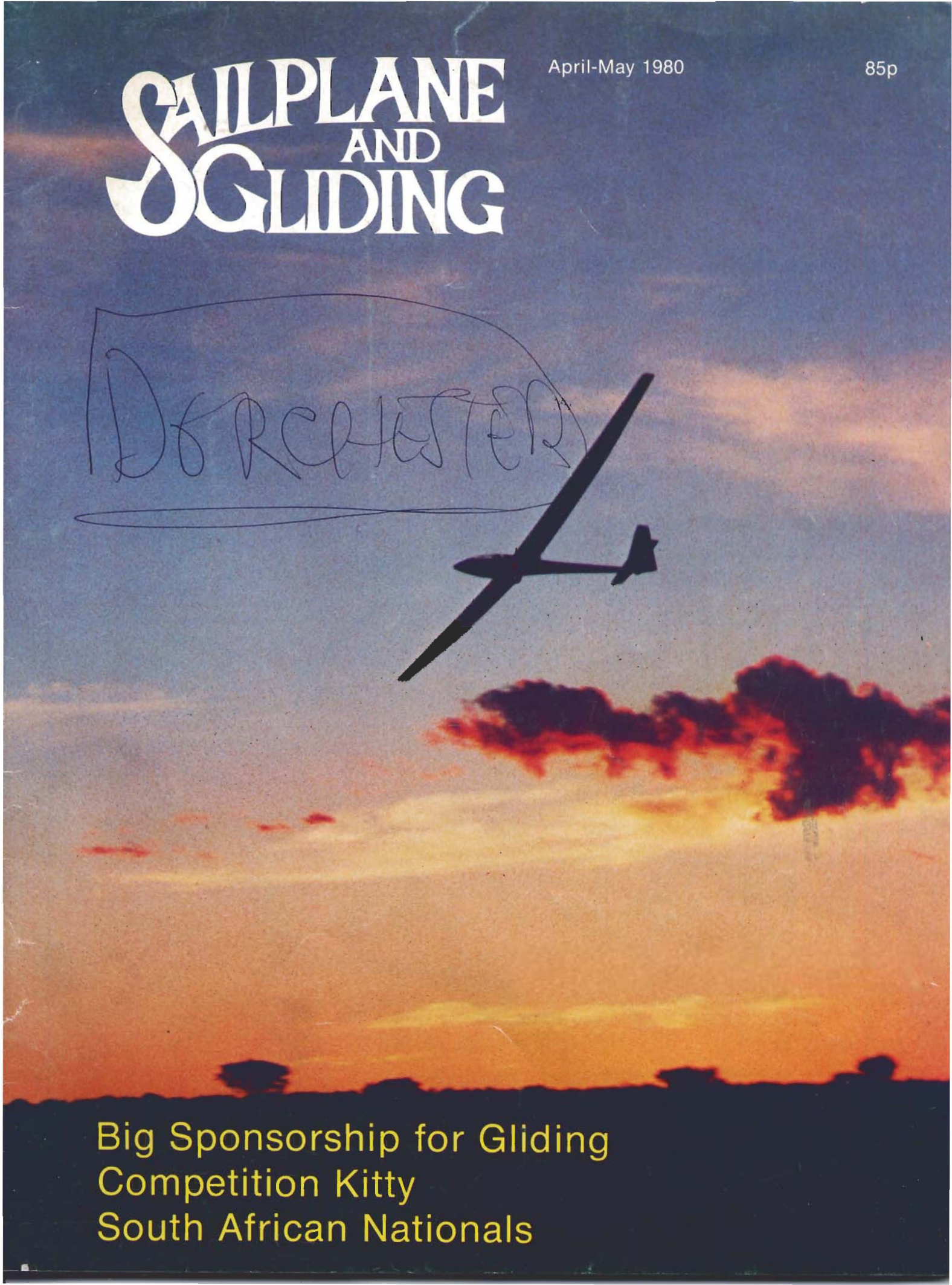
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April-May 1980

85p



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Competition Kitty
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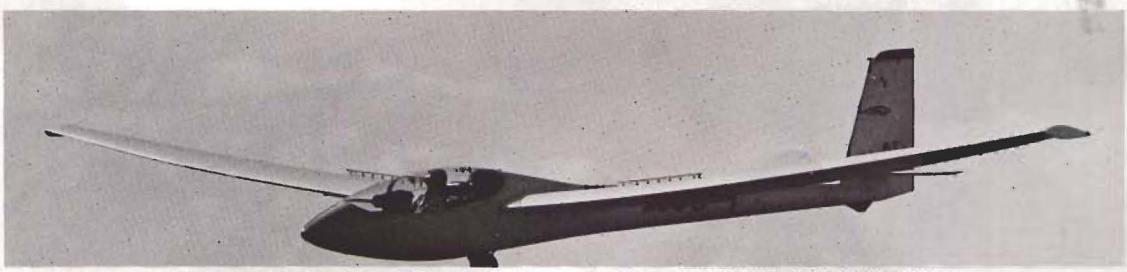
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SAILPLANE & GLIDING

Magazine of the BRITISH GLIDING ASSOCIATION

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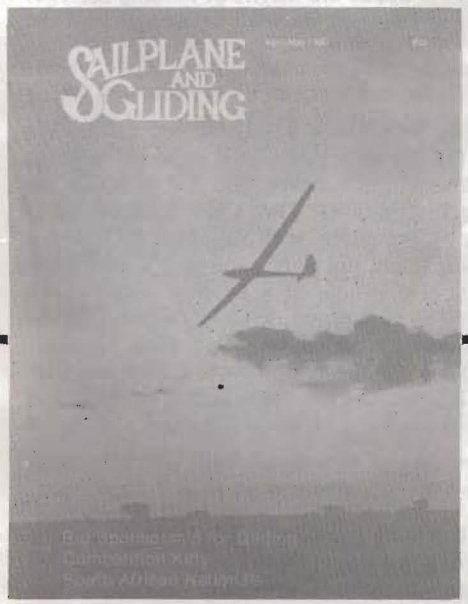
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Cover: A sunset landing by Jan Geerlings (ASW-17) having just completed a 692 out and return in the South African Nationals at Vryburg. Photo: John Glossop.



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CHAIRMAN'S REPORT, 1979

ROGER BARRETT

Despite 1979's average-to-poor British summer there are signs that our policy of encouraging more pilots to fly cross-country is bearing fruit. A number of clubs recorded appreciably higher cross-country kilometre totals than in previous years and the National Ladder had an excellent entry. But whilst the quality of our gliding may be improving, the quantity — measured by number of civilian pilots — has taken a dip: membership of our clubs is less than in 1978.

Accidents and Airspace

One possible reason for the drop in members is the continual escalation of our costs: only recently there has been a steep rise in insurance rates, a significant item because it affects all of us. What should, and can, the BGA do about this? The answer may be linked to another problem looming large on the horizon: the possible loss of our long-established rights to fly, in certain conditions, through some areas of controlled airspace.

In both cases the actions of a minority can harm everyone. At present expensive damage to gliders caused by carelessness — bordering on crass stupidity in some recent instances — means a moment's thoughtlessness is going to be paid for by us all (insurance companies are by no means charities). And, similarly, if a pilot transgresses the airspace laws the repercussions are quite likely to mean that thousands of our club members are going to suffer, perhaps for decades to come.

So, what action can we take to prevent this gloomy scenario becoming a reality? I believe the accident record of private owners warrants special attention. There is a danger that the sanctions which are applied when the culprit is flying a club-owned glider may not be used when the glider is privately owned, although the responsibility remains that of the CFI. Should the BGA endeavour to persuade underwriters that pilots with bad records must bear more of the financial burden they cause?

Pilots known to have infringed airspace regulations can be dealt with under the law. But, much more important, is the climate of opinion towards this type of misdemeanour. If a pilot appreciates that to err like this means he will be treated as a pariah by his club or competition peers he is more likely to fly in a socially responsible way.

The importance of *individual* responsibility in gliding is paramount and I make no apology for emphasising again the wise words of one of my predecessors, Philip Wills: "Gliding will prosper in direct proportion to the self-discipline displayed by each individual". If we should ever come to regard self-discipline as an old-fashioned concept and self-interest takes its place there will be nothing the BGA can do to prevent the consequences, and they are likely to be dire.

Hang Gliders and Ultra-lights

During 1979 five clubs suffered substantial interference from nearby hang gliding operations. The National Air Traffic Services were reluctant to invoke the provisions of the law relating to overlapping aerodrome traffic zones and they encouraged the BGA and hang gliding clubs concerned to reach operating agreements. We are quite satisfied that an unacceptable risk of collision with hang gliders exists at some of these sites. Negotiations with the British Hang Gliding Association and with the NATS are being conducted urgently and we hope the matter will soon be resolved.

At present there is a grey area between gliders and hang gliders. This no-man's-land is the territory that will be occupied by what are becoming known as "ultra-light" gliders. Your Executive Committee would like to encourage the development of this class of glider and we are exploring how best this may be done. Further evidence that the BGA does not spend a disproportionate amount of its time on matters that only concern pilots at the high-performance end of the glider spectrum was the announcement during our Golden Jubilee Year of a Home-built Sailplane Competition. The prize money of £3750 comes from The Sigma Fund, set up by the BGA to further the technical aspects of gliding. We are most grateful to the directors of Operation Sigma Ltd who have donated nearly £6000 to establish this Fund.

Sites

The Development Committee report indicates the considerable amount of time that has been spent on site security matters. Sites must always have priority and we are pleased that many clubs have found the contribution made by our committee members and their expert advisers helpful. We had hoped that a change of national government might have led to a more sensible policy regarding the use of MoD land for gliding and other recreational purposes. I regret, however, despite the representations made to the politicians concerned, I have to report a complete lack of any progress. Long leases (essential for our activity) at airfields are still not forthcoming and, regrettably, the Minister for Sport is unable to help us. At some stage government departments must realise that the huge expansion of sporting and recreational facilities that is going to be necessary in the next twenty years means that existing priorities will have to change.

Competitions

This year's Champions — Bernard Fitchett (Open Class), Dave Watt (15m Class) and Nick Hackett (Standard Class) — triumphed at a rather damp Nationals. In Kansas, USA, the sun shone a little more brightly and for the first time a British pilot, Justin Wills, won an American National Championships, in this case the Standard Class. In preparation for the World Championships to be held in Germany in 1981 Mike Carlton was appointed Team Manager. Your Association, though unable to persuade the FAI about the merits of holding the 1981 World Championships in England, decided to bid again for the 1983 event.

Finance

Our accounts for the year show a satisfactory result. We thank the Sports Council for their substantial grant aid towards our coaching and administration costs, and for assisting the British entrants in the International Club Class competition in Sweden. The Magazine Committee, with *Sailplane & Gliding's* editorial and advertising team, not only published a very readable publication, they also produced a healthy surplus: our thanks to the Editor and all concerned. Rika Harwood, Consultant Editor, is to be congratulated on celebrating 25 years association with the BGA. As the year drew to a close an initiative by the London Club resulted in a sponsorship agreement of some significance being finalised between the BGA and Allied Breweries Ltd.

People

Everyone in British gliding must have felt there was some justice in the world when the Royal Aero Club announced that our revered Vice-President, Alan (Doc) Slater, was to be pre-

sented with the Aero Club's Silver Medal by HRH The Prince of Wales in the year of our Jubilee. We were equally pleased that George Lee was to be awarded the Club's premier trophy, the Britannia, for winning the World Championship Open Class for the second time in 1978.

BGA Diplomas were presented to Joan Cloke, Joe Podolski and Eric Richards at our 1979 BGA Weekend held in March at Leicester. We congratulate the recipients, all of whom have worked selflessly for gliding over many years.

Eric Wilks and Frank Irving left the Executive Committee this year, the latter after some thirty years sterling service to the BGA. They were replaced by John Ellis from Booker and John Holland from the Cotswold Club. Roy Tetlow resigned from the Technical Committee chair and Alan Yates took over; Mike Emmett became Chairman of the Airspace Committee. Barry Rolfe was appointed Administrator as well as Secretary of the Association and Bill Scull was given additional responsibilities as Director of Operations. John Williamson joined our staff as a National Coach. After ten years as Development Officer Naomi Christy retired from that position but is still very active as our FAI Certificates Officer.

* * *

If I may end on a personal note, I decided after two years as your Chairman that it would be sensible (both for the BGA and for me!) if I indicated then that I was only prepared to carry on for one more two-year period. My time is now up. I hope my successor feels he is taking over the reins of a 50 year-old Association that is still in good fettle and ready to take on the challenges that all too obviously lie ahead. Thanks to everyone for making my tenure such a pleasant one — Executive and sub-committee members, BGA staff and all the friends I have made at so many clubs since 1976.

WHEN THE BGA BECAME OFFICIAL

A E SLATER

The British Gliding Association has been celebrating the 50th anniversary of its "provisional" formation. That means birth, and it was the birth of an exceptionally vigorous child for, without waiting for its official inauguration on March 27, 1930, it had already set up a provisional Council with Douglas Culver as its Chairman, and with Technical, Finance and Executive Committees, and as Secretary, Howard-Flanders, a well known figure from the early years of British aviation. He, in turn, did not wait to be "inaugurated" before bringing out the first issue of a "British Gliding Association Journal" dated March 1930. (S&G did not start till the following September.)

In a stimulating editorial introduction Howard-Flanders mentioned a scheme for "charting the air" — an idea being bandied about at the time, though no one seemed to realise that any air charted over Britain today was likely to have moved over the North Sea by tomorrow.

" . . . the rest of us, the unknowns"

The official inaugural meeting was held at the Royal Society of Arts, off the Strand, and I remember dividing the audience mentally into well known characters who had come to see "if there was anything in it for me" and the rest of us, the unknowns, who would have to keep British gliding alive by turning up regularly at our gliding clubs: as it turned out, there was a slight overlap between the two classes.

At this meeting a President was elected — Sir Sefton Brancker, the Director of Civil Aviation (he was killed later that year in the R31 airship disaster), and a Council of no less than 31 people. But the most fateful decision of all was the election of E.C. Gordon England as Chairman.

Gordon England had been extremely active throughout the earliest years of development of British aviation and according to the history books seems to have test-flown nearly every new British type. He made several soaring flights at the 1922 Itford contest until, on the last day, a high wind blew him back into the curl-over; he came down semi-stalled, smashed a foot and ankle, and was taken to hospital at Eastbourne. While there, as he wrote in the 10th anniversary issue of S&G in 1932, ". . . it was clearly borne in my mind that the one need was the immediate establishment of a school on Firle Beacon if the movement was to be protected, established and put on a firm foundation."

He was not at the gliding lunch, and in fact never showed any interest in the kind of flying the BGA was formed to promote. But on January 24, 1930, the Press announced the gift of £1000 to the BGA by Lord Wakefield, the millionaire oil magnate. So Gordon England turned up at the inaugural meeting in March and got himself elected Chairman, supported by an enormous Council numbering 31, including many of his friends. He also proposed that the Council could change the rules without consulting the entire membership, but this was turned down.

On returning from Germany in early June I found that the BGA had a full-time paid Secretary and, in conversation, that he had no understanding of soaring flight. Some years afterwards I learned from Ashwell-Cooke, the London Club's founder Chairman, how it happened. To find a permanent Secretary the BGA Council appointed a Committee of three to interview applicants, consisting of Ashwell-Cooke, Gordon England and the latter's friend The Master of Sempill. Ashwell-Cooke voted for an obviously very competent ex-Colonel with excellent testimonials. The other two voted for a man named Waplington, whom they interviewed as if they had never seen or heard of him before. Soon afterwards, Ashwell-Cooke was surprised to learn that Waplington had previously been in Gordon England's employ in a firm which made racing-type bodies to fit on an ordinary motor car chassis, and which had just gone bankrupt.

The result? For two years things went fairly well, with the BGA organising some good meetings, but during 1932 complaints began to accumulate (see S&G) about the BGA's incompetence and extravagance (it had an expensive West End office in Berkeley Square, apparently to give the impression that it was capable of running a subsidised gliding school). In 1933 the London Club disaffiliated, then throughout 1934 the row was at its height; the BGA was bankrupt and persuaded Philip Wills to take over the Treasurership, not realising that this gave him the opportunity to go through the old files. He reported in S&G for November: ". . . anyone can now examine the records and see for themselves how first one club or person and then another became first irritated, and then infuriated, by the incompetence of the BGA. . ." Finally, as a condition of receiving a government subsidy, the BGA had to alter its constitution to make it representative of the gliding clubs. The only remaining quarrel was about whether most of the subsidy should go to "the smaller clubs" because of their poverty, or to the clubs with soaring sites which could make good use of it.

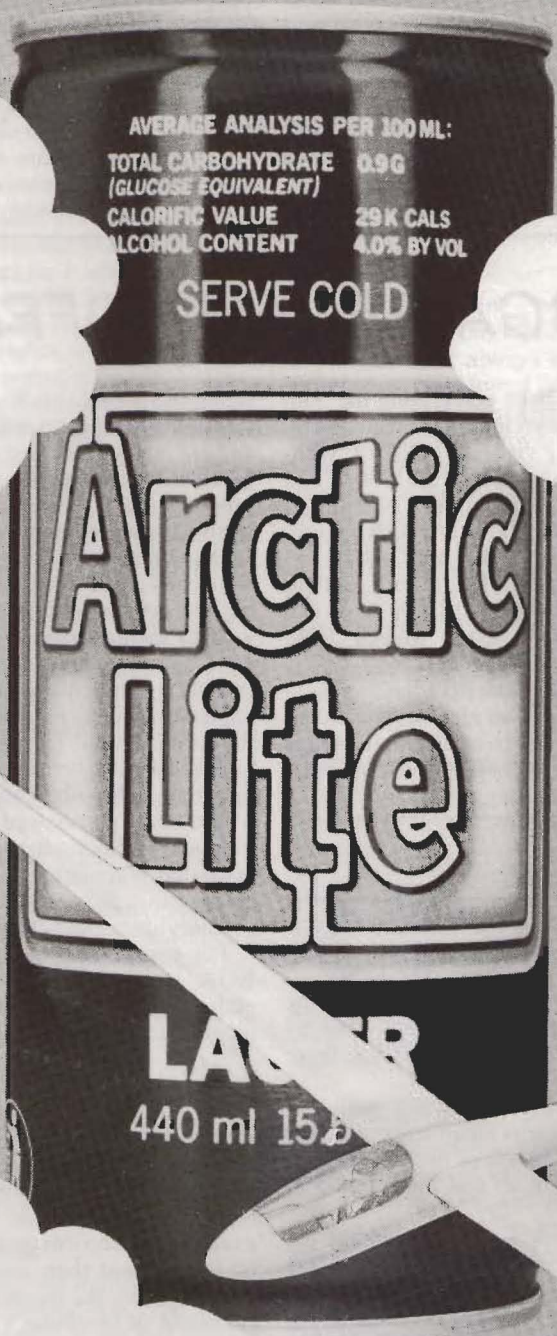
Addition to the article in the last issue, p6:

Newcastle Gliding Club had its first flying meeting on the same day as the London Club — March 16, 1930, but its name does not appear in the list of 35 affiliated clubs published in the BGA Journal for January 1931.

Arctic Lite Gliding

The Arctic Lite
British National Gliding
Championships:-

Dunstable
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and
Lasham, Hampshire
16-25 August 1980.



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Championships
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Trophy for special
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Competition Kitty
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A Major Sponsor for British Gliding

On January 28 a formal announcement was made that, for the first time in British gliding history, a company has agreed to sponsor the National Championships and the British Team. Allied Breweries (UK) Ltd have signed an agreement with the BGA, the main points of which are:

★The sponsor contributes £25 000 to the BGA and they will be spending a further £25 000 on supporting promotional activities.

★The 1980 Nationals will be called "The Arctic Lite British National Gliding Championships" and the BGA will give full recognition that the British Team competing in the 1981 World Gliding Championships is sponsored by Arctic Lite.

★Allied Breweries have first option to sponsor the 1981 National Championships on terms to be agreed.

Arctic Lite is a new low carbohydrate lager that was recently launched in England and Wales. Harvey Allen, National Brands Director of Allied, outlined his reasons for sponsoring gliding:

"It seems natural to us to link Arctic Lite's name with an exciting and colourful sport. So many sports nowadays are overcrowded with sponsor's names. Our aims with gliding are not only to promote the Arctic Lite name in a relatively uncluttered area but also to create a greater public awareness of and interest in gliding on a national scale."

The BGA Executive Committee has already decided that some of the sponsorship money will be used by the clubs organising this year's Nationals, London and Lasham, to improve facilities for competitors at their sites. Commenting on the sponsorship, the BGA Chairman, Roger Barrett, said, "We are delighted that, thanks to the initiative of John Jeffries at Dunstable, gliding now has a major sponsor. I am heartened by the constructive and understanding approach of Allied Breweries and I am very hopeful that 1980 will be just the start of a very fruitful collaboration for both parties. I know that all our pilots, and in particular those competing in the Nationals, can be relied on to play their part in ensuring that Arctic Lite gets all the publicity that our sponsor is expecting from this tie-up."

Arctic Lite

It's Electric

THE ARCTIC LITE CHALLENGE TROPHY 1980

Arising from Allied Breweries' sponsorship of British gliding during 1980/81 is an opportunity to extend information about the achievements and potential achievements possible with modern sailplanes. Serious soaring flights are to the gliding movement measured largely in terms of average speed achieved during closed circuit races. The questions most often asked by the general public are:

1. How long can gliders stay airborne?
2. How high do gliders fly?
3. How far can gliders glide?

The ARCTIC LITE Challenge is designed specifically to encourage the gliding fraternity to attempt flights which will alert the general public to the fact that gliders are capable of achieving considerable distances and carrying out spectacular flights.

The ARCTIC LITE Challenge Trophy 1980 consists of the following prizes for flights, all of which are to be homologated by the BGA in accordance with normal FAI regulations.

Free Distance	**£1500**

This will be awarded for the maximum distance flown by a British pilot for a flight originating from the UK measured in a straight line.

Out and Return	**£1000**

This award will be made to the pilot flying the greatest declared out and return distance originating in the UK.

Speed around a Triangle	**£500**

This will be awarded for the fastest speed around a UK triangle exceeding 300km with standard handicapping provided the minimum actual speed is not less than 80km/h.

Claims for these prizes should be made to the Competitions Committee, British Gliding Association, Kimberley House, Vaughan Way, Leicester on a BGA record claim form with supporting evidence **no later than** the competition closing date of DECEMBER 31, 1980.

VRYBURG REVISITED

BERNARD FITCHETT gives his impressions of the South African Nationals, held from December 16-31, in which he won the 15 Metre Class in a Vega.

The ever attentive Ted Williamson thrust a cold beer into the cockpit of the Vega — "Good flight Bernie, 136km/h, but Laurens beat you — 142km/h, would you believe!" It was Day 2 and the speeds were quite impressive. The Open Class, flying the same task as the 15 Metre, managed 148km/h — not bad for a 642km goal and return! My own speed was a personal best and would have been a National record for want of a barograph (I knew I shouldn't have lent it to Carlton. He broke the record two days before). However, to my relief Brad Pearson finished still faster in a Nimbus and made a claim. I reflected on last year's Nationals here. Flying a Nimbus, I was consistently beaten by the locals on fast days and finished sixth overall. Would it be the same story this year? Laurens Goudriaan, flying a new ASW-20L appeared to be the hot favourite for the 15m title.

It is common for pilots from more temperate climates to have a tough time in the South African Nationals, certainly for the first time. However, last year's experience was so exciting that I was eager to try again. Slingsby Engineering Ltd, who kindly made available a new Vega, solved the major problem of a glider to fly and friends at Baragwanath (near Johannesburg) solved just about everything else.

Vryburg is the most popular venue for the Nationals, not only because of the superior soaring but also because of the superb accommodation and social arrangements plus the friendliness of the town. Situated about 350km west of Johannesburg on a plain at 4000ft asl, it enjoys a dry atmosphere and consistently good soaring. To the east are landable fields ravaged regularly by thunderstorms in summer. To the west stretch the arid wastes of the "moon country" where wicked blue thermals live and unfortunately accidents await the unwary.

An ominously poor pre-contest period preceded the maximum of 14 days good contest weather. A British National record was broken on the day I arrived and the 15 Metre Standard Class started with a 349km triangle. Dust devils danced beneath the blue thermals and I think Ted Pearson must have found the best thermal of the contest — "three dusties were being kicked up by one giant thermal capped by a thin cu at around 18 000ft. I broke off at 17 000ft because I was getting anoxic."

I have yet to experience a really classic African soaring day, the sort of day which sends all true soaring pilots into fits of rapture, when the whole sky is boiling and every cloud is tinged pink with dust and supported at 18 000ft by a "double thump" thermal — you don't turn at the initial surge of 6-8kt but wait for the big one, 10kt plus, perhaps 15 seconds later. Some sections of a task would approach this ideal but generally we operated at between 9000 and 14 000ft asl with 6-8kt of lift, sometimes using both storms and blue thermals on the same flight. In fact the period was divided roughly equally between cu nim, cu and blue. Conditions could be very variable over the task area and often unpredictable owing to the dearth of suitable meteorological information.

Can upset your navigation

It takes a while to accumulate sufficient confidence to extract the maximum out of such weather. On the good days you really can bore along at 90-100kt in the knowledge that there is a good one waiting for you. You don't turn in lift that is reasonable by British standards. You accept long stretches of heavy sink and enormous height losses. For instance, a couple of my final glides were necessarily of the order of 100km — a height loss of some 10 000ft. Such large distances between the thermals and high cloudbases can make starting difficult because 1000m does not give much margin for error in finding that all important first thermal. Alas, the high altitude and temperatures result in true airspeeds which are 10-20% greater than we are used to in Britain, which accounts particularly for the high cross-country speeds and can upset your navigation. Many pilots navigate on the 1:1 000 000 scale map because of the good visibility and scarcity of landmarks. Oxygen, a sun hat and plenty of water are useful items. In short, one has to adjust to scale.

It is probably the first* competition in which a 1000km triangle has been set, albeit nobody completed. The Open Class was despatched on this colossal task and the 15 Metre/Standard on a 750km on a day which unfortunately proved to be only suitable for a 500km. So, all the 15 Metre/Standard and most of the Open Class turned back because of the certainty of landing out. I believe the first South African 1000km triangle was flown during the competition period and I am sure 1000km is possible in the competition itself, but it is necessary to be on the grid by 09.00hrs and a secondary task briefed beforehand to obviate the possibility of a ruined day.

**No, the first time it was set (though not completed) was on December 23, 1974, in the practice week of the South African Nationals. [ED.]*

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Mike Carlton and Con Greaves set off on probably the best day for a 1000km triangle attempt in the Calif and landed only a few kilometres short after an epic flight. They were a little late in starting at 09.40hrs as it was already good by then. The first leg was completed in fine style but over the "moon country" the thermals were blue and broken and an agonising 200km was covered with a river looking the most promising landing area. At 19.00hrs they were climbing and almost within gliding distance of home but were thwarted by darkness at 19.30hrs.

Not every day was good though. Everyone landed out on Day 3 as it was impossible to circumnavigate a peculiar rainstorm which sat near the turn point all day and provided no lift whatsoever. This was my only outlanding of the competition and resulted in the undercarriage retracting on landing, possibly because the soft ploughed earth may have pressed against the overcentre mechanism. When fields are available, the ploughed variety are normally recommended but many pilots land wheel up to prevent undercarriage damage.

By the following lunch time repairs were completed thanks to the local welder and a lot of assistance. Another 300km goal and return was set with storms forecast for 16.00hrs. No time to lose. Everyone had set off by the time I launched at 13.40hrs and showers were already forming. I crossed the startline at 13.50hrs. A poor start but at least we were in business. My luck was in. A storm front developed on the return leg. I heard people finishing high, so pressed on harder in anticipation of better lift. With only 60km to go I was jetting along in 10kt with 8000ft to burn off. The Vega nose went down further — it had to be maximum rough air speed all the way in. Vryburg was in the clear as we crossed the finish line at 16.00hrs with a winning speed of 136km/h. I could hardly believe it! It was time for beers all round.

There were two more days of thrills and spills, the latter including a write-off and two majors through inadvertent landings in the "bush", but fortunately no serious injuries. The Standard Class rounded off the contest with a flourish — an incredible 132km/h flown by Ian Robertson in a Std Cirrus for a 300km Mafeking and return. So ended one of the best contests I have attended — certainly the best weatherwise. Klaas Goudriaan won the Open, Dick Bradley the Standard and my own success in the 15 Metre Class I must attribute to the old recipe of making no major errors (Laurens won seven days and I won six), a good ship and crew plus a dash of luck.

Task analysis	**Open**	**15 Metre**	**Standard**
Total length of tasks set (km)	*7380*	*6474*	*5477*
Total days flown	*14*	*14*	*14*
Total days with at least one finisher	*12*	*12*	*12*
Fastest speed (km/h)	*148*	*142*	*132*
Average fastest speed (km/h)	*125*	*118*	*106*

Of the tasks set, 5 (Open), 6 (15 Metre) and 4 (Standard) completed 500-600km; 2 (Open) and 1 (Standard) finished 600-700km and one in each Class flew 700-800km.

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DIARY OF A FAILURE



(or come off it Bernard Fitchett)

MIKE CARLTON

You may read somewhere else in this magazine that "Flying SA" was all a great success. If you believe that you'll believe anything!

Day One
8000km goal flight London Heathrow landed Jo'burg. Competitions' Committee being difficult about homologation.

Day Two
Quick 500km O/R to establish soaring conditions. (Broke record.)

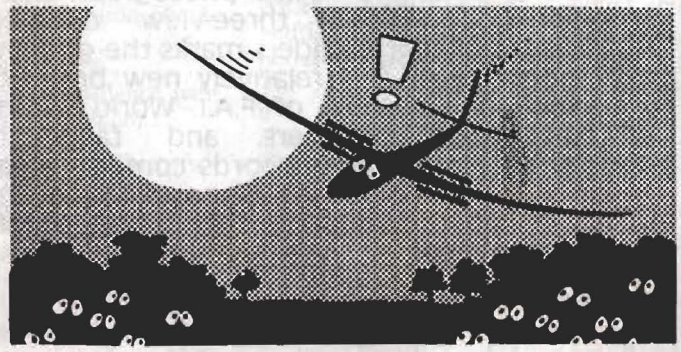
Day Three
300km triangle in Calif. Difficulty keeping Greaves awake. (Broke record.)

Day Four
Championship task too easy so took Murphy to Burgersdorp in Calif. Broke Fielden's records. Aerotow retrieve difficulties diabolical. Gave up: landed in diamond mine. Locals hostile. Got drunk. Spent night.

Day Five
Terrible hangover. Did not fly.

Day Six
Glossop took me on 300km O/R. Broke record. Broke camera. No record.

Day Seven
Only 700km triangle. Not worth recording.



Day Eight
Flashed around 1000km triangle. Disaster. Somebody put the sun out 18km short. Landed in amongst leopards. Greaves very irritable. Gave up gliding.

Day Nine
Sold glider.

Day Ten
Declared 800km. Took Glossop. Ended up delivering glider to lucky purchasers just 600km short of distance.

Day Eleven
Declared 50 000km goal.

Day Thirty-five
Reached goal. Expect another bout of difficulty with Competitions' Committee.

The new edition — published this month!

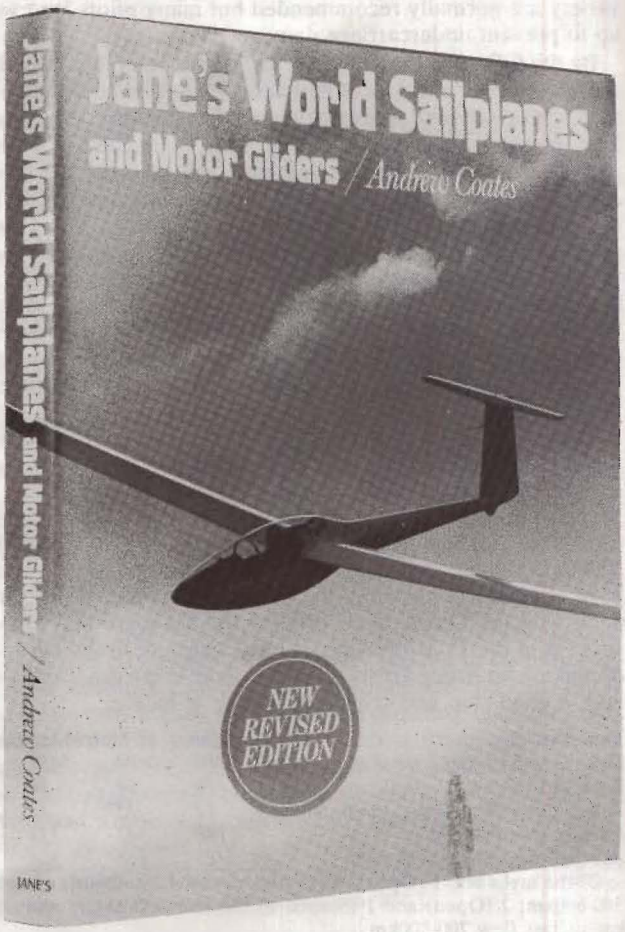
Jane's World Sailplanes and Motor Gliders

Author: Andrew Coates

Firmly established as a standard work before going out-of-print in first year of publication, **Jane's World Sailplanes and Motor Gliders** is now again available in a new and updated edition.

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Jane's Publishing Company April 1980
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This competition, which *specifically excludes* pilots who have competed at Nationals level, has been created to give you the opportunity to fly against some of the best competition pilots in the country and demonstrate your support for the British Team.

Competition Kitty is not a rated competition and is being supported not only by The British Team but also by our sponsors, Allied Breweries, who will be sending their Arctic Lite Team (who will not be competing) so that everyone has a good time.

There is no limit to the number of helpers you can bring, so fill the car/trailer/bus/hamper and have a super time competing or just enjoying the fun of gliding.

WHERE ? and WHEN ?

Kent	April 26-27
South Wales	May 10-11
Booker	May 17-18
Wolds (Pocklington)	June 7-8
Lasham	June 14-15
Cambridge	June 21-22
Husbands Bosworth	June 28-29
Shobdon	July 19-20
Long Mynd	July 26-27
Nympsfield	August 30-31
Dunstable	September 6-7
Portmoak	September 13-14

HOW ?

RULES FOR COMPETITION KITTY 1980

Qualifications for Entry

Any pilot with normal club authorisation to fly cross-country **except** any pilot who has previously flown in a Nationals or Euroglide contest.

All pilots must provide evidence of third party insurance to £250 000.

Any pilot without a Silver C must provide evidence of authorisation to fly cross-country from his CFI.

In the event of over-subscription to any particular meet, the entries will be subject to allocation by that Competition Director. NB. Priority will be given to pilots who have not previously competed (unless they have a well developed sister).

The Competition Director will be approved by the panel of judges.

Rules

The rules will be announced at briefing but will include:

Carrying of barographs and cameras in accordance with the BGA competition rules.

Dangerous or unsafe flying will result in disqualification from the competition.

Scoring

Handicapping of gliders will be as published in the BGA Competition Handbook.

X and Y will always be 20km.

Day scoring will be in accordance with the BGA Competition Handbook.

Criteria for Selection of Winners

The scores of the competing squad members will be added together and divided by the number of squad members competing. The result will be the "average squad score" (ASS).

The scores of the competing pilots will be expressed as a percentage of the ASS.

Example: Two squad members competing achieve scores of 1000 and 950

$\therefore 1000 + 950 = 1950 \div 2 = 975$ ASS

Competitor A scores 985 = 101%

Competitor B scores 850 = 87%

Therefore competitor A has highest percentage score and is the winner for that day.

The competitor with the highest average percentage at the end of each weekend competition will be that weekend's winner. After the last weekend competition the results of all the weekend winners will be compared and the pilot with the highest percentage score will become the overall winner.

In the event of a dead heat the pilot with the highest actual score will become the winner.

In all respects the judges' decision will be final and binding.

Prizes

There will be a prize for each weekend winner. This will be announced before the task briefing at the commencement of the meet.

The overall winner will receive a week's holiday in Barbados for two inclusive of fares and accommodation.

The winner will be announced within one month of the last competition.

The closing date for entries will be 14 days prior to the relevant meet.

Entries

All entries are to be sent direct to Competition Kitty at the BGA office, Kimberley House, Vaughan Way, Leicester.

The entry fee will be £10 — non-returnable. All cheques should be made payable to "The British Gliding Team".

The entry fee does not include launch or membership fees.

Judges

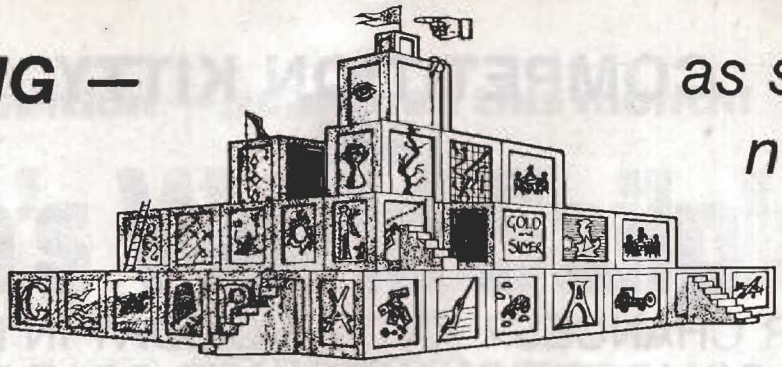
The judges are: Roger Barrett, retiring BGA Chairman; Chris Simpson, Vice-Chairman, Royal Aero Club; Mike Carlton, British Team Manager; Ralph Jones, Aeronautical Plumber; Mike Pope, British Team Treasurer; George Lee, World Open Class Champion.

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COACHING — as seen by a newcomer!



JOHN WILLIAMSON

I suppose most of you take the existence of the National Coach for granted. I know I did! A presence that manifested itself in "Coaching Corner"; an allegedly malignant spirit presiding over instructors' courses — probing incomplete flying techniques; humbling the hopeful; occasionally damning them to an outer darkness. A sort of "Them"!

Perhaps I may summarise what has been my view of the coaching scene, what it has become and our ideas on what it may be in the future.

Birth of the Capstan

It all began in 1963 when the BGA persuaded W D & H O Wills to put money into gliding. One practical result was the development of the T-49 two-seater — the type was named Capstan after a product of the company — and one was presented to the Association for the use of the newly-appointed Coach, John Everitt. John carried the banner for six years, and, with the guidance of the Instructors' Committee, started the series of Instructors' Courses which persist today. These augmented those which were already run at the larger clubs. With upwards of 80 instructors to train each year it must have been terribly hard work — satisfying but hardly fun! Over the years since its inception well over a thousand instructors have been trained by a succession of Coaches who have included Ed Meddings, Bill Scull, John Heath and Brian Spreckley. In parallel with the BGA courses those run by the RAFGSA at Bicester have added hundreds of instructors to the overall British scene, and many more have come in by way of the Air Training Corps.

Most sports have coaches, operating at all levels, who work with individuals and groups or teams to improve their techniques. A structure is established with practical guidance available at each step. Imagine a pyramid constructed of huge blocks which represent school, club, county or league, region, national and international levels. Convenient staircases are provided between each level to be scaled by those with the tenacity, strength and skill, with the help of the appropriate coach. Not so in gliding — in Britain at least.

By the definition above the only true coaches in British gliding are the instructors, and the BGA task was to provide a firm base of *ab-initio* instructors on whom the clubs were to build the rest of the pyramid. Don't be in any doubt that the pyramid exists, right to the pinnacle of the World Championships. But, by and large, there has been precious little practical help along the way for those on their way to the top. To stay with the analogy of the pyramid, the way to the plateau of the first block is now easy. Plenty of expert instructors, plenty of suitable two-seaters, a good safety record. The staircase is wide and the steps are not too steep.

But to climb to the second plateau, actually going cross-country, you are very much on your own! The BGA *has* provided a small step in the Bronze badge. Many clubs have managed to carve one or two rudimentary steps — thermal soaring, handling exercises, lectures, briefings. Some pilots manage to clamber up on the piles of beer crates left over in the wake of all the bar talk! Occasionally a rope is available, left dangling by the example of someone who has made it up to the next level. He may even have been concerned enough to help the others by tying a few handy knots in the rope. But, alas, there have also been cases where club management has contrived to grease the rope, to the consternation of those still struggling below.

So, what of BGA coaching now? Four years ago Brian and Bill took pick and shovel and started to carve the next big step up to the second level. It was called "Instructors' Task Week" and was an instant success. A dozen or so instructors came along to fly an assortment of

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two-seaters and solo aircraft. They were taught to interpret the weather, work out a feasible task, prepare for it and, above all, were taught that it was *possible* — and **FUN!!** After the club treadmill even the retrieves were fun.

The first level of our pyramid is built of hundreds of bricks — instructors — cemented in place by a love of the job. Without *fun* the mortar dries up and crumbles and eventually the bricks fall out — and another BGA instructor course is over-subscribed, plugging the gaps. The task week philosophy was to show ordinary club instructors how to organise similar training for their own clubs, and how to have fun themselves, doing it. The courses were repeated each year and perhaps a measure of the success of the philosophy is that in 1979, for the first time, the instructor courses were *under*-subscribed. And perhaps there are now steps where before was only a greasy rope! In 1980 the courses are renamed "Soaring and Cross-country" and last for nine days.

What are the next steps? A major step in 1978 was the purchase of a Twin Astir and in 1979, when I joined the others, this came into use in two roles new to BGA coaching. Individuals came on short courses to learn specific cross-country techniques — thermal soaring, cloud flying, navigation, turning points, final glides. In a one to one situation a great deal can be taught in two or three hours in the air — techniques and practices which could take months of trial and error on one's own. These are the "Soaring and Advanced" four-day courses. The BGA also ran two Wave Weeks, at Vale of Neath and at Shobdon. The Twin Astir is splendid in this role as those who attended, and were fortunate enough to actually catch the wave, can testify. Both of these new ventures, which are to be repeated in 1980, were primarily intended for instructors. Two coaches can't carve many steps by operating on an individual basis, and the BGA's priority must still be to help the many through the medium of the few — the instructors.

There was one other significant step taken in 1979, when the BGA ventured where only John Jefferies had trod before. Escorted cross-countries are great fun for those taking part and, depending on the skill of the follower, instructive to a greater or lesser degree. A relative novice may not know *where* he has been "towed", how they got there or how they got back. But he will have learnt that there are thermals all over the place, that they *can* be reached, that his glider *will* glide a long way. Two or three such flights and he is firmly on the plateau of cross-country soaring and beginning to reach up towards the next. The more experienced follower will learn correspondingly quicker and may leave the gaggle to branch out on his own almost at once.

Escorted flying is a feature of the cross-country courses in 1980 and we shall continue to learn what we can from it. It remains to be seen whether it could or should be integrated into the normal club syllabus. On balance, because of the difficulty of communications — radio time is critically precious — and of organising near-simultaneous launching, probably it will remain the province of one or two specialists. But something which may spring from it and which we have never seriously tried to exploit, is a viable technique of pairs flying. Poles and Czechs in particular have demonstrated that pairs flying in contests can be devastatingly successful and perhaps that is an area where BGA coaching can help to carve a step towards the topmost plateau of them all.

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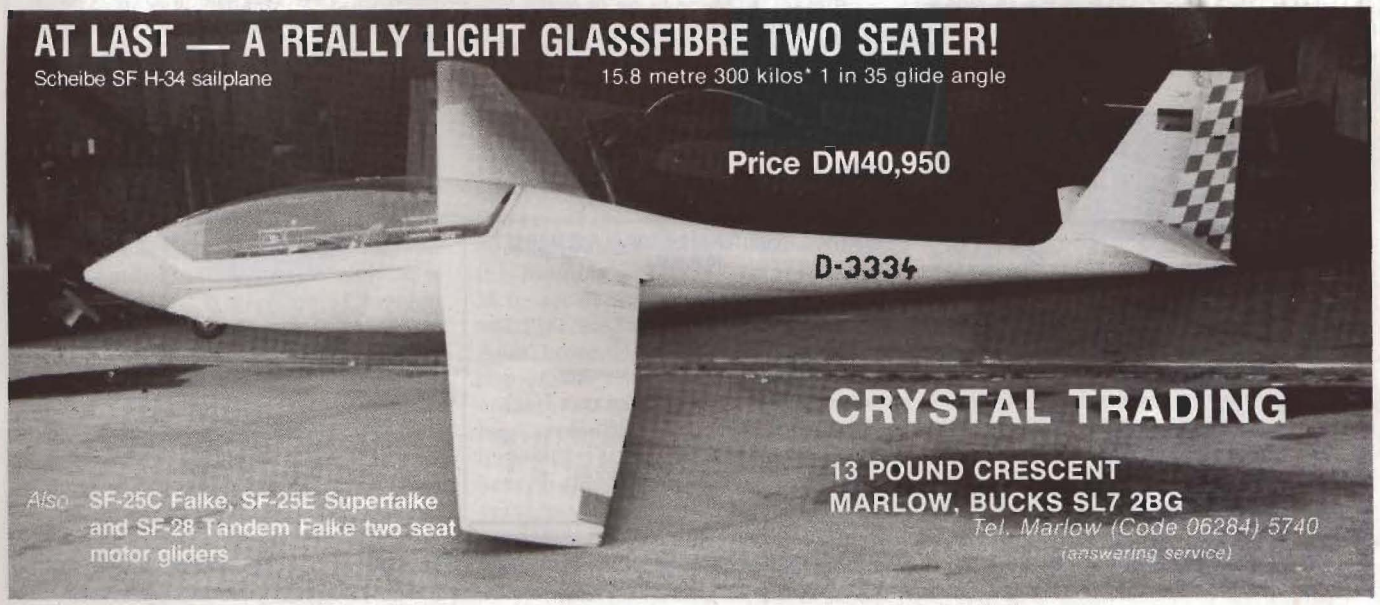
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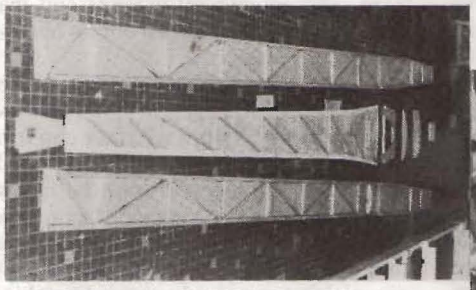
Coaching for young pilots

Finally a new departure in coaching, one which more closely resembles the conventional image, is introduced in 1980. Squad Training is the title and George Lee is the organiser. Of the five 1980 courses the BGA will man two and volunteers will run the remainder. This year may be equated to, say, county coaching, as 15 young pilots go for training in the five courses. Next year five go on to fly in Regionals, and in 1982 one will be coached in the Nationals. How much the BGA full-time coaches will be involved in that progression remains to be seen, but it is a pointer for the future of coaching in soaring techniques — a future that I will be happy to be involved in!



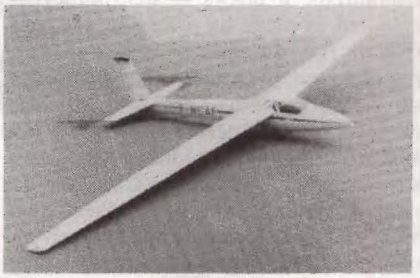
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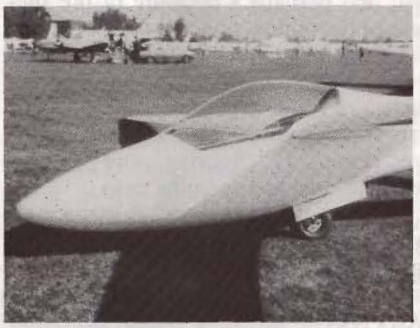
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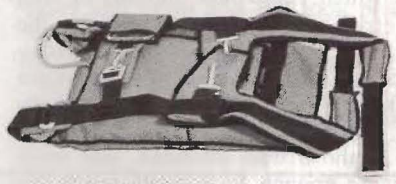
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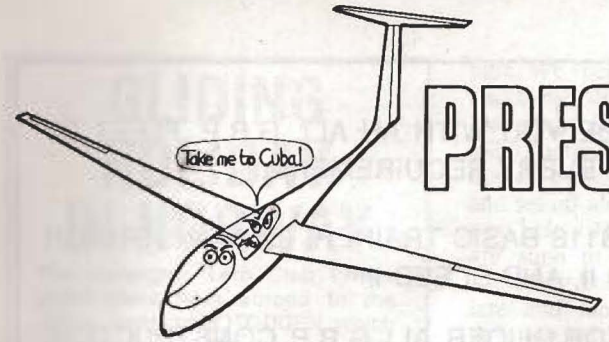
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PRESSING ON OR

How to transform your attitude to cross-country soaring flight

WARREN KAY, a 26 year-old systems analyst began gliding in 1977. The article describes one of the London Gliding Club's cross-country soaring courses run by CFI, John Jeffries (see S&G December 1977, p243) flying ASK-18s from LGC's Dunstable site.

"Book yourself on a course" said a friend. "You're wasting time" said another. So I asked John Jeffries, CFI. "Okay, but after the harvest when field selection is easier." It was June. I had six hours PI. I had just booked myself on a cross-country soaring course. JJ handed me a sheaf of notes and a parting comment: "Get yourself a Bronze C and 20hrs before then." A few minutes later I closed my mouth and left his office.

I arrive at the club at 08.00hrs on September 3 complete with Bronze C, 23hrs, a new set of maps and Silver distance completed the previous Monday. It's blowing a gale, pouring with rain and cloudbase is 300ft. I can't even see the Downs, ¼ mile away. JJ arrives, "Briefing at 9.30" he yells. "Where are we going, swimming?" I quip. A glower and cloudbase lowering 100ft is the reply.

Flying and radio techniques

Alan, a fellow LGC member, and I are all ears as JJ runs through a brief introduction on the aim of the course and a rather longer explanation of the flying and radio technique to be employed. He moves on to discuss today's task.

Day 1, Monday, September 3. "Weather, a depression over the north sea and a high off Spain combine to provide strong westerly winds. The cloud and rain will pass through by 12.00 with weak to moderate thermic activity developing and lasting until 17.00hrs. Task will be a 160km triangle, Watlington, Chipping Norton. The first leg is along the Chilterns enabling us to stay airborne in hill lift if the weather does not develop as forecast." The rain lashes against the clubhouse windows reinforcing my private thoughts "he's nuts". We launch at 13.00hrs between showers and find strong hill lift to 800ft (all heights above Dunstable). Little wisps of cloud are forming in front of the hill and well below the general cloudbase. "Keep in front of the cloud" the radio squawks at me, "screech, whistle, 'orographic', rumble". Orographic? JJ and I are soon at 1700ft but Alan does not join us. We set off on track with the immortal words "Pressing on". We pause at Aldbury ridge (7km, SW) for a thermal to get enough height to cross to Halton 9km into, at 2000ft, a 40kt wind. I drop below JJ's glide path. He scrapes over the ridge. I have to go round the end and reach rising air half way up the 400ft hill. If you've never done this before and you have a weak heart I don't recommend it.

Marginal final glides

I gradually climb up pausing only to wave at the family on a path who are looking down at me. At this point I have stopped caring and the rest of the flight (cut short to an out and return to Watlington) passes by with marginal final glides from ridge to ridge abounding. Beating up and down the familiar Dunstable ridge after 5½hrs in the air I find that I just do not want to come down. It was 83km at an average of 15km/h.

Day 2, Tuesday. The high has moved up to centre on France, 10kt SW wind and moderate to strong thermic activity. The task is a 260km triangle, Cheltenham reservoir, Malvern beacon. We launch at 12.00 hrs, at least an hour after we could have. JJ fumes and later I find out why. We set off and make good progress with strong streeting evident. Remembering this morning's briefing I am watching for JJ to accelerate. He starts to disappear and I increase speed to 90kt, to keep up. Alan, however, doesn't and loses us. We pop off the end of the street and I look around, recognising Bicester airfield. We hunt around for Alan but don't contact him until it's too late. He lands in a field next to the airfield. We continue on, in very poor visibility but very good soaring conditions. I have not thermalled in a stubble fire at its peak yet and the first one takes me by surprise with its violence. At Cheltenham I notice that cloudbase is much lower. JJ informs me, while pointing out the turn point, that sea air is blowing up the Bristol channel. It now becomes a struggle to stay up, let alone reach the next turn point and eventually JJ gives up and we start home. This is the first day of thermalling and I am depressed to find that JJ gains as much as 250ft in every 1000ft of climb we make. However, in one thermal I see a soaring bird at cloudbase and shifting my circle towards it I find much stronger lift and catch him up. As we pass Moreton-in-the-Marsh we are assaulted by a pair of RAF Jaguars. They are in a 90° bank with the wingman above and in tight. They pass underneath me, close enough for me to read markings under their canopies. Our radio exchange went something like: JJ, "That was nice"; me: "Wuh, wuh, Were they Jaguars?"; JJ: "Definitely". The sky begins to look dead and a stubble fire which takes us to 2000ft is the last lift we contact. We land in a large, burnt stubble field 10km short. JJ points out, an hour earlier and we might have got home. It was 240km in 5hrs at 48km/h.

Progress very slow

Day 3, Wednesday. The high dominates. Thermals will be moderate and probably blue. Wind 10kt, SE. Task, 170km triangle, Husbands Bosworth, Towcester. Launched at 12.00hrs we scrape in weak lift and are blown gently on track. Cloudbase is 2800ft but the thermals are not necessarily related to the clouds. It's these conditions when thermalling ability really is necessary and JJ is continually coming down to pick up either Alan or myself. Conditions gradually improve and we make Hus Bos, turning on to track for Towcester we are now heading into wind. The difference is obvious and progress is very slow. Alan misses a thermal and JJ has to abandon him because it has now turned completely

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blue. We spend an hour going backwards and forwards over the M1 motorway at Daventry. K-18s progress into wind in 1-2kt thermals is less than exciting. We make Towcester as the day begins to die and set off along the A5. Down to 800ft, well below JJ, I fly slap into 4kt and we are soon at 3000ft. A stubble fire at Bletchley beckons but we get there too late and land. While waiting for the aerotow retrieve, JJ, who has a BGA meeting in London, tells me to watch out for wave on the way back. He goes first, then I hook on and am airborne at 18.00hrs. I pull off at 2000ft in sight of the club, the vario beeps and then steady 2kt. The air is smooth, the lift constant and parallel with the hill. I call to all and sundry but only the tug responds. Soon I'm at 4000ft well above the inversion which is clearly "bowed" where I have ascended. I find I can trim out to 35kt with no sign of buffet. Almost instantaneously the varios shift to down. I hunt around but am soon down below the inversion and head in. It was 150km in 5½hrs at 29km/h with a 2000ft gain in wave.

Soar the cold front

Day 4, Thursday. The high is still around but a cold front is forecast for mid-afternoon. Wind S becoming W. Strong inversion. Task, 200km out and return Pershore. However the prime objective is to reach and soar the cold front. The inversion is so strong that there is no thermic activity until 14.00hrs. We launch quickly but conditions are very weak and Alan lands at Wing. We are down to 800ft twice but get away. Cumulus begin to form and the lift rapidly improves to 6-8kt. However the band of lift is very narrow and we get no further than another 10km before turning back. The wind is now from the west and the hill is usable. JJ lands but I soar for a while. Later JJ explains that the narrow band of lift was the front but it was much weaker than forecast. It was 60km in 3hrs at 20km/h.

Day 5, Friday. The cold front has gone through leaving an unstable airstream with a SW wind. Thermic activity strong and long. Task, 240km triangle, Marlborough College, Chedworth. The streets look fantastic and JJ impatiently moans at our slowness. We launch at 12.00hrs and set off immediately. JJ leads us onto a black looking street. We circle in 8kt to 3000ft, then set off at 90kt on track. We do not circle until Didcot (55km). As we approach Didcot, JJ ignores a stubble fire with two Nimbus circling and presses on. Another few kilometres and we are down to 1000ft then, thump and round we go. The varios are off the clock. I time the climb, from 1500ft to 4000ft takes 2½min, 1000ft/min. We set off and make Marlborough easily. Turning towards Chedworth the sky does not look so promising but we press on. As we skirt Swindon we are down to 800ft but a stubble fire gives 10kt and we set off for some promising clouds. I am aware of two things. First, my thermalling seems to have improved, JJ does not gain quite as obviously. Secondly, it's most important to choose the right thermal. This was brought home to me when I looked back and down at those two Nimbus still circling in the stubble fire at Didcot. We make Chedworth on a long glide and contact lift just beyond. Turning for home there is still some streeting but the clouds are much larger and higher. Around Oxford we make a long climb. JJ goes down to help Alan so I take a look at a strange concave bowl at cloudbase on the downwind edge of the cloud. I am sucked up into the bowl in very strong lift, then the downwind edge of the bowl opens out and I climb up the side of the cloud in 6-8kt. I call JJ but by the time he has me in sight I am at 6000ft. JJ informs me that with the tailwind component I have enough height to final glide home. I glance at the map as he heads off for the next cloud and . . . chicken out. I follow on 2000ft above and as he flies under the next cloud I am forced to go round it and hit strong sink. Soon we are back on the same level. We take one more stubble fire to top up and then head home. I am again above the glide path so I increase speed to 90kt and out of sheer elation perform my first "beat up". JJ and Alan arrive in seconds and we soon land. It was 240km in 5¼hrs at 46km/h.

We assemble in the bar for a general debriefing. I am not really concentrating. I'm still at 6000ft climbing that cloud and never coming down. A little later I think about the week; 25hrs soaring in ridge lift, strong thermals, streets and stubble fires, moderate and weak thermals, blue thermals, cold front and wave, 773km cross-country and two field landings. When I arrived at the beginning of the week I had turned my back on the club twice. "Pressing on" is now my soaring commandment, how about you?

PS. Did you hear about the early solo pilot without a Bronze C who landed out in a cornfield? When interviewed by the CFI and asked what he thought he was doing he replied "Pressing on".

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CONTROL AND SUPERVISION — is private ownership significant?

BILL SCULL, BGA Director of Operations

In 20 years the growth in private ownership has been considerable — from 30% of gliders in 1959 to almost 74% in 1979. These figures may be significant solely in terms of launching, which is a matter club managements might like to consider as well as the implications regarding general operations — having enough people to operate.

In general it will be argued that these changes in the balance of gliding are not, in any way, unfavourable so long as the private owner members go on working for their clubs — it may well be the case that they do. Others will argue that the overall effects are most undesirable — Fred Weinholtz, Chairman of the German Gliding Commission, has made positive efforts to limit the growth of private ownership. At the last count the figure was in the order of 30% (of gliders). I would very much like to have Fred's view on our movement in this respect, despite his generally favourable comments in the Golden Jubilee issue, "How Others See Us", p281.

Forgive this preamble but all the implications will have to be considered and in this article it is safety. Safety standards depend, largely, on training, supervision and control of pilots be they club or private owners.

Possibly unreported

This year for the first time our annual analysis of accidents has separated club gliders from the private ones. The first and obvious point is that there are many more field landing accidents in private gliders (23 compared with nine to club gliders) with the additional likelihood that many accidents to private gliders go unreported. Overall figures are:

82 accidents to club gliders.

78 accidents to private gliders.

Now there are two ways of putting these figures as rates. One is accidents/aircraft (in each category)/year.

Club 82/332* = 1/4 gliders/year

Private 78/864* = 1/11 gliders/year

So privately owned gliders are operated much more safely, almost three times so. However there is quite a different picture if we take the second, and more usual way, to make the analysis on the basis of accidents per launch (or launches per accident). For many years the figure has been in the order of 0.4 accidents/1000 launches. Recently the figures have occasionally been presented differently — as accidents/100 000 launches (*ie* 40/100 000) which is more realistic since no one has 0.4 of an accident — although you might think differently if you had read some of the reports.

*Civilian + Army + Royal Naval GSA.

Now we are unable to complete the club/private owner analysis on this basis because the launches by private gliders are not recorded separately. However, the figures can be guesstimated.

More hours than launches

The 864 private gliders with an average syndicate of four means 3456 pilots — say 3500. Most private owners do many more hours than launches and a conservative estimate suggests 30 launches per year. To be realistic I am going to take a spread of ½ and 1½ times this figure, *ie* 15 and 45. This corresponds to 52 500 and 157 000 launches and an accident rate between:

Private 1.48/1000 and 0.49/1000 launches.

The corresponding club rate based on the remainder of the launches is:

Club 0.34/1000 and 0.6/1000 launches.

The private owner rate for 30 launches/pilot/year is 0.74, which does not compare too well with the national average of 0.48/1000 for last year — 1979.

Whatever the figures — which do not look too good however you look at them — there may be good reasons for a poor private owner accident rate. Whether anything can be done about it is a matter for conjecture but first we must know the possible causes.

More hours — less launches. Inevitably more hours mean less launches and the only obvious remedy is a few circuits just for the practice, which is a smaller premium than an increase payment to your insurance company. In this context I remember an average experience figure of 18 launches and 30hrs on type at the time of the accident. The remedy of circuit practice is only partially effective since airfield landings will not extend you, unless the demands on accuracy of approach control and restriction of landing area are increased. Even this landing practice may be of little value when it comes to the late selection of the sort of field you used to be good enough to land in. Consider when you did last land-out; I know a few pundits who worry about their lack of recency in this respect.

At what stage to buy your own glider? This was dealt with in some detail in an article on club fleet planning (June 1977 issue of S&G p108) and most of what was said there is still relevant now. What has become apparent is that pilots become private owners sooner and with much less experience than in the past. Typical figures for ten years ago were 100hrs experience; nowadays the figure is probably less than 50. Matters may be made worse by the limited number of types in the club fleet and the (possible) big step taken in converting to the private gliders. There are also other implications.

The implications. To what extent does the private owner regard himself as part of the club's scheme of things? How often do *you* expect to be checked? If you fly badly (in the local area) will you accept an instructor's comments, advice, training recommendations, or, in the extreme, disciplinary measures?

Control lessened

The chances are you will resent anything the instructor does or says. Private owners stand apart from the club system, and whether they should or not is another matter, but not all the blame lies with them. Instructors have gradually lessened their control of solo pilots — not consciously I am sure — and standards seem to have declined. Perhaps gliding clubs have become too democratic thereby reducing, to some extent, the authority of the CFI and his instructors. Also because not enough instructors do the same kind of flying as private owners, they are often unable to exert control with credibility.

Whatever the reasons that have brought about this state of affairs the remedy is obvious, tedious and frustrating — better control with a view to improving the standards. The alternative is simple; pay the increased premiums to your insurance company and do not complain. Unfortunately insurance companies are only in it for the business. I do not believe they are particularly concerned with keeping the rates down but only with making a percentage. If the claims increase to the extent that they lose out on a year, then this will be made up in subsequent years. Even a good individual or syndicate safety record is

generally no protection against these increases. (As a matter of interest you may like to compare your premium with the average figure for Denmark — 2% in the scheme run by the Danish Gliding Union.)

One thing about the Danish scheme that struck me as particularly effective was its degree of control — if there were doubts about your ability to fly the glider you wouldn't get cover for it! Such sanctions are not possible in the present scheme of things here, nor are they likely in the future.

The remedy lies collectively in our hands. Take an objective look at your flying over the years and see where you lack experience or recency, then seek to refresh or fill in the gaps — some field selection practice, simulated field landings or a refresher course of some sort. First and foremost at the beginning of the season get yourself back in practice as soon as possible. Be aware of the emergencies you might have to deal with.

The following statement is unequivocal in spelling out the responsibilities of club committees and CFIs in particular:

General. To improve the standard, and quality control, of all flying from the club by all pilots.

Specific. To be genuinely responsible for all dual training, flying and passenger carrying, supervision of all instructors and post solo training. Also for the standard of all private owners flying at all levels of advancement (this includes all phases of flight, local soaring standards in terms of sound and safe procedures, cross-country landings, investigation of incidents and accidents). Note, one of the trickiest jobs is the supervision of private owners who may resent what they think of as interference. However, the CFI has a duty and the power to control all flying standards of private owners who should be left in no doubt as to this.

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GLIDER THOUGHTS

Have you ever thought, said the Main Spar,
to the ribs all down its length,
That my brother now has an engine,
and his fatigue life is almost spent.

That's tragic, said the Root Rib,
whatever shall we do,
If one day they decide also
that we need an engine too.

Oh perish the thought, said the Fuselage,
to the fittings attaching the wings,
We really have no room in here,
for those noisy smelly things.

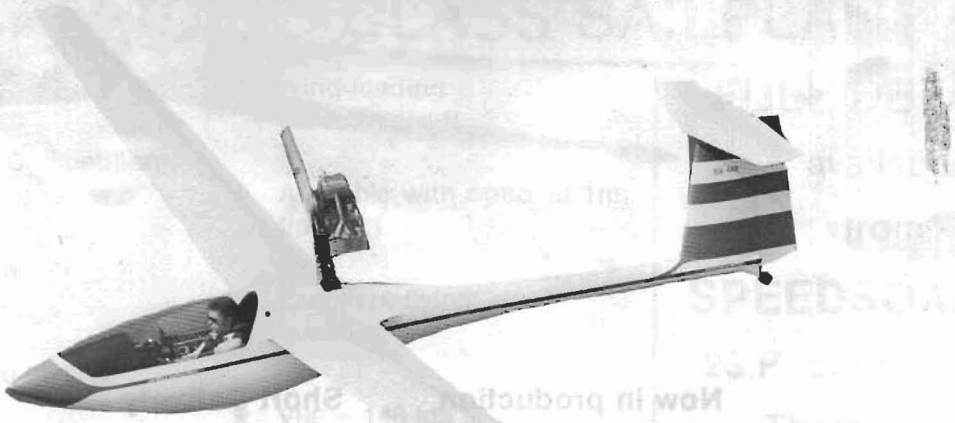
They'll open your back and put doors in,
said the Rudder bemoaning its fate,
and I'll take the torque and the prop wash,
to keep the rest of us straight.

The vibration will knock-out our stiction,
said the Instruments looking glum,
We enjoy the peace and quiet;
'till the gyro's start to hum.

I'm a purist, said the Bold Pilot,
circling both low and tight,
But sometimes, a "little" old engine,
would save all of us having a fright.

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FOCUS ON 1979

The British Gliding Association's AGM was held at the Post House, Rugby on March 16 during the BGA Weekend which will be reported on in the next issue. Meanwhile here are brief extracts from some of the Annual Reports.

Airspace Committee. Despite meetings with appropriate officials, there was little progress with the hang gliding problem at several BGA sites. ATZ infringements and consequent airmisses involving military aircraft have increased considerably during the year following the MoD decision to abandon fixed low flying routes in favour of dispersing such activity widely over the country. The CAA has confirmed that all gliding sites listed in **Air Pilot** are also included in the relevant military low flying handbook, and that military pilots must not infringe any ATZ. Mike Emmett, Chairman, reported that the CAA has, with some reluctance, withdrawn the exemption which allows gliders to penetrate the Birmingham Special Rules Area, following several incidents during the Nationals and the Inter-Service Regionals last season. He stressed that airspace considerations should be given more weight when task-setting, particularly at Regionals level.

Competitions and Badges Committee Chairman, Gordon Camp, felt that probably their most significant product during the year, in terms of the number of people affected, was the introduction of the new A and B badges replacing the A, B and C badges with a new structure to reflect current requirements.

Development Committee. With the great majority of clubs operating from sites which are not secure, this Committee under their Chairman, Keith Mansell, have been concentrating on site security. They were encouraged by the willingness of several insecure clubs in one area to combine onto one site if a secure one could be found. The proper management of gliding facilities ranked as a big factor in improving the quality and cost-effectiveness of gliding and the Committee's objective here was to improve club administrators' understanding of the issues and principles involved.

Instructors' Committee Chairman, Vic Carr, reported that the coaching operation continued its gradual change of emphasis towards more soaring and cross-country training.

Safety Panel Chairman, Arthur Doughty, said that 1979 was disastrous in terms of accidents with the highest number recorded in any year of the past decade. There was an increase of 23·08% compared with 1978 while the number of launches was virtually the same. The overall accident rate rose to 0·48 per 1000 launches compared with 1978's 0·39 per 1000 launches.

Technical Committee. The BGA have issued 140 registrations to gliders during the year. The Chief Technical Officer, Dick Stratton, visited 26 clubs and only has four more to go to have covered all BGA and Service clubs in the UK.

Corrections: *Our apologies to the CAA for giving their old address in the last issue, p19. They are now at CAA House, 45-59 Kingsway, London WC2; telephone 01-379 7311. In the December issue, p263, the caption to the Ilkley Conference photo was incorrect. The second row should have started from the left with two unknowns instead of one unknown before Mr. Wall (Newcastle GC).*

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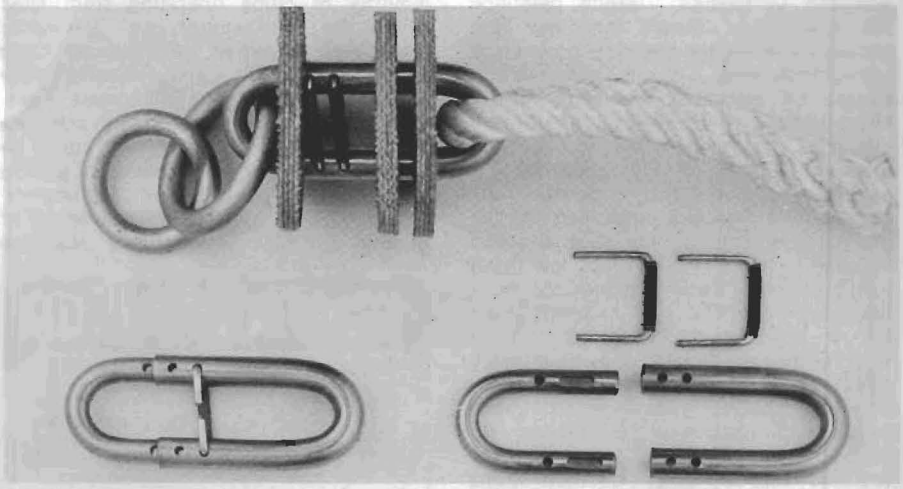
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DEVICES FOR SAFER AEROTOWING

A New Weak Link

Michael Astley

Continuous filament plastic ropes wear alarmingly when used as weak links for launching gliders and can soon drop their victims in difficult situations. **The use of thin elastic towropes intended to fail in an emergency is also potentially dangerous. One never knows exactly when or where they are going to break and there is a real danger of ends wrapping themselves round control surfaces.**



" . . . a frightening figure"

Six millimetre three strand nylon is a continuous filament rope which when new breaks at about 1650lb. The stored energy in a new 120ft length of this rope stretched to breaking point (a 40% extension to 168ft) is nearly 40 000lb/ft, a frightening figure. Nylon ropes retired "prematurely" at Husbands Bosworth have broken at less than 500lb under test.

The most important feature of the new Mity link is the back up staple which remains unloaded until the first staple shears. Thus the link parts only when its fully rated load has been exceeded. If the first staple breaks because it becomes old and weak the link opens out ¼in revealing two empty holes and only the second staple remains. The ground crew must ensure that both staples are renewed before the rope is used again. Asymmetric drilling makes it impossible to assemble the link incorrectly, thus ensuring that the four pairs of shearing edges remain accurately aligned.

The usual forces involved in towing gliders are below 500lb so that staples rated at 900lb can be fitted safely at the glider end. To protect the tug from damage caused by snagging the rope on landing, a second link is fitted at the tug end of the rope with staples rated at 1100lb, which is the C of A rating of the tug hook*. This 200lb difference ensures that the link at the glider end should always break first if either aircraft gets badly out of position.

The rubber buffers are essential only at the glider end to protect the link and particularly to prevent damage to the staples from rattling Ottfur rings on landing. As an added protection against fitting the rope the wrong way round the staples are colour coded with sleeves, yellow for tug and red for glider end. For winching the same links should be used with 1100lb staples.

The links are stainless and 2¾in overall. A pair of Ottfur rings weighs 52gm and the link with its staples and buffer discs totals 70gm. In the event of both staples breaking in an emergency, the rope end may carry with it one end of the link but it weighs only 26gm.

The staples are of heavily galvanised annealed steel. The specification is critical and on no account should unauthorised wire be used. During tests on the quadruple shear featured in the design we tested bicycle spoke wire of the same diameter which broke at 1750lb!

Unlike tugs and gliders no one DIs towropes, which is understandable because it is impossible to tell just by looking when a rope has become too weak for use. One way of testing is to anchor the tug link and drive away with the other end until something breaks. If the rope is serviceable the glider end staples only will require renewing. It is a good idea when doing this test to cover up the back window of the car and clear everyone out of the way. A couple of 20ft loops of heavy rope tied over the links prevents bits of metal being catapulted about the countryside.

Drop rather than drag

Whilst ropes and links last for ages when landing on grass, hard runways naturally play havoc with both. It would seem desirable to drop ropes whenever possible rather than to drag them, unless cost is of secondary importance. Mity links have been used exclusively at Husbands Bosworth during 1979 and also for Euroglide. We have now standardised on 140ft ropes of 10mm split film polypropylene having a minimum strength of 3140lb when new. **This rope is much cheaper than nylon and has only about one third of its elasticity. This reduces stored energy problems should either pilot release whilst the rope is in tension.**

Whilst the use of simpler systems known to fail below 1000lb may be acceptable for sites with unlimited room for landing after premature breaks, it is obviously dangerous for clubs towing low over hazardous areas. The use of any rope stronger than 1100lb without a weak link at the tug end may invalidate the C of A of the aircraft and certainly endangers the pilot's life.

**Future Flight Manual Amendments may raise this figure to "not exceeding 1300lb."*

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Don't Tug the Tail

Ron Gillman

In the past few years, there has been a number of fatal accidents worldwide due to gliders getting too high on take-off, lifting the tail of the tug, and causing it to dive to the ground.

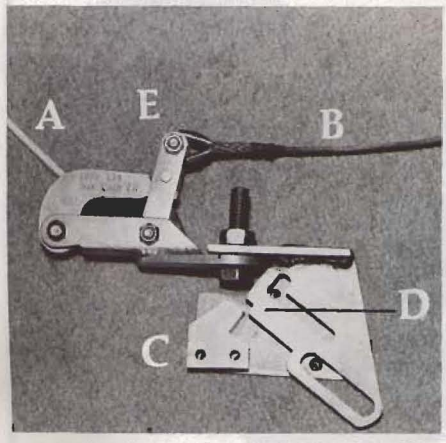
It shouldn't happen of course, particularly in view of the stress laid on this area during training, but every so often, an inexperienced glider pilot loses his place and the result is invariably disastrous. It all happens so quickly.

By the time the glider pilot recognises the condition, he has probably lost sight of the tug anyway, and this may inhibit him from making the rapid nose-down correction so vital to recovery. At such a low altitude, with control suddenly wrested from him, the tug may well hit the ground before the pilot can get his hand to the release toggle.

If he does succeed, it is not only the glider pilot who has a problem, for with the stick hard back to avoid disaster, the release of the lifting force on the tail can cause the tug to go into a steep climb at low speed. That little manoeuvre has a limited future too.

Automatically releases the glider

Pondering on this problem, a British glider pilot who also happens to be a design engineer, has come up with a device which automatically releases the glider just before the point of no return. If the tow rope exceeds an upward angle of 35°, it is automatically slipped from the tug. This is achieved by an attachment to a conventional tow hook.



In the accompanying illustration, C is the side plate attached to the aircraft's structure. There are two of these of course, to contain the moving parts, but the nearer has been removed for clarity. D is the latch plate, and when the towing cable A is at an angle of less than 35° above the horizontal, the latch plate is pulled backwards to engage with a cheek mounted between the side plates.



The attachment in position.

However, should the glider get too high and exceed the critical angle, the latch plate will be lifted, and when free of the cheek, slide diagonally upwards. As it does so, the tug pilot's release cable will pull taut and now further upward movement of the assembly will cause the vertical latch E to rotate in a clockwise direction releasing the hook and the glider.

Inevitably the question arises as to what happens should the release occur inadvertently and at the wrong time.

In order to check this out the designer, Richard Green, fitted the gear to an Auster tug at Wycombe Air Park's Gliding School, and during the past year over a thousand launches have been flown without an unscheduled release, and on every occasion when the glider was lifted above the 35° angle, the device did what it was designed to do — it let the glider go.

Now, the CAA has cleared the device for use on Auster aircraft in Britain, but with suitable modification it can be fitted to any kind of tug worldwide. With such ingenious simplicity, there is little to go wrong and it could well help to eradicate those unnecessary "overflying" accidents.

For further details contact the designer, Richard Green, 79 Park Lane, Harefield, Middlesex.

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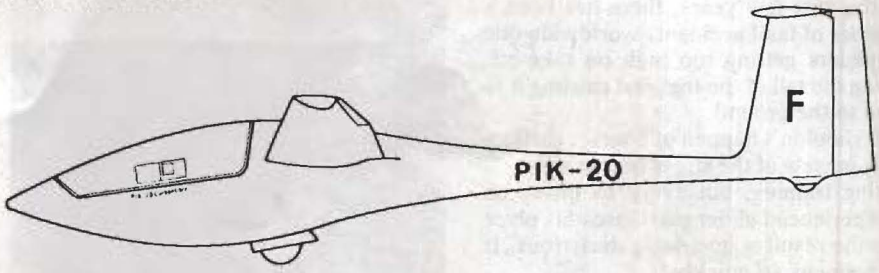
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OVERSEAS NEWS

Please send news and exchange copies of journals to the Overseas Editor: A. E. Slater, 7 Highworth Avenue, Cambridge, CB4 2BQ, England.

AUSTRALIAN NATIONALS

The Australian Nationals, at Benalla, Victoria, from January 8-18, was a successful safe competition with seven contest days. The average task length was from 350-400km with a total of 209 131km flown.

Ingo Renner, ex-World Champion, flew a Nimbus 2 to win the Open Class. Tony Tabart and Mike Giles, both in Nimbus 2s, came second and third. Maurice Bradney (ASW-20) won the 15 Metre Class for the second year with David Pietsch (LS-3) second and David Jones (ASW-20) third. The Standard Class was won by Ted Pascoe (Std Jantar) with Terry Cubley second and Harry Crossan third, both Std Cirrus pilots. *(Condensed from the report by Margaret Simons.)*

IBM INTERNATIONAL GLIDING WEEK

After the successful task weeks in the UK, Lasham-'78 and West Germany, Rheinermark-'79, the IBM International Gliding Week 1980 will be held in Holland at Terlet airfield near Arnhem from May 24-31.

This (more fun and pleasure than competition) week is open to all IBM employees and their relatives who are able to fly a glider on cross-country flights. A booklet with extensive information is available from Jaap Hollenberg, IBM South Hants GC, Baltic House, Portsmouth, Tel. 694941 ext 5163.

OBITUARY

LUDWIG HOFMANN

The death has been reported in the Dutch magazine *Planeur* of Ludwig Hofmann, one of the most brilliant pre-war Rhön Contest pilots. Few flying careers can have started more inauspiciously. As a small boy he disappeared on his bicycle to reappear two days later on the Wasserkuppe, only to be told by his gliding instructor, after his first attempts, that he was hopeless.

Nevertheless he persevered and when 17 gained his Silver C (No. 44) at the 1934 Rhön Contest during which he flew over 300km into Czechoslovakia. At the 1935 Contest he achieved a world distance record in the Rhönsperber of 474km, this being the first soaring flight to exceed 400km.

He finished second in the 1937 Wasserkuppe International, flying Wolf Hirth's forerunner of the Minimoa, the Moazogotl, and flew one of the first Weihes in the 1938 and 1939 Rhön Contests.

During the war Hofmann was a test pilot and continued testing aeroplanes after the war while in Russian captivity. Returning to West Germany in 1955, he became much involved with helicopters. After having been in apparent good health last summer on the Wasserkuppe, he died on September 14 at the age of 62.

C. WILLS

FORTHCOMING EVENTS

MAY 1-10: Hahnweide International Contest, Kirchheim/Teck, W. Germany.
MAY 5-15: Inter-Services Regionals, Greenham Common.
MAY 15-26: Swiss Nationals, Montricher.
MAY 17-JUNE 1: German Nationals, Aalen, Elchingen.
MAY 24-JUNE 2: Arctic Lite Nationals, 15m Class, London GC, Dunstable.
MAY 24-31: IBM International Gliding Week, Terlet Airfield, Holland.
JUNE 7-16: Western Regionals, Bristol & Gloucestershire GC, Nympsfield.
JUNE 8-22: Dutch Nationals, Terlet.
JUNE 15-28: European Motor Glider Contest, Porta Westfalica, W. Germany.
JUNE 17-26: USA Nationals, 15m Class, Wilmington, Ohio.
JUNE 21-29: Competition Enterprise, Devon & Somerset GC, North Hill.
JULY 1-10: USA Nationals. Standard Class, Harris Hill. Elmira.
JULY 5-13: East Midland Regionals, Buckminster GC, Saltby.
JULY 7-AUGUST 8: Italian Nationals, Rieti.
JULY 15-24: USA Nationals, Open Class, Hobbs, New Mexico.
JULY 19-27: Wycombe Regionals, Wycombe Air Park.
JULY 20-AUGUST 2: German Nationals, Club Class, Dinslaken.
JULY 26-AUGUST 3: Eighth International Vintage Glider Rally, Sutton Bank.
JULY 26-AUGUST 10: International Pre-World Championships Contest, Paderborn-Haxterberg, W. Germany.
AUGUST 2-10: Enstone Regionals. Enstone Eagles GC, Enstone.
AUGUST 9-17: Northern Regionals, Yorkshire GC, Sutton Bank.
AUGUST 16-25: Arctic Lite Nationals, Open/Standard Class, Lasham Gliding Society, Lasham.
(Please also note date and venues for Competition Kitty p61).

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INTERNATIONAL GLIDING RECORDS (Correct as at 3.3.1980)

SINGLE-SEATERS

Height Gain	12 894m	P. F. Bikle, USA	SGS 1-23E	25.2.1961
Absolute Altitude	14 102m	P. F. Bikle, USA	SGS 1-23E	25.2.1961
Straight Distance	1460.8km	H-W. Grosse, W. Germany	ASW-12	25.4.1972
Goal Distance	1254.26km	B. L. Drake, D. N. Speight, S. H. Georgeson, New Zealand	Nimbus 2	14.1.1978
Goal & Return Distance	1634.7km	K. H. Striedieck, USA	ASW-17	9.5.1977
Triangular Distance	1229.25km	H-W. Grosse, W. Germany	ASW-17	4.1.1979
100km Triangle	165.35km/h	K. Briegleb, USA	Kestrel 17	18.7.1974
300km Triangle	153.43km/h	W. Neubert, W. Germany (in Kenya)	Kestrel 604	3.3.1972
500km Triangle	143.04km/h	E. Pearson, Gt. Britain (in South Africa)	Nimbus 2	27.11.1976
750km Triangle	141.13km/h	G. Eckle, W. Germany (in South Africa)	Nimbus 2	7.1.1978
1000km Triangle	145.32km/h	H-W. Grosse, W. Germany (in Australia)	ASW-17	3.1.1979

MULTI-SEATERS

Height Gain	11 680m	S. Josefczak and J. Tarczon, Poland	Bocian	5.11.1966
Absolute Altitude	13 489m	L. Edgar and H. Klieforth, USA	Pratt Read	19.3.1952
Straight Distance	970.4km	I. Renner and H. Geissler, Australia	Calif A-21	27.1.1975
Goal Distance	864.86km	Isabella Gorokhova and Z. Koslova, USSR	Blanik	3.6.1967
Goal & Return Distance*	965km	H-W. Grosse and H. Kohlmeyer, W. Germany (in Australia)	SB-10	7.1.1980
Triangular Distance*	1110km	H-W. Grosse and H. Kohlmeyer, W. Germany (in Australia)	SB-10	28.12.1979
100km Triangle	147.19km/h	E. Mouat-Biggs and S. Murray, South Africa	Janus	21.11.1977
300km Triangle	135.51km/h	E. Mouat-Biggs and S. Murray, South Africa	Janus	16.11.1977
500km Triangle	140.06km/h	E. Mouat-Biggs and S. Murray, South Africa	Janus	17.11.1977
750km Triangle*	132km/h	H-W. Grosse and H. Kohlmeyer, W. Germany (in Australia)	SB-10	14.1.1980
1000kmTriangle*	129.5km/h	H-W. Grosse and H. Kohlmeyer, W. Germany (in Australia)	SB-10	21.12.1979

SINGLE-SEATERS (WOMEN)

Height Gain	9119m	Anne Burns. Gt Britain (in South Africa)	Skylark 3B	13.1.1961
Absolute Altitude	12 637m	Sabrina Jackintell, USA	Astir CS	14.2.1979
Straight Distance*	949.47km	Karla Karel, Gt Britain (in Australia)	LS-3	23.1.1980
Goal Distance	731.6km	Tamara Zaiganova, USSR	A-15	29.7.1966
Goal & Return Distance	801.7km	Hanna Reitsch (deceased), W. Germany (in USA)	ASW-20	7.4.1979
Triangular Distance*	805km	Karla Karel, Gt Britain (in Australia)	LS-3	9.1.1980
100km Triangle	139.45km/h	Susan Martin, Australia	LS-3	2.2.1979
300km Triangle*	126.5km/h	Karla Karel, Gt Britain (in Australia)	LS-3	12.2.1980
500km Triangle	133.14km/h	Susan Martin, Australia	LS-3	29.1.1979
750km Triangle	95.42km/h	Karla Karel, Gt Britain (in Australia)	LS-3	24.1.1979

MULTI-SEATERS (WOMEN)

Height Gain	8430m	Adela Dankowska and M. Mateliska, Poland	Bocian	17.10.1967
Absolute Altitude	10 809m	Mary Nurr and H. Duncan, USA	SGS 2-32	5.3.1975
Straight Distance	864.85km	Tatiana Pavlova and L. Filomechkina, USSR	Blanik	3.6.1967
Goal Distance	864.86km	Isabella Gorokhova and Z. Koslova, USSR	Blanik	3.6.1967
Goal & Return Distance	593km	Adele Orsi and M. Monti, Italy	Stinson L5	18.6.1978
100km Triangle	126.28km/h	Adela Dankowska and E. Grzelak, Poland	Halny	1.8.1978
300km Triangle	97.74km/h	Adele Orsi and F. Bellengeri, Italy	Calif A-21	18.8.1974
500km Triangle	69.6km/h	Tamara Zaiganova and V. Lobonova, USSR	Blanik	29.5.1968

BRITISH NATIONAL RECORDS (Correct as at 3.3.1980)

SINGLE-SEATERS

Height Gain	8870m	G. J. Rondel	Olympia 2B	18.6.1960
Absolute Altitude	11 500m	H. C. N. Goodhart (in USA)	SGS 1-23	12.5.1955
Straight Distance*	949.47km	Karla Karel (in Australia)	LS-3	23.1.1980
Goal Distance	579.36km	H. C. N. Goodhart	Skylark 3	10.5.1959
Goal & Return Distance	801.3km	C. Garton	Kestrel 19	22.7.1976
Triangular Distance*	805km	Karla Karel (in Australia)	LS-3	9.1.1980
300km Goal and Return	141.3km/h	E. Pearson (in Rhodesia)	Nimbus 2	25.10.1975
500km Goal and Return	137.63km/h	B. J. G. Pearson (in South Africa)	Nimbus 2	18.12.1979
100km Triangle	143.3km/h	E. P. Hodge (in Rhodesia)	Std Cirrus	30.10.1976
300km Triangle	146.8km/h	E. Pearson (in South Africa)	Nimbus 2	30.11.1976
500km Triangle	131.9km/h	E. Pearson (in Rhodesia)	Nimbus 2	5.11.1975
750km Triangle	109.8km/h	M. R. Carlton (in South Africa)	Kestrel 19	5.1.1975

MULTI-SEATERS (**Also Multi-Seaters, Women, Record)

Height Gain*	8003m	T. J. Wills and B. Iggulden (in New Zealand)	Twin Astir	13.1.1980
Absolute Height**	9519m	Anne Burns and J. Oesch, USA (in USA)	SGS 2-32	5.1.1967
Straight Distance*	471.9km	M. R. Carlton and M. French (in South Africa)	Calif A-21	21.12.1979
Goal Distance*	471.9km	M. R. Carlton and M. French (in South Africa)	Calif A-21	21.12.1979
Goal & Return Distance	692.02km	M. R. Carlton and C. Greaves (in South Africa)	Calif A-21	23.12.1978
Triangular Distance	762.72km	C. M. Greaves and C. Simpson (in South Africa)	Janus	28.12.1977
300km Goal and Return	105.44km/h	M. R. Carlton and C. Greaves (in South Africa)	Calif A-21	19.12.1978
500km Goal and Return	113.08km/h	M. R. Carlton and C. Greaves (in South Africa)	Calif A-21	23.12.1978
100km Triangle	137.22km/h	M. R. Carlton and Leoni Lawson (in South Africa)	Calif A-21	27.12.1978
300km Triangle*	113.54km/h	M. R. Carlton and C. Greaves (in South Africa)	Calif A-21	19.12.1979
500km Triangle	108km/h	M. R. Carlton and C. Greaves (in South Africa)	Calif A-21	21.12.1978
750km Triangle	104.01km/h	C. M. Greaves and C. Simpson (in South Africa)	Janus	28.12.1977

SINGLE-SEATERS (WOMEN)

Height Gain	9120m	Anne Burns (in South Africa)	Skylark 3B	13.1.1961
Absolute Altitude	10 550m	Anne Burns (in South Africa)	Skylark 3B	13.1.1961
Straight Distance*	949.47km	Karla Karel (in Australia)	LS-3	23.1.1980
Goal Distance	528km	Ann Welch (in Poland)	Jaskolka	20.6.1961
Goal & Return Distance	545km	Anne Burns (in South Africa)	Std Austria	6.1.1966
Triangular Distance*	805km	Karla Karel (in Australia)	LS-3	9.1.1980
300km Goal and Return	107.5km/h	Karla Karel (in South Africa)	ASW-15B	1.1.1975
500km Goal and Return	102.6km/h	Karla Karel (in Rhodesia)	ASW-15B	16.10.1975
100km Triangle	110.8km/h	Karla Karel (in Rhodesia)	ASW-15B	2.11.1975
300km Triangle*	126.5km/h	Karla Karel (in Australia)	LS-3	12.2.1980
500km Triangle	108.9km/h	Angela Smith (in South Africa)	Libelle 301	28.12.1972
750km Triangle	95.42km/h	Karla Karel (in Australia)	LS-3	24.1.1979

UNITED KINGDOM RECORDS (Correct as at 3.3.1980)

SINGLE-SEATERS

Height Gain	8870m	G. J. Rondel	Olympia 2B	18.6.1960
Absolute Altitude	9300m	G. J. Rondel	Olympia 2B	18.6.1960
Straight Distance	718km	T. J. Wills	Std Libelle	1.8.1976
Goal Distance	579.36km	H. C. N. Goodhart	Skylark 3	10.5.1959
Goal & Return Distance	801.3km	C. Garton	Kestrel 19	22.7.1976
Triangular Distance	606km	C. Garton	Kestrel 19	10.6.1976
300km Goal & Return	106.4km/h	D. G. Lee	Kestrel 19	17.8.1975
500km Goal & Return	89.7km/h	C. Garton	Kestrel 19	22.7.1976
100km Triangle	114.2km/h	R. Jones	Nimbus 2	30.4.1974
200km Triangle	97km/h	R. Jones	Nimbus 2	30.6.1975
300km Triangle	105.45km/h	R. Jones	Nimbus 2	29.5.1974
400km Triangle	90km/h	D. G. Lee	Kestrel 19	19.5.1974
500km Triangle	106.9km/h	R. Jones	Nimbus 2	31.5.1975
600km Triangle	88.8km/h	C. Garton	Kestrel 19	10.6.1976
100km Goal	128.4km/h	K. A. Harrison	SHK	13.4.1969
200km Goal	114.3km/h	I. W. Strachan	Skylark 4	2.6.1963
300km Goal	132.8km/h	A. H. Warminger	Kestrel 19	24.4.1976
400km Goal	73.8km/h	T. J. Wills	Std Libelle	7.6.1976
500km Goal	90.7km/h	H. C. N. Goodhart	Skylark 3	10.5.1959

SINGLE-SEATERS (WOMEN)

Height Gain	7833m	Alison Jordan	Astir CS	8.10.1978
Absolute Altitude	8701m	Alison Jordan	Astir CS	8.10.1978
Straight Distance	454km	Anne Burns	Skylark 3B	10.5.1959
Goal Distance	309km	Anne Burns	Skylark 3B	12.4.1958
Goal & Return Distance	303km	Angela Smith	K-6E	14.8.1970
300km Goal & Return	60km/h	Anne Burns	Nimbus 2	25.7.1975
100km Triangle	80km/h	Anne Burns	Cirrus	14.6.1970
200km Triangle	69.3km/h	Anne Burns	Std Austria	22.8.1964
300km Triangle	76.8km/h	Jane Randle	Kestrel 19	18.8.1976
400km Triangle	60.6km/h	Anne Burns	SHK	5.8.1967
500km Triangle	76.1km/h	Anne Burns	Nimbus 2	31.5.1975
100km Goal	83km/h	Rika Harwood	Olympia 2B	27.5.1957
200km Goal	85.5km/h	Anne Burns	Olympia 419	2.6.1963
300km Goal	63.9km/h	Anne Burns	Skylark 3B	12.4.1958

MULTI-SEATERS

Height Gain	6740m	J. R. Monteith (USA) and M. Mahon	Capstan	2.11.1972
Absolute Altitude	7650m	J. R. Monteith (USA) and M. Mahon	Capstan	2.11.1972
Straight Distance	421.5km	J. S. Fielden and Valerie Fielden	Bergfalke 3	14.8.1970
Goal Distance	421.5km	J. S. Fielden and Valerie Fielden	Bergfalke 3	14.8.1970
Goal & Return Distance	350km	J. R. Jeffries and N. Foster	Calif A-21	17.8.1975
300km Goal & Return	81.9km/h	J. R. Jeffries and N. Foster	Calif A-21	17.8.1975
100km Triangle	83.5km/h	J. R. Jeffries and G. Love	Calif A-21	22.4.1974
200km Triangle	72.8km/h	J. R. Jeffries and A. Kirtly	Calif A-21	5.8.1974
300km Triangle	85.87km/h	B. Fitchett and A. Miller	Janus	9.5.1979
400km Triangle	68.4km/h	J. R. Jeffries and G. Love	Calif A-21	7.5.1974
500km Triangle	88.4km/h	J. R. Jeffries and Gillian Case	Calif A-21	31.5.1975
100km Goal	96.5km/h	D. B. James and K. O'Riley	Gull 2	27.5.1957
200km Goal	77.8km/h	B. J. Willson and H. Daniels	Blanik	11.7.1970
300km Goal	69.2km/h	W. A. H. Kahn and J. Williamson	Eagle	12.4.1958

RESTRICTED CLASS

Straight Distance	718km	T. J. Wills	Std Libelle	1.8.1976
100km Triangle	109.7km/h	D. S. Watt	Std Jantar	16.8.1976
200km Triangle	96.2km/h	A. J. Stone	Std Cirrus	16.8.1976
400km Triangle	91.7km/h	S. J. Redman	Std Cirrus	31.5.1975
300km Goal	131.1km/h	T. J. Wills	Std Libelle	24.4.1976
400km Goal	73.8km/h	T. J. Wills	Std Libelle	7.6.1976

15m CLASS

200km Triangle	93.49km/h	B. T. Spreckley	ASW-20	14.7.1979

UK 750km DIPLOMA

1. Goal and Return	801.3km	C. Garton	Kestrel 19	22.7.1976

MOTOR GLIDERS (**Also British National Record)

SINGLE SEATERS

100km Triangle	57.3km/h	I. W. Strachan	SF-27M	13.6.1971
200km Triangle	48.2km/h	I. W. Strachan	SF-27M	23.8.1976
100km Goal	85.7km/h	I. W. Strachan	SF-27M	16.7.1971

MULTI-SEATERS

100km Triangle**	35.6km/h	P. T. Ross and H. Daniels	SF-28A	27.6.1976
100km Goal	76.2km/h	P. T. Ross and K. Winfield	SF-28A	22.8.1976
200km Goal	66.3km/h	P. T. Ross and P. Fletcher	SF-28A	18.7.1976

INTERNATIONAL MOTOR GLIDERS (Correct as at 3.3.1980)

SINGLE-SEATERS

Height Gain	8923m	G. Cichon, W. Germany	Nimbus 2M	27.5.1979
Absolute Altitude	10 408m	G. Cichon, W. Germany	Nimbus 2M	27.5.1979
Goal & Return Distance*	880km	K. Abhau, W. Germany (in South Africa)	Nimbus 2M	26.11.1979
Triangular Distance*	1016km	F. Rueb, W. Germany (in South Africa)	Nimbus 2M	31.12.1979
100km Triangle	152.16km/h	F. Rueb, W. Germany (in South Africa)	Nimbus 2M	29.12.1977
300km Triangle	131.75km/h	F. Rueb, W. Germany (in South Africa)	Nimbus 2M	27.12.1977
500km Triangle*	125km/h	F. Rueb, W. Germany (in South Africa)	Nimbus 2M	8.1.1980
750km Triangle	120.21km/h	F. Rueb, W. Germany (in South Africa)	Nimbus 2M	29.12.1978
1000km Triangle*	110km/h	F. Rueb, W. Germany (in South Africa)	Nimbus 2M	31.12.1979

MULTI-SEATERS

Height Gain	4523m	F. Jung and G. Marzinzik, W. Germany (in France)	ASK-16	26.3.1978
Goal Distance	646.42km	G. Jacobs and G. Hüttel, W. Germany	SF-25E	28.4.1976
Goal & Return Distance*	550km	W. Collee and K. Pummer, W. Germany (in South Africa)	Janus M	10.12.1979
Triangular Distance*	756km	W. Collee and K. Pummer, W. Germany (in South Africa)	Janus M	31.12.1979
100km Triangle*	128km/h	W. Collee and E. Doerr, W. Germany (in South Africa)	Janus M	15.1.1980
300km Triangle*	115km/h	W. Collee and W. Hoffmann, W. Germany (in South Africa)	Janus M	16.12.1979
500km Triangle*	106km/h	W. Collee and K. Pummer, W. Germany (in South Africa)	Janus M	20.12.1979
750km Triangle*	98km/h	W. Collee and K. Pummer, W. Germany (in South Africa)	Janus M	31.12.1979

1000km FLIGHTS

(See April-May, 1979, p77, for previous list)

43 Triangle	1015.54km	A. G. Tabart, Australia	Nimbus 2	31.1.1979
44 Triangle	1002km	H-W. Grosse and H. Kohlmeyer, W. Germany (in Australia)	SB-10	21.12.1979
45 Triangle	1110km	H. W. Grosse and H. Kohlmeyer, W. Germany (in Australia)	SB-10	28.12.1979
46 Triangle	1016km	F. Rueb, W. Germany (in South Africa)	Nimbus 2M	31.12.1979
47 Triangle	1002km	H. Kohlmeyer and W. Kuhn, W. Germany (in Australia)	SB-10	18.1.1980

*Flights subject to homologation

New records have to exceed the old ones by: Distance 10km. Heights 3%. Closed circuit speeds 2km/h. Goal speeds 5km/h.
For records, no side of a triangle may have a length less than 28% of the total distance of the course, except that for triangles of 750km or more for International and British National Records, or of 500km or more for UK Local Records, no side may have a length less than 25% or greater than 45% of the total distance.
Conversion Factors: Multiply km or km/h by 0.621 to get statute miles or mph. Multiply km by 0.54 to get nautical miles or kts. Multiply metres by 3.28 to get feet.

TWO-SEATER AND MOTOR GLIDER

1000kms

In 1964, Al Parker, USA, set the gliding world alight by covering the first 1000km distance — a record which stood until 1970. Since then there have been about 43 1000km flights, all in single-seaters, and the majority by Hans-Werner Grosse, W. Germany, who also claimed the first completed triangle in 1975.

Hans-Werner as P1, now lays claim to the first two-seater 1000km triangle flown in the SB-10 in Australia at the end of December. In South Africa the first 1000km triangle was flown a few days later in a motor glider by Fritz Rueb, W. Germany making this the third Class in which 1000km has been achieved.

20 World Claims

The 1979-1980 soaring season in the southern hemisphere has brought its now almost normal spate of world records. Between November 14 and January 23 no fewer than 20 world claims have been submitted. Except for three feminine class records by Karla Karel of Gt Britain, who flies in Australia, all claims are by German pilots who also completely dominate the motor glider class.

The world gliding records (all Classes) on the current list have been flown in: Australia, 12; USA, 7; South Africa, 6 plus most motor glider records; USSR, 5; New Zealand and Poland, 3 each; W. Germany and Italy, 2 each; Kenya and France, 1 each.



On September 16, 1979 at Saltby Airfield, after four years of thinking, calculating, and the expenditure of a great deal of nervous and physical energy, the moment of truth arrived! The tug aircraft had been ordered from Husbands Bosworth and the weather, although very windy, didn't look like presenting any excuse for postponing the flight trials. There were the usual last minute fettling tasks to carry out, such as clearing away the wheel fairings which had been made too tight a fit and under load were rubbing slightly. The cockpit accommodation had been laid out for average size pilots and a modification was needed for the longer frame of Brian Spreckley, who had kindly (and bravely) agreed to nurse my creation through its initial teething trials.

By mid-morning these tasks were all completed and final weighing established that the CG was in its correct place. The tug arrived and after a final check over the glider, we forsook the calm and safety of the hangar to take up position at the end of the main EW runway.

After two low autotow trials to confirm the general control response, instrument readings and stalling speed, the rope was hooked on behind the tug and the many flights of fantasy over the long winter months suddenly became a reality. It was in the air!

Designer flies his own glider

Over the next few weeks a series of development flights followed, during which various corners were rounded off. By mid-December, after a brief refresher course on the club K-6 to prove that I hadn't completely forgotten how to fly, I made my first solo flight in a GRP glider. My previous GRP flying experience at that time amounted to a brief dual flight in the superb Janus and a slightly longer dual flight in the not so superb Twin Asir. No doubt I am biased, but flying the Falcon is, for me, a most uncomplicated, satisfying experience. Much easier and quieter than a K-6, particularly in rough air, and for someone new to the long glide angle scene the amount of sky available, even from 2000ft, still seems almost unbelievable.

Why build my own glider? After a season with a beautiful 1939 Weihe, I looked around for its modern equivalent. Earning my daily bread as a consultant in plastics and fibre composites convinced me that it had to be glass or carbon fibre. This meant an imported German product with the associated price tag and generally with too many levers to pull and reputed twitches which, certainly, were never present in the Weihe. So if you can't buy one, I reasoned, design and make one.

What to build? I started by thinking I could design a very light, simple machine capable of being made in a few months. Unfortunately, I had to conclude that this conflicted dramatically with the minimum performance criteria, *ie* it had to be better than a 1939 Weihe (L/D 29:1). I also concluded that clipping the wingspan had very little effect on construction time, but was death to any aspiration of high performance.

I, therefore, concentrated on a simplified 15 metre design, with fixed wheel (fairings are cheaper and more reliable than retracting mechanisms), vee tail (only two rear control surfaces) and trailing edge brakes (simple to make and safer when the grass field turns into waving corn at the last moment).

Performance estimates indicated an expected stalling speed just below 39kt with a VNE of 135kt and rough air speed of 100kt. Depending on flying weight the best glide ratio should be in the 36-40:1 range at about 55kt with a minimum sink rate of about 1.1kt.

Where to build it? This is the most difficult problem for any prospective home-builder and I was fortunate in having access to a well insulated, disused broiler shed where my larger man-powered aircraft had been built. This was OK until the roof blew off in a gale in mid-winter and urgent relocation of the part built glider was required.

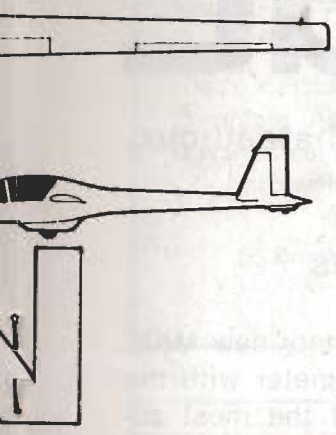
The fuselage halves were slotted into my garage and with a hasty re-arrangement of furniture and comprehensive application of plastic sheet covering, the lounge and dining room became the wing assembly workshop. This was ideal for GRP work, with central heating, colour TV etc, but it did mean cancelling all incoming social events for two months. I am fortunate in having a particularly tolerant wife, who also proved to be an accomplished GRP laminator and very constructive critic. Women always seem to have the knack of spotting the simplest and easiest way of doing a particular job.

Any large project inevitably has its frustrations and problems and I am particularly indebted to Brian Spreckley, BGA National Coach, and Ralph Jones of Southern Sailplanes who gave both advice and practical help when it was needed.

The design is entered in the BGA Home-Built Glider competition and, depending on the outcome, it may well be possible to offer it, perhaps in kit form, to other prospective home-builders.

Specification and Construction

The 15 metre tapered wing is designed around a high lift laminar flow section, with a high aspect ratio (25.6) to achieve a low sink rate without the complication of flaps. The ailerons have a 4:1 differential to minimise adverse yaw and increase safety should the ailerons be used incorrectly near the stall, and 3° wash out built into the outer section also contributes to the safe stall characteristics of the wing.







The designer and his glider. Peter's hobby used to be motor racing and he came to gliding via man-powered flight. An engineer, he has built two man-powered aircraft which flew successfully.

A BRITISH HOME-BUILT GLIDER

PETER W. WRIGHT

The fuselage is a tough five ply glass-fibre shell, moulded in two halves with integral vee tail formed by the half shells. The fixed 400 × 4 moulded nylon main wheel is housed in an impact resistant Kevlar fairing which also fairs in the tow hook. The wheel housing and tow hook are sealed to eliminate air leakage drag (and keep the pilot dry and afloat in a wet landing).

The tail wheel is leaf sprung on a glass-fibre spring with a Kevlar/glass-fibre fairing.

An adjustable seat back and headrest is provided for "normal" size pilots and a snap-in rear seat pan for the longer breed. On the left are the release knob, electrical trimmer switch and airbrake lever with caliper wheel brake control. On the right are the forward demist control and the fresh air control (piped in from NASA flush vent under the starboard wing). A continuous reading elevator position indicator is located below the fresh air controls. The instrument panel lifts out on release of two screws and a plug in battery connection from the 12v 9A/hr Varley battery.

Connections locked from the rear of cockpit

The wings have conventional male and female spar connections with two shear pins at 18in centres. Spherical bearings in the wingroot rib carry the fuselage on T-45 steel cross tubes bonded into bulkheads. Since the ruddervators are not normally removed for transportation, the only rigging pins are the two wingroot pins and two aileron pins which connect push rods to the central fuselage belcrank. All connections are made and locked easily from the rear of the cockpit. The travelling edge airbrakes couple automatically by a tongue and groove torque tube connection and a positive over-centre lock keeps them closed.

Design placard limitations are reproduced below:

FALCON

VNE	135kt	Operating limits	+6*g*
Rough air	100kt		−4*g*
Aerotow	100kt	Aerobatic within above limits	
Winch	70kt		

AUW 800lb max cockpit load 250lb central ballast
Empty 525lb min cockpit load 120lb may be carried

Pilot Wt (lb)	120	140	160	180	220	250
Min forward ballast	20	10	0	0	0	0
Max forward ballast	30	30	20	10	0	0

Technical data

Span (m)	15m	Wing area (m²)	8.76
Aspect ratio	25.67	Length (m)	5.94
Empty weight (kg)	238	Min AUW (kg)	301.64
Max AUW (kg)	362,88		

This design has been entered in the BGA's Home-Built Sailplane Competition. See p83 for details.

FLYING THE FALCON

BRIAN SPRECKLEY

On a clear Sunday morning in September outside the hangar at Saltby Airfield, looking at the result of four years of hard work, Peter said "Well I can't think of anything left to do, so we may as well go and fly it." The "it" was the glider Peter had designed and built; the glider I had watched develop from some ideas over a pint, through to today, and it looked magnificent.

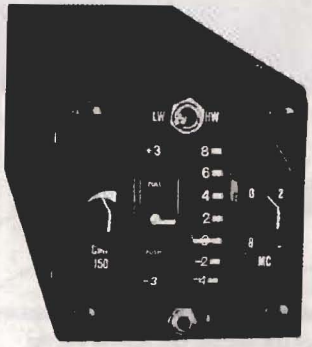
The club members who gathered round as we towed the glider out to the launch point were full of the sort of comments one would expect, like "The wings look a bit thin" and "How do you know it will fly?" — the fact was, I didn't. I had every faith in Peter's ability as a designer and constructor, after all the first time I met him he was lying under an enormous man-powered aeroplane, adjusting the gearing with a hammer, and that flew. I watched him build the second man-powered aeroplane and it also flew so why shouldn't the Falcon? I had taken a keen interest in the construction at every stage, offering constructive criticism which was usually met with long suffering sighs and a patient explanation of the facts. This background gave me every confidence in the Falcon and enabled me to hide my terror quite convincingly.

After going through the flight programme and the C of G positions with Peter, I was hooked up and prepared for take-off. The wind was about 20kt but luckily most of it was coming straight down the runway — it was probably a little rough for the first flight but we might wait a long time for a better day, so I gave the "All Out".

From the first movements of the controls the glider felt lively and was responsive in pitch without feeling twitchy. The ailerons took a little longer to bite but by 35kt I had full control. As soon as we lifted off she felt very stable and despite the turbulence, staying in position was effortless, dispelling any doubts about the C of G hook.

At about 100ft a howl suddenly appeared, reminiscent of the Dagenham girls pipers all playing out of tune — this frightened the life out of me but as I was too low to jump out and the fields didn't look very inviting, I decided to stay and find out what the

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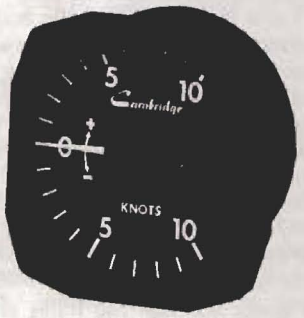
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cause was. After much waggling of controls and craning of neck, I decided to close the forward ventilator and hey presto all was silent and beautiful.

By the time I came off tow at 4000ft, I was impressed by the visibility and handling. I trimmed out using the electric trimmer which was effective and extremely simple to use, if at the time a little noisy. The first few turns demonstrated the light and well balanced controls, the rate of roll measured at 5secs, 45° to 45°. The rate of roll deteriorated slightly as the speed dropped below 45kt indicated. The ailerons felt a little like the Std Libelle, becoming very light at low speed. The trailing edge brakes proved to be effective and closed themselves if the lever was released. They showed no tendency to suck out when unlocked and were light to operate with no apparent trim change.

Although the high aspect ratio wing looks more slender than other Standard Class ships, the deflection in flight is much less than usual. In a 3½*g* pull out I estimate the deflection to be about ⅓ that of my ASW-20, and tests up to the VNE of 135kt have confirmed the stability of the structure.

Able to explore soaring potential

The result of the first flight was very satisfying; it was beautiful to fly and the few detail snags subsequently proved relatively easy to overcome. The following week I was treated to the first soaring flight and was able to explore the glider's soaring potential. The performance certainly seemed quite remarkable and, although the best circling speed was around 48kt, indicated (position error unknown at this stage but probably a true airspeed nearer 44kt) the glider climbed extremely well. After about 30mins soaring, I felt confident about the glider's ability and felt that a relatively inexperienced pilot would have no problem flying and soaring the glider. The stalling characteristics C of G forward are in line with most modern gliders and numerous attempts to spin the glider have so far produced at best one half turn which becomes a spiral dive. Although, at the time of writing, the C of G aft tests have still to be undertaken, I am sure that the stall and spinning characteristics will be compatible with most early stage gliders. As a result of the flying to date, we have measured the glide ratio at 50kt and for an unsealed, unpolished glider arrived at 39:1 with a minimum sink rate of 1.2kt.

The flying to date has confirmed Peter's concept of design — a simple glider with good performance that most inexperienced pilots could fly and soar easily. The next stage is to compare the glider in soaring weather with other Standard Class gliders.

With the test flying over and some time spent on sanding and sealing, the Falcon should also prove to be a good competitive ship. If Peter has the same flair for cross-country flying as he has shown as a designer and builder, we will soon be seeing another new name on the Nationals' results sheets.

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BGA AND GENERAL NEWS



Prince Charles chatting to Doc Slater after presenting him with the Silver Medal.

BGA DIPLOMA WINNERS

Our congratulations to the four BGA Diploma winners who have given long service to gliding.

Henryk Doktor, CFI of the Yorkshire GC, started gliding at Sutton Bank in 1950 and on gaining his full instructors' rating in 1958 was officially appointed resident instructor/ground engineer, although having previously given generously of his time. He became CFI in 1964 and to date has 4000hrs in tugs and the Falke. Henryk, who was born in Warsaw and flew with 663 Squadron (Polish) during the war, has lost count of his gliding hours but prior to getting his PPL in 1967 it was about 1000hrs annually.

Dickie Feakes, a Sqd Ldr in the RAF, has shown "extraordinary devotion" to the sport during the 25 years he had been gliding. He played a leading role with the Cranwell GC in the mid-1950s and was a founder member of the Red River GC in Canada. Later he became an active member of the RAFGSA Executive Council, being Treasurer for the last five years, and was British Team Manager for the 1978 World Championships.

Roy Hubble has given a long period of unstinting service to gliding. He was CFI of the Kent GC for 21 years until last October and was a member of the BGA Instructors' Committee.

Robert Lintern, who joined the Lasham Gliding Centre in 1956, is "one of those very special people who helped to build and maintain the flying movement in this country." He went solo on a Tiger Moth as a member of the Civil Air Guard and joined the RAF in 1939, flying Dakotas as a Flight Engineer while attached to the South African Air Force from 1941-1946. At Lasham he was a genius in maintaining, revamping and creating equipment out of spares for launching in the post-war period. He is totally dedicated to the sport.

ROYAL AERO CLUB ANNUAL AWARDS

It was the first time, for as long as I can remember, that there was a waiting list for tickets at the Royal Aero Club annual prizegiving on December 18.

This was no doubt due to one of the greatest historic events in aviation, when Paul MacCready and his team succeeded in flying across the Channel in 2hrs 49min on June 12, 1979, in the Gossamer Albatross piloted by Bryan Allen. This gave the chance to meet this illustrious team personally, as they were to receive the £100 000 cheque from Mr Kremer and a memento from the hand of HRH Prince Charles who had once again consented to present the awards.

It was pleasing that on the gliding side the Aero Club's major award, the Britannia trophy, was presented to our twice over World Champion, George Lee. (He had received the Gold Medal in 1977 after becoming World Champion for the first time in 1976.)

Another very popular award was that to "Doc" Slater who received the Silver Medal, a fitting tribute to the man who has done so much for gliding over the years.

One of the most popular ladies in British gliding, Pamela Davis, who flies at Lasham and Odiham, received the British Woman Pilots' Association O. P. Jones Cup for her many services to gliding.

RIKA HARWOOD

STRUCTURE OF THE BGA

The membership structure of the BGA is now made up of 83 full members and 69 associate members. The 83 full members include three members which have affiliated clubs as follows: Army Gliding Association, two, RAF Gliding and Soaring Association, 13 and Royal Naval Gliding and Soaring Association three clubs.

Operations. During the year ending September 30, 1979 (1978 figures in brackets), civilian clubs flew a total of 86 375 (89 456 hours from club sites from 272 646 (289 579) launches.

Club owned gliders totalled 301 (308) and privately owned gliders 844 (858). The combined Services flew 22 347 (20 545) hours from 87 994 (77 122) launches.

Certificates. Certificates were issued as follows: A and B endorsements 1611 (1869), C endorsements 128 (132), Bronze C 526 (483), Silver C 264 (226), Gold C 52 (47), Diamond goal 56 (22), Diamond height 65 (55) and Diamond distance 6 (4).

A and B certificates were applied for by 845 (974) holders of the ATC proficiency certificate.

INTERNATIONAL RALLY

The Vintage Glider Club are organising the Eighth International Vintage Glider Rally at Sutton Bank, by kind permission of the Yorkshire GC, from July 26-August 3. It is thought there will be about 40 entries from most Western European countries. For more information contact the Secretary, Frances Furlong, 60 Well Road, Otford, Kent, tel 09592 3277.

PHILIP WILLS MEMORIAL FUND

The Trustees of the Philip Wills Memorial Fund thank the following for their donations received up to January 25.

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OFFICIAL OBSERVERS

We have now heard from the FAI that introduction of a new Sporting Code will be delayed until January 1981. The 1975 edition of the Sporting Code will therefore remain current for a further twelve months. This means that existing Official Observer appointments with a suffix '75 will remain current for the remainder of 1980. The fee for any new appointments is £2.00 with effect from January 1, 1980.

50TH ANNIVERSARY PARTY

Southdown GC, one of the earliest clubs to be formed in the UK, are celebrating their half centenary year with a dinner and party at the club on June 28. It is hoped the event will attract as many old time members as possible, even perhaps some originals who flew at Devils Dyke in the 1930s.

The organising Secretary, Jim Tucker, will be pleased to hear from ex Southdown members or friends interesting in renewing their association with the club.

HOME-BUILT SAILPLANE COMPETITION

The closing date for preliminary proposals for the BGA Home-Built Sailplane Competition has been deferred from March 31 to May 31, 1980. Full details and entry forms are available from the BGA office.

BGA ACCIDENT SUMMARY — Compiled by ARTHUR DOUGHTY, Chairman of the BGA Safety Panel

	Glider Type	BGA No.	Damage	Date Time	Place	Pilot/Crew Age	Injury	P/Hrs.	Summary
11	Olympia 463 ?	1379 ?	M ?	11.10.79 15.09	North Hill	57	N	41	Failed to hold off adequately for touchdown, bounced and pilot closed airbrakes. On second landing glider weathercocked in crosswind during landing run and wingtip struck wingtip of another glider which had landed and was awaiting retrieve to launch point.
12	T-49 Capstan	1130	W/O	20.10.79 17.56	1 mile NW of South Marston A/F	21	F	2	For reasons not determined the glider assumed a steep nose down attitude and dived into the ground. No evidence of pre-crash malfunction or failure.
13	K-13	1565	S	06.10.79 16.20	Dunstable Passenger	39 40	M N	392 —	Pilot aborted aerotow launch in severe turbulence in strong wind blowing off hill when tug started to turn. Glider started to roll and pilot was unable to level wings for landing. Lower wing touched ground and glider cartwheeled causing severe damage including severed starboard wing. Air experience flight.
14	YS/BG-135	1815	S	10.11.79	Romanno Bridge Borders Region	47	N	300	Expedition to a hill. After poor bungey launch attempted to soar but sank below hill top and was badly positioned to land in one of two previously selected fields. While turning to land in other field wingtip touched and glider cartwheeled. K-8 soared and landed in smaller of fields successfully.
15	Super Falke	G-BDGX	W/O	28.12.79 11.30	Husbands Bosworth P2	56 25	N N	445 Power 2179 Gliders 6¾ P2	P1 took over on approach and motor glider suddenly started to turn left and although wings were levelled turn continued. Airbrakes closed and overshoot initiated but poor climb due to carburettor hot air not being returned to cold. Wingtip struck boundary fence and motor glider turned over. Probable cause was that P1 with artificial right leg placed right foot on P2's left rudder pedal thus inducing yaw and turn to left and the more he attempted to correct the worse the situation became.
16	K-8b	2083	Nil	31.12.79 16.10	Portmoak	49	N	10 min	Pilot on third solo launch. Slight over run on take-off and picked up rope on end of cable in wheel box. Rope failed to pull out of box because of knot and at top of launch winch, driver disengaged and glider pulled remaining cable off drum and landed after dragging cable across power wires.
17	K-13	2554	S	06.01.80 15.00	Nympsfield P2	39 21	N M	94 ?	On approach through moderate turbulence the pupil moved the control column forward suddenly because "the speed was gradually falling". P1 was unable to take over and recover before glider struck ground in a nose down attitude.
INC	Blanik	?	Nil	30.12.79	Nympsfield P2	? ?	N N	? ?	P1 took over on approach from pupil and after making corrections landed, but glider did not respond to application of left rudder. To avoid running down hill into obstructions glider was stopped by lowering left wing and applying wheelbrake. P1 subsequently discovered he did not have left foot on rudder pedal but on back of front seat structure.

M=minor; N=nil; S=serious; F=fatal and W/O=write-off.

OBITUARY

BEVERLEY SHENSTONE

Beverley Shenstone died on November 9, 1979 in Cyprus. His life was devoted to aviation, and "devoted" really is the correct word, for he engaged himself in almost every aspect of it, both professional and amateur.

He was born in Toronto in 1906, and visited the UK to work at an Air Ministry laboratory in 1927. In 1928, he learned to fly an Avro 504K in Canada and returned to Europe to work on the prototype Ju52 in 1930. (This was the single-engined variety: the wartime 52/3m was a later development.) In the summer, he went to the Wasserkuppe, earned a C certificate and met Alexander Lippisch, with whom he worked for a while. He then joined R. J. Mitchell's team, working on the prototype Spitfire. In 1938 he went to the Air Ministry, thence to the Ministry of Aircraft Production and, towards the end of the war, back to Canada where he became General Manager of A. V. Roe Canada Ltd.

In 1947, the BGA ran a two-seater design competition, which attracted some twenty entries. The judges put Hugh Kendall's Crabpot in first place and the Harbinger, designed by W. Czerwinski and B. S. Shenstone, in fifth. The Harbinger was unique amongst the first six in having struts and a curious swept-forward inner wing. Examples were built in the UK and Canada and, by the standards of its day, it was a good machine.

In 1948, he returned to the UK to become BEA's Chief Engineer: perhaps the fact that one P. A. Wills was General Manager (Technical) had something to do with it. He was appointed to the Board in 1960 and remained with BEA until he moved to BOAC as Technical Director in 1964. He was mainly responsible for the introduction into service of most of BEA's post-war fleet up to the Trident, sometimes with misgivings — subsequently shown to be correct — about the judgment of his commercial colleagues. He retired in 1966. Gliding and, latterly, man-powered flight, were his abiding interests. He was Editor of OSTIV, a founder member of the original Man-Powered Aircraft Committee at Cranfield, Vice-Chairman of the Man-Powered Aircraft Group of the Royal Aeronautical Society, and an enthusiastic fund-raiser for "Sigma". He wrote numerous papers on gliding and man-powered flight, including the excellent chapter on "Unconventional Flight" in the Society's book **The Future of Aeronautics.** It was a great pity that he was unable to witness Bryan Allen's marvellous cross-Channel flight.

He always seemed calm, gentle and methodical. How he packed all his activities — which included a year as President of the Royal Aeronautical Society — into one lifetime is a mystery. He will be remembered with the greatest affection by his friends and colleagues.

F. G. IRVING

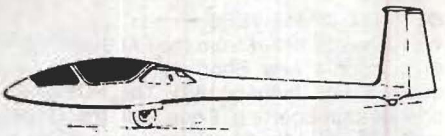
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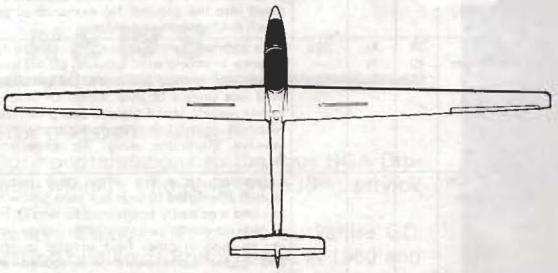
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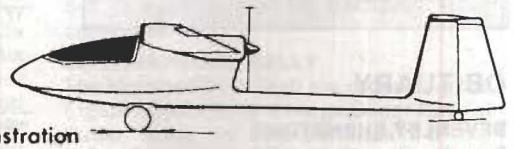
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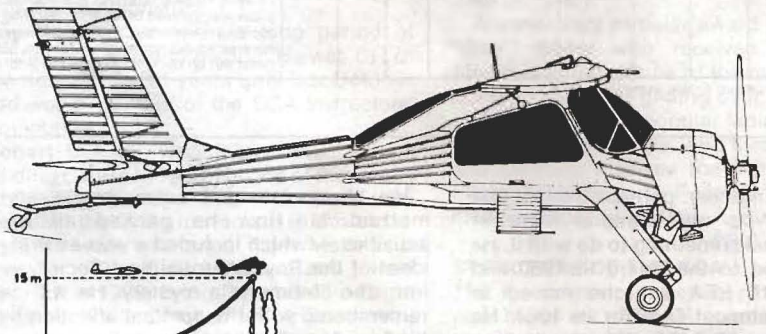
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GLIDING CERTIFICATES

DIAMOND DISTANCE

No.	Name	Club	1979
1/157	B. A. Barry	London	5.11
1/158	A. J. Wray	Narrowmine	31.10
1/159	G. Mc A. Bacon	Bicester	17.12

DIAMOND GOAL

No.	Name	Club	1979
2/942	S. G. Hunt	Airways	9.7
2/943	G. F. Read	Thames Valley	5.8
2/944	C. Davison	Fayence	15.7

DIAMOND HEIGHT

No.	Name	Club	1979
3/435	Joy Lynch	Bath & Wilts	22.10
3/436	C. Brock	Southern Cross (Australia)	6.9
3/437	C. V. J. Heames	Clevelands	4.11
3/438	J. J. Earnshaw	Hambletons	16.9
3/439	D. W. Davis	Bath & Wilts	22.10

GOLD C COMPLETE

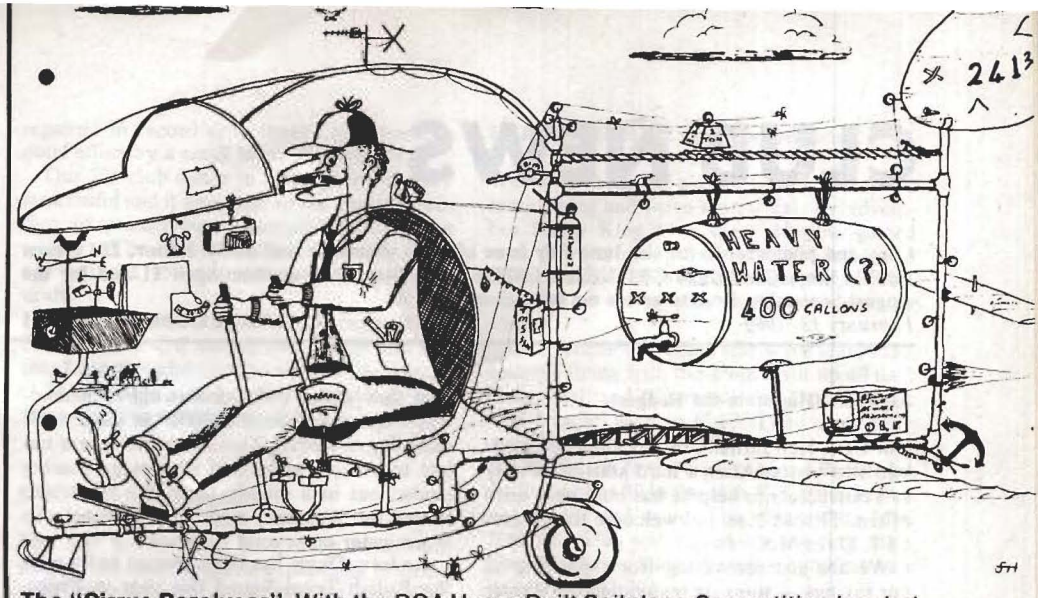
No.	Name	Club	1979
741	B. A. Barry	London	29.9
742	C. Davison	Fayence	15.7

GOLD C HEIGHT

Name	Club	1979
R. P. Arnold	Surrey & Hants	22.10
D. Harker	Newcastle	19.10
M. F. Phillips	Hambletons	4.11
T. Lowe	Hambletons	2.9
B. A. Barry	London	29.9
D. Hovell	Deeside	20.10
J. P. Marriott	Four Counties	22.10
F. P. L. Walters	Hambletons	2.9
D. Aspinall	Hambletons	4.11
A. S. Brodrick	Thames Valley	1.11
M. G. Ward	SGU	18.7
R. W. Spiller	Chilterns	4.11
R. Buckley	Blackpool & Fylde	24.11

GOLD DISTANCE

Name	Club	1979
S. G. Hunt	Airways	9.7
G. F. Read	Thames Valley	5.8
C. Davison	Fayence	15.7



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SILVER C

No.	Name	Club	1979
5458	R. J. Watts	Rattlesden	5.8
5459	P. J. Underwood	London	21.7
5460	B. McDermott	Two Rivers	19.5
5461	K. L. Tarrant	Buckminster	15.9
5462	T. A. Hollings	Yorkshire	20.10
5463	J. L. Hey	Ouse	4.8
5464	B. Scougall	SGU	9.11
5465	R. Smallman	Aquila	8.10
5466	K. Morton	Clevelands	1.12
5467	I. D. Powell	Eagle	18.11
5468	G. F. Read	Thames Valley	5.8
5469	L. Kirkham	Shropshire	16.9
5470	G. W. Craig	Oxford	22.8
5471	S. J. White	Aquila	8.10
5472	J. Wilson	Rochester, USA	16.9
5473	K. D. Dumville	Midland	6.1

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CLUB NEWS

Copy and photographs for the June-July issue of S&G should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 47725, to arrive not later than April 11 and for the August-September issue to arrive not later than June 10.

February 12, 1980 **GILLIAN BRYCE-SMITH**

AQUILA (Hinton-in-the Hedges)

Our CFI, Ken Jarman, retires after his promised two years. After a hard start with only two instructors to help he has built up a team of ten. Thanks Ken and welcome to our new CFI, Dave McQue.

We are just recovering from spending all our savings — some on renovating the Auster and a bigger half on buying a Skylark 3. We were pleased that one of our longest serving members, Keith Chichester, first broke away from local soaring to land the Skylark Silver distance away. He then flew it most of the way home to a tidy field landing.

Syndicate rash seems to have most of the club owning a part of the ten privately owned gliders. A symptom is increasing frugality with launches so although last year's hours were a club record, take-offs were down by a third.

We became a Ltd Co in 1979 but the dissolution clause was modified at the membership's insistence to transfer assets in this unhoped for event to the gliding movement.

The main runway now has a tarmac strip with 06-24 marking and there is a grass landing area at the 24 end. The other runways have been well scraped and, thanks to inset attachments, winch cables now stay at the runway edges.

A.M.R.

BATH & WILTS (Keevil)

We have been fairly active during the winter months. For the second year running we had an expedition to Aboyne in November and took five gliders. Again it proved successful, especially for Bill Davis (Mini Nimbus) and Joy Lynch (DG-100) who gained Diamond heights. Diamond height was also reached by several other pilots who had first achieved this the previous year.

Soon after this Andrew Davis (Mini Nimbus) flew seven miles downwind to Roundway ridge and climbed to 7000ft in wave, later returning to Keevil. Two other pilots were too late to contact wave and after ridge soaring landed out in a muddy field. We have also soared the Westbury ridge from Erlestoke to Warminster on several occasions.

Andrew Davis has been chosen to fly with the British Team Squad this year in Paderborn, the site of the next World Champs, and we wish him the best of luck. Chris Rowlands and Bob Bromwich are flying in the Nationals and Steve Parker in the Western Regionals. We are sorry to say goodbye to Chris, who has joined Booker.

We have bought a Pilatus to add to our fleet. Sheila Way has gone solo to join our small band of women pilots.

J.L.

BLACKPOOL & FYLDE (Chipping)

We have enjoyed regular flying over the past two months, unusually so for our club, and there were 75 launches over Christmas with the ground covered in snow. It suggests that our constant efforts to improve the drainage are beginning to pay off.

New Year's Day proved exceptional with wave contacted as low as 300ft agl and going to more than 5000ft. This was in a northerly wind and confirms that we can contact wave in any direction from NW right round to SW from a 900ft winch launch.

R. Boyd found wave first, going to 3000ft in the T-21 and later to more than 5000ft in the Oly 2B. Ian Hamilton and Ken Fixter both bettered 4000ft the same afternoon.

J.T.

BORDERS (Milfield)

Our annual dinner-dance was enjoyed by more than 100 members and guests. 1980 has heralded increased subscription and launch fees, although our new rates would still probably be envied by many clubs. A new club ladder has also been inaugurated to encourage solo pilots to develop their skills.

A.J.B.

BRISTOL & GLOUCESTERSHIRE (Nympsfield)

We have a new Bellanca Scout tug to replace our ageing Auster and to join our Super Cub. We also have the use of a member's Supercruiser, so the aerotow queues should remain fairly short this summer. A heavy landing damaged our K-13 but it should be flying again soon.

Hang gliders have appeared on our west and north facing ridges over the last few weeks. This is causing us considerable concern from the safety angle but happily we are holding discussions to try and work out how we can co-exist peacefully and safely.

Vice-Chairman, Dave Wales, who was involved in a car crash during January, is sadly missed and we wish him a speedy recovery.

As a run up to the Western Regionals in June, we hope to hold a task week the week before.

R.A.R.

CORNISH (Perranporth Airfield)

Despite a miserable 1979 with little soaring and when even our ridge let us down, we are more optimistic for 1980 with the prospect of the new twin-drum diesel winch to give us a better launch rate and greater heights.

We are glad to welcome George Collins back as our CFI and his deputy, Ron Brewer. Congratulations to Mike Jordy on his Silver C, finished after he left us, to Barry Wallace on his PPL, Fred Toms for his Bronze and Ian Gibson on going solo.

Despite many rumours about industrial development of our site, nothing positive is in the offing. We aren't keen on a tin mine in the circuit, so we keep our fingers crossed.

Finally a small correction to annual statistics in the last issue, p24. Our fleet is two single-seaters and two dual aircraft.

P.T.B.

COTSWOLD (Aston Down)

We are probably entering our last season at Aston Down since our latest information is that the site is to be split into three plots and sold off by public auction. A club Airfield Committee has been formed and a big drive begins for a permanent site.

If the weather co-operates, this last season could be vintage since our launching methods are well proven and reliable and the private owner fleet boasts the biggest stack of glassfibre we have ever seen.

Unfortunately the Astir and K-2 are to be sold to help with our airfield fund but the new Bergfalke 4 is proving popular and backed up by the two K-7s forms a good two-seater fleet. For the time being the single-seater fleet will be limited to the K-8 until the airfield issue is settled.

The Committee also sees some changes with Ken Lloyd, Chairman for several years, and Dave Roberts, Treasurer, retiring. Our thanks for their services.

J.D.H.

COVENTRY (Husbands Bosworth)

While the winter weather has restricted gliding, training flights whenever possible have brought solo stage nearer for some hardy *ab-initios*.

We have been decorating and refurbishing the clubhouse and the kitchen has been re-equipped with new units and sinks, which has provided much needed space. It has also given a morale booster to our ladies who spend so much time preparing and serving endless meals and snacks.

Our social events have been most success-

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B.R.

DERBY & LANCS (Camp Hill)

The winter has been good and even the Prefect has had an airing. The last K-4 has been hibernated, Bluebird has flown whilst a second K-7 has come from Germany, with a touch of assistance from Eric Boyle.

Sunday evenings are devoted to lectures and our thanks to Derek Piggott and Vic Carr for allowing themselves to be press-ganged.

Our thanks and farewell to our stewards, Sam and Katie, who are off to Saudi Arabia. Congratulations to Ashley Birkbeck on his Bronze, Silver height and duration in three months.

S.G.

DEVON & SOMERSET (North Hill)

Northerlies before Christmas produced gentle wave to intrigue Mike Dixon (Astir) and spanking north-westerlies since then have reminded us how well our west ridge can work — and how vicious the curl-over on approach can be in such conditions.

Lists for our two task weeks, May 31-June 7 and August 16-23, are filling well and once again we are hosting Competition Enterprise. There are also expeditions planned to other sites in the UK and abroad.

I.D.K.

DONCASTER (Doncaster Airfield)

Soaring exploded into life on February 10 with 9½kt being the highest climb rate. Nev Spencer claimed the first field landing of the season earlier this year.

E.T.R.

DUMFRIES & DISTRICT (Falgunzeon)

Flying from our site stopped at the end of October due to the usual boggy conditions, but we should soon be airborne again. Skylark 3 syndicate members were converted to their new ship at Dishforth during November and also gained valuable aerotow experience. Our thanks to Ben Bennett, CFI, for organising the pleasant weekend.

The K-2, damaged in September, was repaired in record time thanks to a tremendous effort by a small band of members.

Our 200 club dance in December was very successful and it was good to see the resurrection of prizegiving. Congratulations to the winners. The shop sale of bric-a-brac in January raised £175 towards reducing our overdraft.

Several members have been flying with the Northumbria GC during the lay up and our thanks to this club for the warm welcome.

This season's target is to establish ourselves as a cross-country club.

F.S.S.

EAST SUSSEX (Ringmer)

The last few months have been somewhat trying. We had temporary planning permission for aerotowing until July last year. Our application for renewal was turned down on the strength of seven letters of complaint and a petition of 40 signatures. We believe that the majority of the complaints arose from the use on our open day of a borrowed tug, a somewhat noisier machine than our Super Cub. A factor not to be overlooked was the incessant noise from crop sprayers. Indeed, complaints were being received long after the grounding of our tug! Not being a hill site, this has caused us some inconvenience, not least to those unable to soar from a 1000ft winch launch!

Without security of tenure for our site, it was felt that the high legal costs of an appeal could not be justified. After a lengthy period of inertia, we decided to raise a petition of our own. Through the efforts of one member, we obtained 1052 signatures from the surrounding area, an overwhelming response, together with the support of the Ringmer Parish Council and the local, recently formed, Air Scout Group.

On the strength of this, we have represented our application for aerotowing, although accepting that a certain degree of compromise is unavoidable in the interests of both local harmony and the gliding movement as a whole.

Congratulations to Chris Foss, Sandy Polak, Peter Worsley and Christine van den Berghe on going solo, and a special welcome to our new CFI, Doug Gardner.

V.N.

ENSTONE EAGLES (Enstone Airfield)

At our annual dinner-dance in December the following trophies were awarded: John Mole trophy for gliding achievements, R. Forrest; Task Week trophy, B. Forrest; Silver Plate for being second overall in our Regionals, T. Watchorn; Best *Ab-initio* cup, P. Harman; Jean Newman memorial trophy for best female pilot, P. Mullin and the Lorne Daniels cup for service to the club, P. Moss. R. Hobbs earned himself the "dog-house" trophy.

Just before Christmas a party went to Dishforth in search of wave but returned disappointed the following week to find wave at Enstone. D. Wilson then managed to climb to 5600ft, the best so far this winter. Our congratulations to our most recent solo pilot, Ken Sparkes.

S.G.

HEREFORDSHIRE (Shobdon Airfield)

We've been having a good winter with much more flying and wave than usual. In November Philip King and Roger Harlow gained their full Cat ratings. Our congratulations to them, the early solo pilots for keeping in practice and to those who went solo over the winter.

On December 1 there was wave and cross-country flying with the Twin Astir up all day. Tony Maitland (Diamant) and Don Towson (Std Libelle) went to 15 000ft and many were over 10 000ft.

John Bastin flew a clever second Bronze leg on December 30 in the club K-8, using marginal hill lift and wave. The new carbon Mini Nimbus (530) was rigged for the first time. The Maitland, King, Boucher syndicate are delighted with her.

On January 6 there was wave to 12 000 and the gap didn't close until evening. The two carbon Mini Nimbis met at 8000ft and climbed together over an Alpine cloudscape (with an Alpine landscape in the gaps). Rhoda (849) contacted wave at 1500ft on Shobdon hill. Philip King, while hunting for a new wave system, used a 2kt thermal for 1000ft. Unusual in early January.

Our next excitement is the BGA wave expedition.

R.P.

HIGHLAND (Dallachy)

Our congratulations to Neil Collyer on becoming an instructor and Ken Nagle on going solo. Apart from the odd welcome visitor, Dallachy has been very quiet this winter, with the wave, when it is there, frustratingly out of reach.

In December, at RAF Kinloss, George Lee gave us a very interesting illustrated talk on the last World Championships.

After lengthy negotiations, we have obtained permission to bungey launch off the top of Knock More, a hill with a north-facing slope which we found very useful for duration flights in the days when we had a tug to get us there. The Oly is being fettled in preparation for the first launch, and advice from anyone who has had the experience of being "launched like a sling shot" (to quote one of our American visitors) will be very welcome.

Gordonstoun School have now acquired a K-13 which should shortly be on site. We hope this joint venture will benefit both sides.

Gerry Robson has taken over from Jeff Howlett as Inspector, and is busy with little repair jobs and repairing and repainting the Oly.

R.E.T.

IMPERIAL COLLEGE (Lasham Airfield)

1979 was a bumper year. Everyone on the Easter course went solo, the summer produced eight Silver distances and a Gold for Peter Reading and we ended the season with a trip to the Long Mynd. Unfortunately this was marred when the Astir had an argument with a fence. However, there was some interesting ridge and wave soaring (including a duration) thanks largely to the generosity of the Midland GC who allowed us to fly their aircraft.

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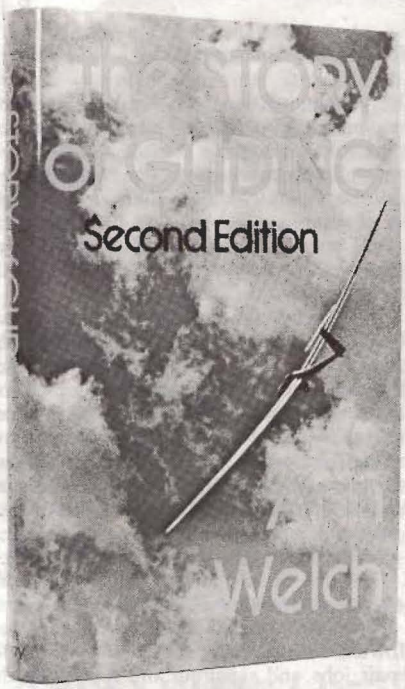
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The Astir has been repaired and survived a Christmas visit to Portmoak where a remarkable eight days out of the 11 were soarable and a Gold height was added to our accomplishments.

October saw a healthy influx of new members and we were able to organise a Christmas course which also had good weather and produced our first solo of the year. This is a good start to 1980 in which, of course, we celebrate our 50th anniversary. The semicentennial dinner will be on Saturday, May 10, and tickets are available now.

C.S.

KENT (Challock)

The K-7 has been sold and replaced by a new K-13. On the syndicate side, the K-6E has been sold and a new Astir acquired by Ray Smith and partners. We have also sold our Citabria tug and the second Jodel D140 will soon be joining the fleet after its refurbishment. Added to this we have virtually a new winch thanks mainly to Glyn Richards and Alex Wright.

Glyn is now installed as CFI having taken over from Roy Hubble who retired last year after 21 years outstanding service.

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After a wet and windy spell in January we have had one or two ridge days and on February 10 a good soaring day with a 3000ft cloudbase.

We are hosts to the Vintage Club at Easter.

D.H.

LONDON (Dunstable)

By the time these words are read our new tug hangar and office block should be complete. It should merge well with the surroundings without greatly obscuring our view of the hill from the restaurant.

We bid farewell to Ron and Lee Humphries at the end of October and thank them for their efforts in the bar and restaurant over the past few years. Our ladies, led by Dilys Yates and latterly Jane Falconer, came forward to fill the breech to provide welcome snacks and bar service pending the new regime under professional caterers, which is due to start in mid-February.

Our autumn expedition to Shobdon was much enjoyed, but not particularly for the flying. The only height of note was achieved by Ron Page — and he was a bit vague as to the actual height indicated on his mini altimeter. Safe returns to the unfamiliar field were assured by Ken Barton's magic electronics which gave a reasonably accurate course to steer through the murk. An enthusiastic horde awaits our spring expedition in March.

Latest hot ship on site is Stuart Beck's ASW-17.

F.R.

MIDLAND (Long Mynd)

Good westerly winds have kept us soaring through December and parts of January. Visitors from Essex, Booker, Lasham, Norfolk and South Marston have shared this flying. Don Brown spent many hours in wave, outsoaring others, but had to break off at 16 000ft asl when his oxygen ran low.

First solo congratulations go to Sue Abbott and Keith Bruce. Keith has probably achieved the last old style A and B certificates to be awarded. He soloed half an hour before dusk on December 31.

We are all looking ahead to the soaring season and our task week for July 19-27. Visiting pilots will be most welcome. The final weekend should introduce some interesting extra competition, with some British Team Squad members to beat as part of Competition Kitty.

The irresistible Iris demonstrator is on site for some months and has already been enjoyed by many members.

J.S.

NEWCASTLE & TEESSIDE (Carlton)

Due to adverse weather we didn't do much flying in December and January but prior to this there were notable achievements. Congratulations to Ken Cutty and Brian Richmond on completing their Silver Cs and to Jonathan Smith and Ged Terry on their Bronze C. Peter Irving was again able to fly solo when he reached his 16th birthday following his earlier achievements in Germany last year (see S&G, August 1979, "How to go solo at 15", p175). In fact he reached 4000ft on his first solo flight at Carlton.

Congratulations also to Don Hawker on achieving Gold height when a group of members went wave soaring in Scotland.

The annual presentation dinner in November was a huge success thanks to the Social Committee and Alan Spellman in particular.

Sadly our Auster has engine trouble and it seems aerotowing will be out for some little while.

W.R.I.

NORFOLK (Tibenham)

Winter entertainments have included the usual filmshow at the University of East Anglia and a New Year party at which Joe Podolski was victim of a "This is Your Life" by CFI "Eamonn" Woodhouse.



The clubhouse has been decorated in preparation for the summer courses — to the extent of adding curtains! The new workshop, which until recently was a telephone exchange, has been transported and erected on a brand new concrete base next door to the hangar.

One of our two landlords has agreed to sign a lease provided our flying habits throughout the coming season are exemplary. We always welcome visitors in gliders, but please don't fly over *any* houses at less than 1000ft!

Three evening courses on cross-country flying are aimed at increasing still more the growing enthusiasm for cross-country trips. The two task weeks in May and August, will give members the chance to cut their teeth.

The Superfalke has had a structural failure and one of the K-13s is having a major C of A, so the club fleet is depleted. New syndicate gliders are popping up one a month — glassware will soon amount to two Astirs, two Mosquitos and a Kestrel 19, PIK-20B, Hornet, Std Libelle and, possibly, PIK-20E.

M.T.B.

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NORTHUMBRIA (Currock Hill)

While a less severe winter than last year, the weather hasn't been good and our last useful wave was in September. In early February Andy Townsend and Rick Walton explored Cross Fell and the Hartside area in the Chipmunk with a view to aerotowing out from the club on suitable days. They discovered several good landing areas, and these need to be checked from the ground and permission obtained. Hopefully, we may also be able to organise a summer expedition. The club used to fly in this area, indeed our old winch is still up there somewhere, but there were no landing fields available near the launch point.

Work continues on the clubhouse. All the toilets are now working, the showers will soon be completed and the heater has arrived.

Tony Moss has just brought his new trailer on the site, and a magnificent edifice it is too. Complete with internal loo. Has anyone else got this kind of facility?

We wish John and Viv Savage the very best for their new venture in Holland.

J.W.

NORTH WALES (Pen-y-parc)

We are still flying during the winter, which is something we couldn't do at our previous site. We have just bought a second glider, a Grunau Baby, to supplement our Bocian.

We welcome three assistant instructors, Tony Knight (fully rated), Tony Dickenson and Reg Mayo, to help Ken Payne, CFI.

Our Christmas social was very successful and Tony Knight showed his fine slides. Mrs Mayo presented the trophies with cups going to Doug Cumiskey for the first solo of the season and Alan Elliott for being the pilot making the most progress.

We are looking forward to our camp in May at Shobdon.

A.E.

OXFORD (RAF Weston-on-the-Green)

At the AGM members voted in favour of a 50% increase in subscriptions, while flying and launching fees remain the same at present. Since we are now VAT registered there is no advantage in spreading subscription income throughout the year, and we are changing the system so that all subscriptions become due in February.

It is many years since we damaged any club glider seriously but the inevitable has now happened and one K-13 was out of action all winter. Fortunately the pilot was unhurt. The number of *ab-initio* members has been falling for the past year or more, possibly as a result of the frustrations of sharing our site with parachutists. There were very few winter days when two K-13s could have been used effectively even if the second one had been available. We are not free to organise open days but we are considering some form of local advertisement.

Recent first solos include Pedro Rivas.

P.H.

PETERBOROUGH & SPALDING (Crowland Airfield)

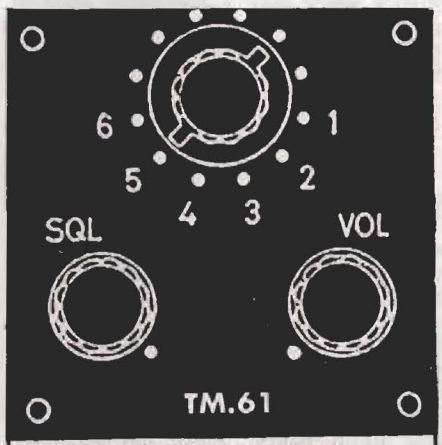
Unfortunately, owing to unforeseen circumstances, we are forced to cancel the airshow on May 18. However visitors are always welcome at any time.

We have a group aiming for Bronze C and several Silver legs have been gained recently by "older" hands.

A.E.G.

RATTLESDEN (Rattlesden Airfield)

Our AGM in January was its usual success with more than 80% of membership present.



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There are several new Committee members and we thank retiring members John Osborne, Cedric Vigar and Pauline Westrup for their hard work. Pat Smith, our new Ground Equipment Officer, is preparing our twin-drum winch for the increase launch rate we expect with the arrival of our new K-8 from Germany.

Our membership drive is progressing well and helped by a newspaper feature on our site and a steady flow of inquiries from posters sited in the area, we should keep our T-21 busy.

We trapped the elusive Rattlesden thermal on February 10. David Johnston and his pupil in the T-21 flew for 45 minutes and Tony Emmerson exploited a cloud street in the club Swallow.

R.W.

ROYAL AIRCRAFT ESTABLISHMENT (Farnborough)

Every other year the Society of British Aerospace Contractors runs a week of exhibitions and displays on our airfield and preparations start soon, rising to such a level of activity that we have to stop operating from around July to late September. We would be grateful is another site, or sites, could have us for some or all of this period. We have two club two-seaters, three single-seaters and about six privately owned gliders. We would like to provide flying continuity for our two-seater pupils and recent soloists. We have about a dozen instructors, many of whom would be happy to work with our hosts, plus a sound autotow system which might do the same. We normally operate at weekends.

Are there any clubs within a day's march of Farnborough who might fit us in? If so, please contact me, John Stone, CFI, 37 Napoleon Avenue, Farnborough, Hants, tel Farnborough 44110 (home).

J.S.

SCOTTISH GLIDING UNION (Portmoak)

Although poor weather generally, we have made the best of the good days with the most significant effort being a 22 000ft climb in early January.

Our thanks and best wishes to Martin Grant, Safety Officer, who has taken a full-time post at Lasham. Graham Smith has taken over. Peter Copeland, Treasurer, has

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resigned after several years hard work and was presented with the Thorburn Salver at the Christmas dance in gratitude for his superb efforts. John Hamilton is our new Treasurer.

The Board is constantly looking for ways of minimising outgoings. For example, we have a new fuel buying policy for the tugs and the workshops, which are fully operational in the capable hands of Bert Jarvis, have been re-organised.

The north runway is now operational and offering a smoother alternative to the aerotow strip.

R.H.

SOUTHDOWN (Storrington)

Conditions have been exceptionally poor this winter with few chances of using our 40 mile ridge. Les Merritt gained his Gold height at Portmoak and Derek Eastell and Brian Bateson have their full Cat ratings.

Deputy CFI, Keith Mitchell, kept various groups of pupils hard at work with a series of winter lectures.

George Constable wishes to stand down at our AGM after 22 years as CFI. On behalf of the many hundreds who have respected George over the years, we thank him for carrying a very heavy load for so long. Southdown wouldn't have been the same without his magnificent efforts.

Our Tuesday evening group training starts at the end of March and was so popular and successful last year we are already assured of an enthusiastic and eager squad.

B.A.B.

SOUTH WALES (Usk)

We have been fortunate in being able to operate from our field this winter and have enjoyed more than abundant wave which has regularly taken the club fleet to more than 16 000ft, 8kt not being uncommon.

A lot of work is going on at the site and we are grateful to John Hunt for his efforts as Site Manager and to Danny Roberts for doing the C of A on the club K-13. A new winch is slowly forming from our bus, thanks mainly to Lyn Everritt, Dave Rowlans and Gerald Waldock. Our congratulations to Lyn on completing his Bronze C in the recent wave.

P.A.C.

STAFFORDSHIRE (Morridge)

We are having a busy social season with good attendances. The programme has included tape/slide shows, a talk on wave flying by Vic Carr, CFI of the Shropshire Soaring Group, film shows, socials and in March our double bill — AGM and buffet/disco — completes the social calendar.

Alan Jones has completed his Bronze C, Ken Lane has gone solo and Gordon Brocklehurst started the year by landing out in January. The 100 Club has raised £90, £57 of which has bought a heater for the clubroom.

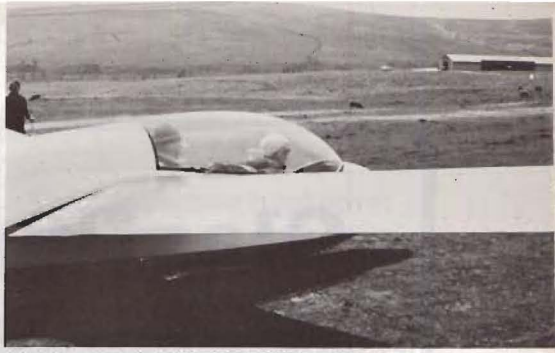
P.F.

STRATFORD ON AVON (Long Marston)

We have had a clutch of first solos — congratulations to Cliff Brant, Bill Bugh, Martin Eglasj, Alan Marchant, Neil Paveley, Doug Robinson, Les Sherlock and John Shipston. Several new syndicates have been formed.

On a sad note, we lost one of our keenest and oldest flying members, John Simonite, who died suddenly in December. John joined us in 1975, soloed after 95 flights at the age of 61 and completed his Silver in August 1979 in his syndicate K-2 with a flight to Shobdon. He had flown at Sutton Bank, the Long Mynd and Portmoak as a visitor. He and his partners had built a closed trailer and completely refurbished the K-2 ready for 1980. John was an inspiration to all and put some of the younger members to task with his outstanding contribution to club activity. He will be very much missed and our sympathy goes out to Dorothy and his daughter.

H.G.W.



Pauline Gwinnett of Staffordshire GC being checked out by CFI, Charles Webb, in the K-13 before flying the newly acquired K-8. Photo: Peter Foster.

SURREY & HANTS (Lasham Airfield)

Despite increased costs of flying and travelling, the clubhouse is crowded at weekends — it is quite usual to arrive after a wet foggy drive to find every chair occupied in the not inconsiderable canteen.

We are looking out for an additional glider to fill the obvious gap in our fleet between the Astirs and the Mosquito — the Speed Astir type or Club Vega are possibilities.

Advanced training is being more formally organised this year and we have ordered a K-21 to aid the training programme.

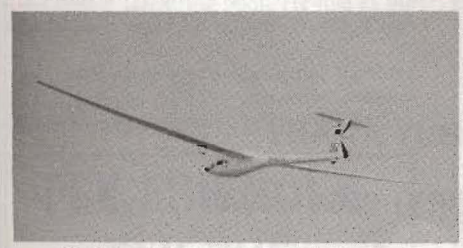
C.L.

VINTAGE NEWS

A F.W. Weihe 50 has arrived at Dunstable to replace the Weihe (BGA 448) severely damaged last summer. BGA 448 will very probably be repaired in time. A Caudron C.801, recently imported from Buno Bonnevaux in France, is being made airworthy in South Wales. The Kite 1 (BGA 400), previously belonging to Derek Ashman, has joined the RUSSAVIA collection at Duxford. It was built in 1939 with a minimum of metal parts to take part in the early Radar trials over the Channel. Three Grunau Babies and an H-17, in bad condition, are to be infused into the vintage movement. They previously belonged to the late Mr Richardson.

C.W.

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WELLAND SOARING GROUP (Careby)

Great efforts are being made to get the aircraft and ground equipment ready for the new season. Our annual dinner is on February 16 and our AGM on March 5. Our grass field is too wet at the moment for us to operate but some of us have been flying elsewhere. We are particularly grateful to our RAF friends at Cranwell.

E.C.

WOODSPRING (Weston-super-Mare Airfield)

Although the airfield is a morass we hope to be flying again soon. The Blanik is back after repairs but in its absence the K-4 did a magnificent job.

Congratulations to John Hornill and Angelos Yorkas on their five hours, John flying at the Long Mynd. We intend running at least two courses for club members this summer when visitors will be very welcome. Our annual dinner-dance is in mid-April and by then we will be operating from noon on Thursdays as well as the weekend.



The Tutor, which has been in pieces in the hangar for ages, has taken to the air. Alan Jennings, one of the six man syndicate, is photographed ready for take-off.

S.F.J.

WYCOMBE AIR PARK (Booker)

Our oldest K-13 has gone to Gordonstoun to complete its education, having spent eight years doing "prep" with us. It has been replaced by a new one (EBZ).

We are pleased to welcome Bernie Fitchett as our 1980 resident tug pilot. He makes the sixth Booker resident in the World Team Squad.

Our 1980 training programme includes *ab-initio* courses on every weekday evening with advanced courses and task weeks for the more mature students every week throughout the season. We have just had the first good day of the year with 4kt and several 100km attempts. Not bad for February 10!

E.W.

WYVERN (Upavon)

The trip to Aboyne was rewarded with Diamond heights for Roy Gaunt and John Harber. Martin Hardy repeated Diamond height to show anything Zell am See could do, Aboyne could do better. Martin was up to his old tricks again on his recent ten days' leave from Northern Ireland. He majored the K-8 and his own Astir practically single-handed. Thanks Martin!

Congratulations to Mandy Woodbridge, John Hawkins, Stuart Moss and Barry Perks on going solo and to Dave Lorraine on completing his instructors' course.

T.C.

YORKSHIRE (Sutton Bank)

We have been able to do quite a lot of training. We continue to make steady site improvements and visitors will have noticed the work done on the roads and hard surfaces. The refitting of the kitchen will aid Jean in looking after the courses, many of which are already filled.

The new winch should soon be in service and then the old one will be updated and uprated. Visitors thinking of flying in should inspect the field carefully before landing. Most of the short runway and a small corner of the long runway is ploughed and awaiting seeding.

A Sport Vega is being added to the club fleet and flying qualifications for the Astir will be reduced.

For the first time we organised a Farmer's Party and were so encouraged by the response and appreciation we will make this a regular date.

Our congratulations to David Lilburn who topped the club ladder with his stupendous climb and to Henryk Doktor on being awarded a BGA Diploma (see p82).

S.C.E.

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SERVICE NEWS

ANGLIA (RAF Wattisham)

We are still here and flying at weekends, weather and Air Traffic permitting. There is a lot of hard work to be done before we are up to full strength, but with the devotion of our small hard core we should soon be fully operational. Accommodation is available to visitors in our bunkhouse.

We are sorry to say goodbye to "Porky" Woods and Mike Taylor, but welcome Gordon Forsyth who is only the second instructor to be posted in for five posted out!

S.P.

BANNERDOWN (RAFGSA)

The New Year started with the arrival of a new K-13 to replace the T-21 which has been bought by a syndicate.

Ivan Hardwich completed his Silver C in September having started flying on April Fool's Day — appropriate? Belated congratulations to Chris Smith on going solo on his 16th birthday.

E.A.C.H.

BICESTER (RAFGSA Centre)

At our AGM in December we said thank you and farewell to our retiring Chairman, Air Vice Marshal John Brownlow, who reported another good year of flying activities. We welcome Wg Cdr Peter Saundby as the new Chairman and hope to see the Brownlow family as visiting pilots from time to time. The trophies were presented and our congratulations to John Armstrong who won the Novice's trophy, Bob Johnson who received the Daniels trophy for the member doing most work on the support side and Dave Caunt who won the Delafield trophy for the most

praiseworthy 100km flight. Dave, together with Paul Bolton and Whitsun Bush, has become a full Cat instructor. There was an enthusiastic vote of thanks to Sally Caunt who provided splendid food in the bus throughout the year.

Thanks to much hard work by Centre staff, especially Vic Carter and Pete Lewis, another of our Chipmunks is flying with a Lycoming engine. The team who produced the bus winch (described in the last S&G, p45) are busy with a second one which should be ready soon. The latest addition to the glider fleet — a Janus B — arrived in early February. After receiving some instrumentation it was flying the following day, coincidentally, our first soaring Sunday this year.

J.W.

CLEVELANDS/HAMBLETONS (RAF Dishforth)

Our winter wave was poor compared with previous years, although those who gained Diamond height to complete all three Diamonds will say differently. Mary Charlett-Green was also happy with her wave flight which gave her Gold height. Ann Thompson has converted to the B-4 and Gillie Dart went solo in the Blanik and converted to the Oly 2B.

Gordon Forsythe has been posted to RAF Honington and we also say farewell to our CFI, Roger Crouch, who is off to Cyprus in May.

Sadly one of our tugs has been allocated to another GSA club after we spent a lot of club money to buy it. This may restrict the number of visiting GSA clubs to our site.

The new kitchen is in operation, thanks to the efforts of a number of people including George McLean, Alan Lightfoot, Mike Greaves and Eric Roberts.

Your scribe broke his leg by slipping on ice on the taxiway, while carrying a parachute. Unfortunately I was too low to use it. Should this be classed as a gliding accident?

J.A.S.

CRANWELL (RAFGSA)

Our CFI has been posted to Germany and Bruce Tapson has taken over. Already the club has benefited greatly from his expertise. Mike Barnes has become deputy CFI of the Service Glider Flight. He has many years experience as a pilot/instructor on Service gliders. The mild weather has enabled us to fly nearly 600 launches in January, our membership is on the increase, the fleet continues to grow and work has begun on a bus winch. Aerotowing returns to Cranwell as we have secured a Chipmunk.

J.B.

EAST MIDLANDS (RAF Wittering)

At our AGM in January, the President praised the club's safety record and hoped that it would continue. The CFI's trophy for the most improvement went to Al Baker, with Mick Topham being awarded the trophy for hard work on the ground.

Terry Hampson and Kevin Parker soloed in early February, both having joined the club in November. Also buying the traditional beers after flying were Steve Carter, Jerry Parr, Ian Gill and Mick Topham for being checked out as passenger carriers before going on instructors' courses later in the year.

Work is in hand to convert one of the Wild winches to narrow drum.

I.M.G.

FENLAND (RAF Marham)

We have had several additions to the club fleet and ground equipment, the most significant being a new K-13 which will allow a more flexible training programme. We have bought a David Brown tractor and Brian Mack overhauled and modified one of the Fergusons, including the addition of a wide platform with a handrail on the back to give a safer ride for returning winch drivers. We are also expecting to get a bus chassis for winch conversion.

There has been a sharp drop in the number of instructors. Latest to go are Barry Elliott and Graham Headey, though the arrival of John Jenkins from Germany has been a help.

M.J.M.

FOUR COUNTIES (RAF Syerston)

The K-18 has arrived, the T-21 should soon be back after its misfortunes and Sue and Chris Curtis are picking up their ASW-20 from Booker. Congratulations to Steve Cox and Dave Abalard on going solo.

There are plans to convert a Weetabix wagon into a Twin Astir trailer and other trailer building is going well.

G.P.S.

FULMAR (RAF Kinloss)

At last the airfield destruction and construction is complete which leaves us only the barbed wire security fences to negotiate when moving the gliders in or out of the hangar. The time saved has improved our daily launch totals considerably.

Before George Lee left us to go back to Leuchars he gave us, and our welcome guests from the Highland Club, a very enjoyable slide show at our Christmas party.

Membership is on the increase as we enter 1980. Our congratulations to Wg Cdr McKinley and Stu Millington for gaining their A and B certificates and to Chris McQuigg for getting his PPL and converting to the RF-3 Sadly we say goodbye to Chris, who is going to Finningley (a new member for Humber), and to Roger Hanson who will be sorely missed after dedicating his time to the club for the last three years.

C.J.

KESTREL (RAF Odiham)

During the winter we had our first dinner-dance, ably organised by Bev Cook. This was a resounding success and we hope to make it an annual event.

The AGM was held in February. The Committee was re-elected and the Treasurer gave the welcome news that subscription fees will not change very much this year.

Trophies were presented to Tim O'Donovan, CFI, for the longest closed circuit flight in a club glider; the Alison Farrell memorial trophy went to Mick St. Jean, as the best *ab-initio* awarded by members' ballot and the President's Pot for the best all round member was presented to Mark Thorpe.

We welcome Dave Armstrong (ex Cyprus) and Bob Bickers and family on their return from Germany. Finally, we shall be represented in the Inter-Service competition by Alex Reid and Dave Armstrong.

P.W.A.

PHOENIX (RAF Brüggen)

Although we are only using the Blanik, K-8 and K-18 at present, we still manage more than 160 launches a weekend during the winter. The ASW-20 owned by Eddie Wright and syndicate is due for delivery this month and the club are replacing the Blanik with a K-21. The K-13 has a new skin and will soon appear in a shade of Post Office red.

We say a sad farewell to Al Stacey who was awarded the "best club member" trophy at the AGM. Sue Banks and Pat Nelson have converted to the K-8 and Gabby Drücker to the K-18.

G.A.B.

PORTSMOUTH NAVAL (Lee-on-Solent)

A number of intrepid members braved the cold on Boxing Day and New Year's Day and were rewarded by an hour or two of soarable conditions. We expect to have our new tug by Easter and a new Std Astir, financed mainly from grants made by the Fleet Amenities Fund and Sailors' Fund. We also have the PIK-20 for two months.

The T-21 is in storage until the warmer weather and the T-49 and two Auster tugs are on C of A. Our winch is having an extensive refit and we have a new fire vehicle, the old one being converted into a cable retrieve truck. Our Swallow, after many years of faithful service, is being sold to help pay for these improvements.

Congratulations to Marc Morley on going solo on his 16th birthday.

H.C.

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PRESELI (RAF Brawdy)

Our club was born on a Saturday afternoon, December 8, when an elderly K-4, piloted by Grant Guest, CFI, was launched after a wet start to the day. January produced 150 launches on six flying days, culminating with one day when 33 launches were achieved in 6½hrs.

Despite its reputation for bad weather, we believe the site has the potential to provide a good range of gliding conditions throughout the year. The predominate winds lay on the cliffs one mile west of the airfield and we regularly see lee wave overhead. In summer there seems to be good thermals and observations indicate that sea breeze fronts may not be a major problem due to the local geography. It will be interesting exploring the site potential in the months ahead.

We expect the club fleet to expand soon with the allocation of a K-7 and a single-seater from the GSA so that we can increase our membership. There is also a privately owned L Spatz. We have a number of ATC glider pilots who are near to re-solo standard but to-date only Vice-Chairman, Barry Holding, has gone solo with the best launch of the day to 1700ft.

J.K.S.

TWO RIVERS (RAF Laarbruch)

It was decided at our AGM in December that charges had to go up to cover the 62% rise in fuel costs and the 37% increase in insurance premiums. On January 28 we hosted the RAF Germany Gliding Association AGM with a party afterwards in the clubhouse.

We have said farewell to Dave Wood (ex-CFI), Mick Black, Ginge Carter, Steve McIlraith and "Hutch". Carl is now solo on winch maintenance.

Phil Shambrook, Dave McClean and Chris Lansley have gone solo. The K-8B has been sold to Rattlesden GC and we are searching for a newer K-8B replacement. Some members are off to Sisteron in March.

J.R.N.

Club News contributors: If unable to get your reports typed, please print all names.

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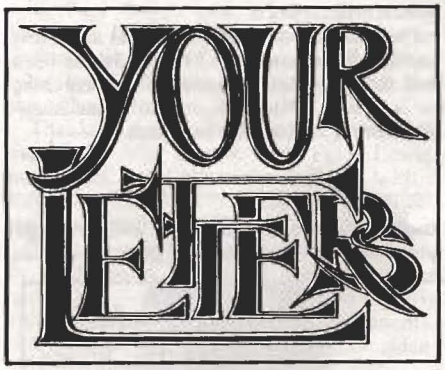
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GLIDING CERTIFICATE NUMBERS

Dear Editor,

Alan Yates may well be correct in suggesting in the last issue (p48) that E. L. Mole has the lowest gliding certificate number (6) of anyone still living, though Latimer-Needham (No. 2) and Mungo Buxton (No. 5) died only recently. Lowe-Wylde (No. 1) had a fatal accident in 1933; Marcus Manton (No. 3), my first gliding instructor, performed loops in a Bleriot when I was a boy; M. L. McCulloch (No. 4), one of the London Club's earliest instructors, soon left gliding and I last saw him in the Strand about 1931 when he was making portable rubber swimming baths.

The first *ab-initio* to get a British gliding certificate was Graham Humby (No. 13), who flew his A at Ivinghoe Beacon on July 30, 1930. Another *ab-initio*, D. M. Morland, flew his A later the same day, but was more nippy in sending in his application form and was awarded No. 8.

A. E. SLATER, **Cambridge.**

INVENTIVE AND CHEAP

Dear Editor,

Frank Irving's mention of the introduction of MacCready rings in the mid-1950s ("50 Years of Peering at the Dials", December issue, p264) reminded me of my effort in this direction in the late 1940s, when I shared my Olympia with Stan Armstrong and others at Camphill.

This was to sandpaper the paint off an ordinary (though preferably fattish) hexagonal pencil, and mount it vertically beside the red ball tube of the Slater-Cobb variometer in such a way that it could be rotated by hand to present any desired facet to view.

The next step was to work out, with graphpaper and the Olympia's polar diagram, the flying speeds for best true gliding angle (relative to the ground) when the red ball was at each of the graduated marks on the variometer, and for each of six different wind conditions — *ie* one for each facet of the pencil. These were: no wind; 10, 20, 30mph, following winds; 10, 20mph headwinds.

These flying speeds were then inked in neatly on each facet opposite the relevant red ball graduations. All the pilot then had to do in flight to achieve maximum range (in theory!) was to rotate the pencil to present the facet corresponding most nearly to his estimate of the current wind condition, and adjust his speed to correspond with that indicated opposite the position of the red ball as he flew along, interpolating as necessary.

I used to find this device quite helpful, and perhaps the idea would be of interest to those with vintage or other gliders still equipped with Slater-Cobbs. Very cheap!

LAWRENCE ROBERTSON, **Southampton.**

CREDIT WHERE CREDIT IS DUE

Dear Editor,

Much as I appreciate you attributing the Accident Summary in the last issue, p32, to me it should go on record that the task of producing these summaries is carried out by Arthur Doughty, Chairman of the Safety Panel.

Since he took office five years ago he has dealt with more than 700 accidents and incidents. As well as this he does a considerable amount of analysis without which accident prevention measures — such as S&G articles — could well miss the point.

W. G. SCULL, **BGA Director of Operations.**

THOSE VEGA WINGS

Dear Editor,

Many observers believe that the UK's economic weakness and the chronic failures of both government and industry owe much to obsessive secrecy, far too much cover-up and the fact that the penalties for failure are seldom really harsh.

So it is germane to ask some questions about Slingsby's sub-contractor who, appallingly, skipped a whole heat-treatment process and delivered a batch of unhardened Vega wing spigots apparently ripe for failure.

Which company was it? Has it been stripped of any CAA, AID or other official approvals? Will it ever be allowed to undertake aeronautical work again?

BOB RODWELL, **Belfast.**

Roger Bull, Sales Manager of Slingsby Engineering Ltd, replies: It is to be hoped that Bob's comments concerning obsessive secrecy and far too much cover-up were not intended to apply to Slingsby, since the act of writing the article "Vegas and Wings and Things" in the December issue, p295, was in itself anything but a cover-up. Bob is wrong in stating that the wing spigots were unhardened — it was in fact the required hardening of the surface which masked the lack of heat treatment of the core. The company concerned has been visited by the CAA and their approval status has been reviewed. If every company that made some error was stripped of their airworthiness approval there would be no aircraft industry. After all de-Havillands continued after the Comet disaster, and McDonell Douglas is still very much in business despite the DC10!

VEGA PILOT'S ANSWER

Dear Editor,

In the article in the December issue, "Vegas and Wings and Things" (p295), Roger Bull discusses the cause of the breaking up of a Vega wing in mid-air during the Italian Championships. I was the pilot and although Slingsby Engineering promised to send information about the investigation, they have never done so. As they haven't answered any letters, it seems correct for me to give my reaction to this article *via* S&G.

In my flight report and in discussion with the Slingsby people shortly after the accident I never said that I had encountered strong turbulence at high speeds, as is stated in the article. It is said that further hard flying made the accident possible (probably after the minor damage was initiated). Flying in a competition like Rieti cannot be denoted as "hard flying" for a normal glider. There has never been another accident like this in Rieti.

The author says that tests have shown that the wings would stand the *flight loads* in both positive and negative bending without damage and *in torsion with only minor damage!!* In torsion with only minor damage means that the wing cannot stand the flight loads within the permitted flight envelope. In other words: damage appears before maximum permitted load is achieved.

My last remark on the article is that the author talks about the breaking of spigots and spars as if it were car engines that break down. However there is a slight difference. If a wing fails it can cost the pilot's life.

BAER SELEN, **Delft, Holland.**

Roger Bull again replies: It is a pity that Baer Selen should see fit to comment adversely on my article, which was an honest account of our tests and findings following his accident — an article which scrupulously avoided imputing any blame to him, and which admitted that the wing had faults, (which have now been rectified on all Vegas). However, it seems I must defend the content of my article, so here goes:

1. The article does **not** state that the pilot encountered strong turbulence at high speeds — it states "The pilot reported that in an earlier phase of the flight, after crossing the start line, he encountered a strong negative gust". That is what Baer Selen told us, and that is what was written.
2. Most people would concede that flying in a National competition in mountainous regions with 10kt thermals around would qualify as hard flying. Indeed had Baer Selen not been flying reasonably hard, I doubt whether he would have been at the top end of the results table. It is not germane to comment that no other gliders had an accident like this at Rieti, any more than it would be for me to comment that none of the other 25 or so Vega owners have encountered any similar problems with their wings.
3. My article quite explicitly stated that the tests we carried out for torsion were those

relating to −2*g* at **150kt** (Vd). Baer Selen's conclusion that the aircraft could not stand the flight loads in the permitted flight envelope is wrong, since VNE is limited to **135kt.** What we did in fact show with our tests was that there was **no** damage to the wings within the permitted flying limits.

4. I must leave it for readers to decide for themselves whether or not my article was flippant — it was not intended to be.

Finally we must apologise to Baer Selen for not sending him information on the testing — this was due to an oversight on my part, which has now been rectified.

EARLY BRITISH GLIDER PILOT

Dear Editor,

Congratulations on an excellent Anniversary Year issue, (December 1979-January 1980). It was well worth reading. However, it was no little surprise to me that J. C. Riddell did not mention an early British glider pilot in his article, "The Old Heave-Ho", p276. In 1010 a monk, named Eilmer, jumped from the tower of Malmesbury with a hang glider and landed after a glide of 600ft. Although I do not know the height of the tower, the glide angle does not look bad for those days.

Eilmer's two legs were broken, but he immediately explained what went wrong during the landing: "*caudam in posteriore parte*", which could mean something like: "I forgot to install my elevator". My reference says this story is mentioned in Lynn White's **The Expansion of Technology 500-1500** in the Fontana History of Europe. I couldn't get hold of a copy to check it.

As far as I know there is no drawing of the glider available, so we can save Derek Piggott from flying a replica.
ALBERT HENGELAAR, **Amsterdam.**

THOSE MISSING NUMBERS

Dear Editor,

Surely Mr. Roney cannot be serious in suggesting in the last issue, p48, that pilots read their altimeters in dealing with launch failures or cable breaks at critical heights. After so much copy in recent years attempting to make everyone aware of the risks attendant to turning, I hope that no one takes too much notice of the implication that a pilot is going to rely on an altimeter reading in making the decision whether to go straight ahead or not. In nearly all the serious or fatal accidents in this category there has been enough room to go ahead. When will they ever learn?
W. G. SCULL, **BGA Director of Operations.**

Extracts from other letters on the subject:
Surely the pilot who puts his head "in the office" to read his altimeter during a cable break situation at 200-300ft is asking for an accident anyway. Should he in fact be flying solo at all, if his height judgment is so poor that he has to rely on an instrument which, under the circumstances, would most likely be inaccurate to judge? GRAHAM FRANKLAND, **Bramhall, Cheshire.**

Colin Roney said that he uses an altimeter reading to decide what to do following a 200-300ft launch failure. Unless he flies with a radio altimeter I would strongly recommend that he, and all like-minded people, immediately learn how to judge height or, for their own and everyone else's safety, take up sailing. T. E. MACFADYEN, **Bristol.**

I suggest the last thing he should be doing on a launch failure in the 200-300ft height-band is to be tapping his altimeter to obtain a correct reading. I also feel that a pilot of Justin Wills's standing ("The Great American Dream", last issue, p4) should not be proud of flying without oxygen at 17 000ft, headache or no headache. G. BOLTON, **Leicester.**

GLIDING IN TEXAS

Dear Editor,

I would like to make an addition to your excellent article in the last issue on gliding abroad (p22). Dave Saunders and I went to the Commercial Soaring Centre at Caddo Mills, Texas last June and I think all potential travelling glider pilots should know about this terrific site. (See also S&G June, 1979, p150).

Caddo Mills is near Dallas and can be reached by direct Braniff flight from Gatwick. Last year it cost £190 each, APEX return. The site is owned and run by A. C. Williams and his wife Mary who do everything possible to give one an enjoy-

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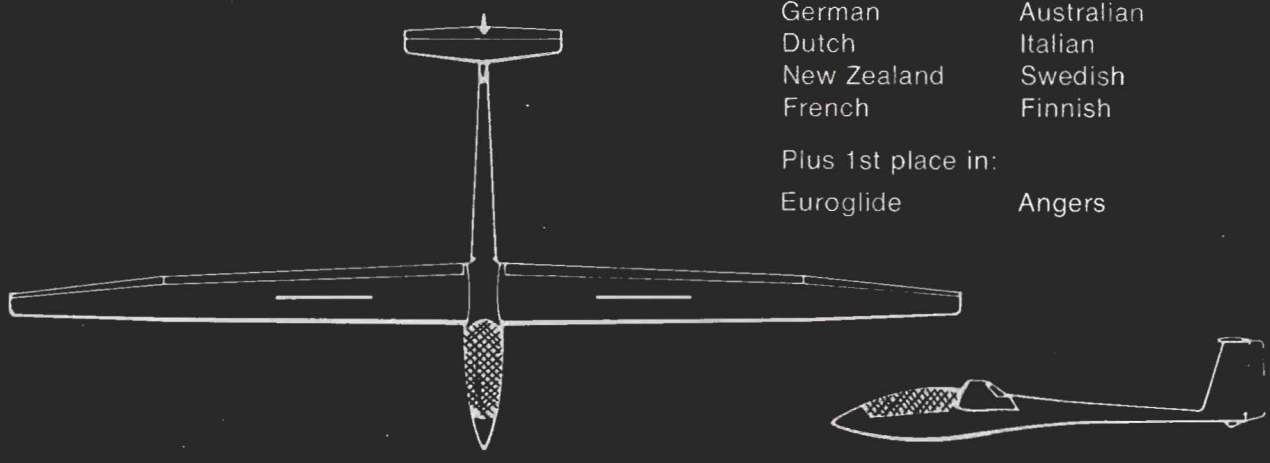
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STEVE BICKNELL, **London.**

MORE ABOUT FEAR OF GLIDING

Dear Editor,

I read with some despair the minor assault levelled at the article by Keith Nichols ("A Psychological Perspective on Gliding" in the October issue, p219) by M. Randle in his letter in the December S&G, p312. Reading between the lines, I suspect that this criticism was justified by its writer presumably because of Mr. Nichols's lack of experience as an instructor. Personally I was never aware that one had to be a gliding instructor for twenty years or more before offering articles for publication!

Surely the fear which the "terror ridden" pilot displays in the cockpit is but the tip of the iceberg compared with what must surely occur during his journey to the club; and heaven knows what he must go through as his turn in the two-seater draws near. The fact that such a pilot turns up week after week is proof enough that he is combating his phobia and I would imagine the last thing he wants to hear is an experienced instructor advising him to lie down and accept defeat.

I have witnessed a club take such a person under its wing and persevere to the end. What triumph we experienced when I finally sent him solo after 349 launches — and may I add that he was ready for solo after 50; yet he invented "problems" with his flying in an attempt to keep the instructor in the cockpit. He is now a competent cross-country pilot who was given help when he needed it most.

Secondly, there is a definite shortage of articles aimed at the really early solo pilot, perhaps because the more experienced pilot (and author) has forgotten, or does not care to remember, that stage of his flying career. It could be therefore that the best pilot to write such an article is one who has just traversed the stage about which he is writing. Full marks to S&G for featuring such an article and top marks for authors such as Keith Nichols for having the ability to offer such material, for without them our magazine would be in danger of becoming a pundits technical journal.

Let us hope that three things emerge from this article and its ensuing correspondence:

1. That the pilot who needs special attention never ceases to receive it.
2. That Keith Nichols has not been discouraged from writing such articles.
3. That M. Randle is not deterred from offering constructive criticism.

M. BOND, **Swinton, Lancs.**

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A NEW ANXIETY!

Dear Editor,

Having been much impressed by Keith Nichols's article I thought I would try a little anxiety management on my own nerves. I had reckoned without the side effects.

Relaxing in my rocking-chair, I tried a little pre-flight rehearsal in imagery. Alas before I had even reached the top of the launch, I was fast asleep. So much for anxiety! — but then, it is not the launch that worries me so much as the proximity of the ground at the end of the flight.

I therefore put my feet up again and tuned in on my down-wind leg. I never got as far as my final turn — I was fast asleep again — and again — and again, no matter how hairy the imagined flight or difficult the approach!

Now what worries me is this. If I persevere with Keith Nichols's technique to combat my incapacitating fear of flying, am I going to be able to stay awake in the air at all, or am I going to float in nerve-free bliss from all-out to round-out, peacefully asleep?

RUTH TAIT, **Elgin, Scotland.**

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FOR NON-GLIDING WIVES

Dear Editor,

Are you a gliding widow, and feel "out of it"? Well, so did I! Six years ago my husband Colin stopped the caravan on our outward holiday journey and decided he wanted to have a "flip". So I agreed and we all had a flight. Very pleasant and harmless I thought. But the follow-up was that he wanted to return for another go after our holiday to see if he really liked gliding. That night he came home as pleased as punch with his latest experience but also sheepishly stating he had joined the club!

He agreed only to go out on Saturdays so we could still have some of the weekend at home with the family. He enjoyed himself immensely, got a lot of exercise and fresh air and started to feel fitter and healthier. I had to adjust to the idea of seeing him less not being able to go out on Friday or Saturday nights, since an early night on Friday was important so he could get his name on the list early Saturday morning before having breakfast at the club. Then on Saturday he would come home late as after all one has to be involved, put the gliders away and then be friendly and have a drink at the bar!

This went on for some two years, come rain or shine, summer and winter, though not during our holidays — then gliding was strictly taboo! Though I did not resent it as such, since I did realise it was good for him and he was getting the exercise he had never had before, I did feel out of it and had no desire to take part. I enjoyed the trip I had had, but it otherwise left me "cold". I did have the odd week at the club when we were allowed to park our mobile caravan for short stays, and I had a rest and lazed about while Colin was busy flying and generally "playing" with gliders. I got to know a few people, especially some of the wives, and began to feel a little more involved.

Eventually we were lucky enough to "inherit" a caravan plot and we moved in straight away. That was four years ago and we come out on Friday evenings whenever we can and stay till Sunday evening. I get peace and quiet away from phone and callers (I do work and people catch me at home almost any time of day and night), I also see more of Colin and have made many new friends.

I have tried to fit in and make myself useful to the club in some small ways. I am sure other wives could gain in the same way and I would be happy to entertain them here for the odd day to help them to get the feel of the place and find that one can enjoy oneself even without gliding. As my work is in connection with people, I feel concern at the strain this time-consuming hobby can produce in marriages, but this need not be so. The children too can have a good time on airfields and I feel the more the family becomes involved the more facilities we can have for their comfort and enjoyment.

I shall be delighted to hear from any wives and friends who care to drop me a line or come and see me at the London GC. We are there most weekends.

ALICE ANSON, **65 Bonnersfield Lane, Harrow, Middx.**

THE 15-34 KIT CLUB

Dear Editor,

It was nice of Bob Rodwell to extol the virtues of the 15-34 Kit Club in his article in the October 1979 issue, p225. We think that Jean Pottier, the designer has produced a kit design which is fully equal to the best in the Standard Class. There were unfortunately some errors in the article which could confuse prospective builders.

The wings of the 15-34 Kit Club are delivered in a fully finished condition with all controls and fittings factory fitted, certified and ready to fly. The 15-38 is also designed by Jean Pottier and is being built at Moulins at the Carmam factory. Carmam is associated with Siren but operates as a completely separate factory.

Flow Technology are the Agents for the Carmam range in the UK, Eire and some commonwealth countries. We trust this clears up any misunderstanding that might have been in your readers' minds.

G. E. BURTON, **Malton, Yorks.**

SCHOOL HOLIDAY REGIONALS

Dear Editor,

I would like to make a plea on behalf of the keen competition pilots of this country who also happen to be members of the teaching profession (probably a larger minority of hardcore club members than you may think — check your own club). That plea is could we have more Regionals timed to coincide with school holidays?

At the moment only the Northerns at Sutton Bank are regularly held in school holidays (well done Sutton Bank). The remedying of this situation would not only help teachers but also the majority of competition pilots in that crews would be so much easier to find because the whole family could take part if the children were on holiday.

R. FOX, **CFI, Wold GC.**

BOOK REVIEW

The Johnson Flight Tests, by Richard H. Johnson, 89 pages published by The Soaring Society of America. Price £3, available from the BGA at £3.35 including p&p. There are few exponents of competitive sport who have stayed at or near the top for a quarter of a century: Dick Johnson is one of them for, when he flew at Chateauroux in 1978, 26 years had passed since his appearance with the RJ-5 in Spain. So, given his engineering background, who better to assess today's sailplanes?

For some years, Dick has been testing contemporary sailplanes with the aid of funds contributed by the Dallas Soaring Association, and has published the results in *Soaring*. SSA has now collected together 20 of his articles, with an introduction by George Moffatt. They cover most of the current batch of important sailplanes and consist mainly of the results of performance testing with observations on quality of construction, handling and general practicability. There are also some useful groups of comparison, polars and measurements with artificial "bugs" applied to the leading edges. The polars are nicely drawn and the quality of reproduction is excellent. With commendable courage, the individual measured performance points are shown, thus providing chaps like me with some grounds for criticism.

Now I am certainly not going to join with the Australian gentleman writing in last November's *Soaring*, who questioned the whole of Dick's techniques, adding a little antipodean brashness for good measure ("... it's time somebody qualified in engineering science put the record straight"). But I do think it is a pity that there is no general explanation of the test techniques nor of the data reduction methods. An introductory note would have been most helpful. Knowing Dick, we can take for granted the accuracy of the flying, and the avoidance of obvious pitfalls like

all pilots can read – but the BEST PILOTS read

Sailplane & Gliding

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flying in wavy conditions, so the scatter of the points about a mean polar will be due to random errors. The amount of scatter varies appreciably from one polar to another: in the Mini-Nimbus polar on p51, it is remarkably small whilst in the ASW-17 polar of p63 it is considerable. (Hans Zacher used to display little histograms of scatter with his polars). Now, if the scatter is very small, one can draw a good mean curve with considerable conviction. But what if it is appreciable? One can either "eyeball" a mean curve or do something posher, like enlisting a computer to provide a polynomial "best fit".

I have a suspicion that both the eyeball and analytical methods have been used in these tests. The ASW-20 polar on p72 looks to have been eyeballed, whilst that of the Nimbus 2 on p54 does not. I took the liberty of subjecting one set of results to various processes (you will have to believe that my conversion of the plotted points back into figures was reasonably accurate), including somebody else's experienced eyeball and the vast computer of a well-known educational establishment. The resulting best (L/D) figures were all in good agreement, and about two units less than the figure quoted on Dick's polar. And, indeed, at the higher speeds, Dick's polar behaves as if the machine had the lower max (L/D) value. What is the moral to all this? I think it is that you believe the points but you make your own assessment of the mean polars and you don't take too much notice of (L/D) figures quoted to a tenth of a unit.

Anyone who has participated in such tests will know what a vast amount of pains-taking work they represent on the part of Dick Johnson and his Dallas associates. Whilst this does not put them beyond criticism, it does mean that they are the best currently published. Whether you want to see how the opposition compares with your own hot ship or whether you simply enjoy reading about sailplanes, you need this book.

F. G. IRVING

classified section

Advertisements, with remittance, should be sent to Cheiron Press Ltd, 7 Amersham Hill, High Wycombe, Bucks. Tel 0494 442423. Rate 20p a word. Minimum £4.00. Box numbers £1.50 extra. Replies to box numbers should be sent to the same address. The closing date for classified advertisements for the June/July issue is May 8.

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