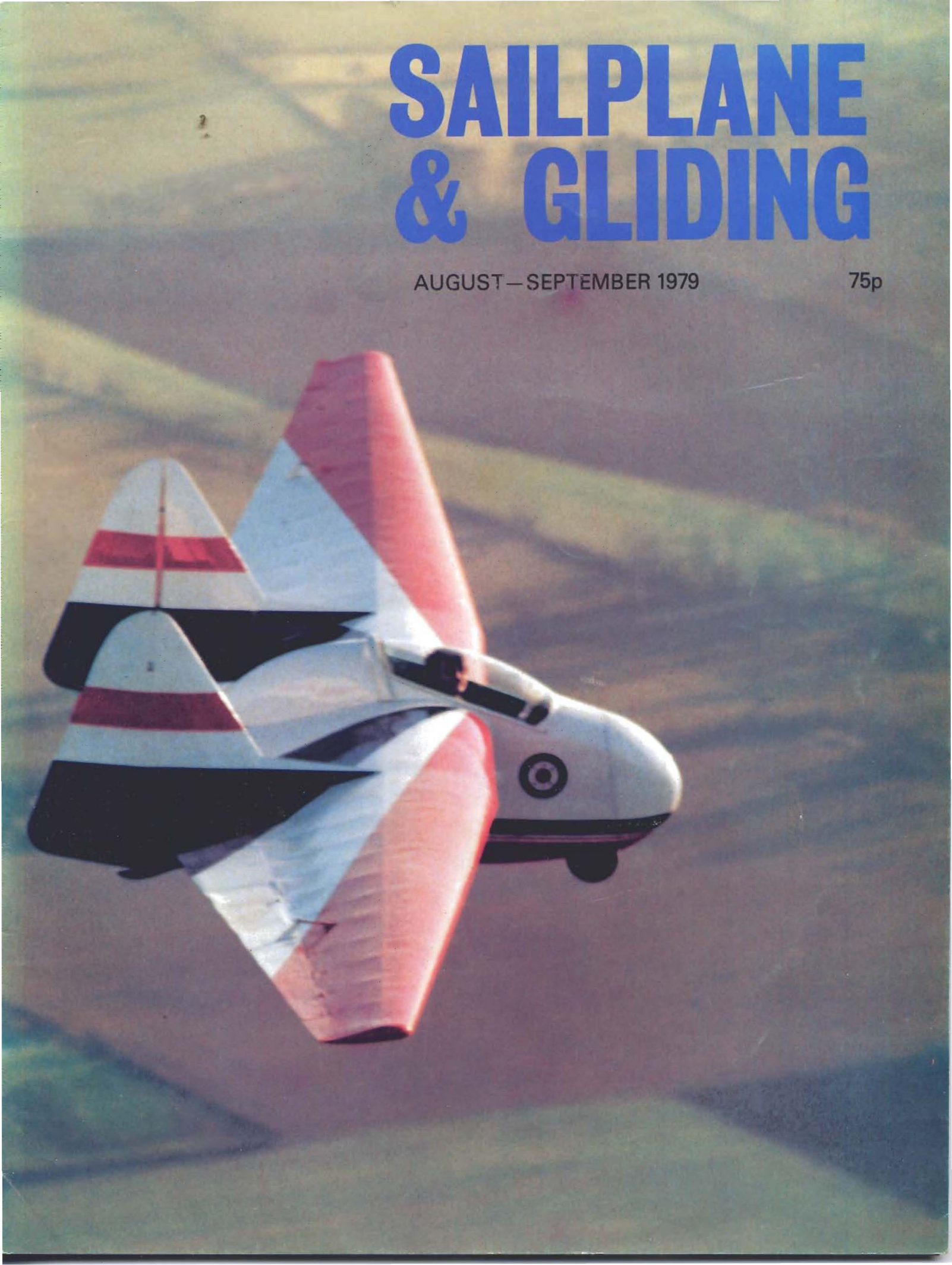
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AUGUST—SEPTEMBER 1979 75p



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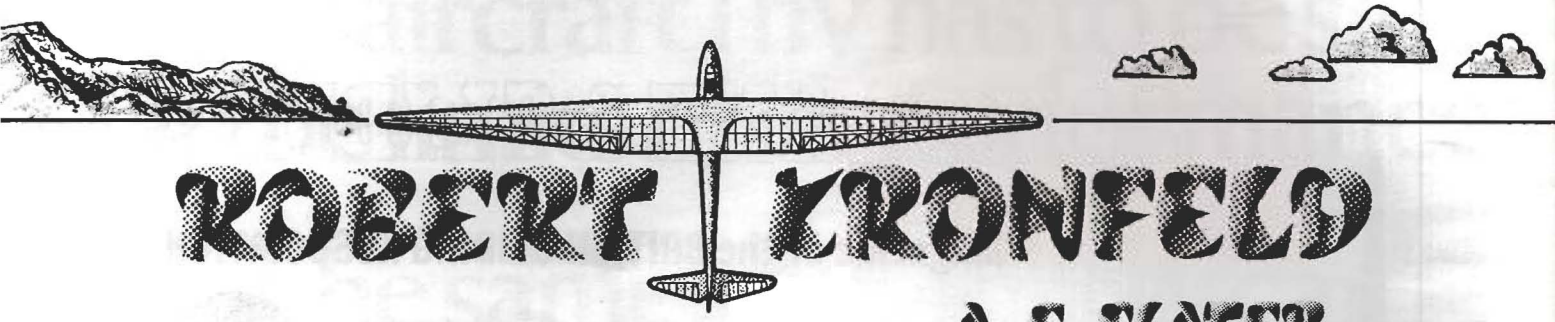


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ROBERT KRONFELD

A. E. SLATER

During 1929 news repeatedly reached England of astonishing distances and altitudes achieved by glider pilots in Germany, and a feeling got around, especially among the less orthodox aviation types, that we ought to be doing the same sort of thing here, partly for national prestige and partly for its inherent interest. So at the end of the year the British Gliding Association was born.

Outstanding among these pilots was Robert Kronfeld, who was earliest to get into the news with the first glider flight of 100km on May 15. For a celebration of the 50th anniversary of this event at the starting point of the flight, I was asked to provide a biography of him for translation and circulation to the German Press. Here it is with modifications.

Robert Kronfeld was born on May 5 1904 in Vienna. His boyhood interests were skiing and sailing. In 1927, as the result of a lecture he gave on a canoe trip round Europe, the Austrian Aero Club chose him as one of three young men to be sent to the Rossitten Gliding School on the Baltic coast. He soon got his A and B, but for a suitable wind for the C he had to wait until the winter, meanwhile earning his keep by working at the school. The physics of sand are such that the steep side of a dune faces the opposite way to the prevailing wind. Eventually he qualified for his C with a flight of 1hr 17min in a temperature of minus 7°C.

The following year he flew in the German Nationals on the Wasserkuppe, and on August 6 I watched his ground crew, sitting on a promontory, signal the wind direction and speed whenever he passed over. He was indeed thorough. Eventually he went off under a cumulus base five miles to Himmeldankberg mountain (where I had soared a model the year before) and returned under a line of clouds, this being the first use of a cloud street. Many others made cross-countries using mountain lift followed by a long descent to low ground.

Next year, 1929, opened with attempts to win a prize of RM5000 (they were called Rentenmarks in those days) offered by the periodical *Grüne Post* for the first soaring flight of 100km. Kronfeld had two serious rivals, Ferdinand Schulz and Johannes Nehring: all three were brought down at their first attempt by a gap in the line of hills they had chosen. But Kronfeld must have remembered his cloud-current flight of the previous year, for at a second attempt he waited for a good cumulus to pass over each gap. His hill range was the Teutoburger Wald, with a south-west facing escarpment which overlooks the famous Oerlinghausen gliding centre. But he only just made it with 2km to spare, because the slopes become very irregular at the far end.

Kronfeld's sailplane was the Wien, a further development by Alexander Lippisch of his Rhöngeist of the previous year which subsequently went into production as the Professor, later to be seen in England.

The German Nationals of July 1929 on the Wasserkuppe gave the ultimate push to the movement towards setting up a BGA. On July 20 Kronfeld and several others made their first thunderstorm flights: he climbed 2025m in it and flew 143km, both being world records. Then on July 30 he astonished the world by climbing through a tall cumulus to a record height of 2560m (8397ft), then flew a record distance of 150km (93 miles) to a village near Bayreuth. He increased this record to 164km on August 24.

In the BGA's first summer it invited Kronfeld to bring over his Wien and give demonstrations at various soaring sites, and in early June he was flying at Firle Beacon, the site of the 1922 slope-soaring contest. Luckily, as then, there was a northerly wind, and he finished by soaring along the South Downs 50 miles to Portsmouth. At Ivinghoe Beacon he gave a private show for the then Prince of Wales, and to demonstrate the silence of soaring he carried on an air-to-ground conversation with the Prince; it sounded to me like a few short, sharp syllables, but according to Kronfeld's autobiography his words were: "I hope soaring flight will interest your Royal Highness" and the Prince replied "Yes indeed, immensely".

"Ridiculous" double glide competition

In 1931 Kronfeld was back again in England to win a £1000 prize offered by the *Daily Mail* for the first double "glide" across the English Channel, starting each time from an aerotow to any desired height. This ridiculous competition was designed by the BGA hierarchy to "Popularise gliding", that body having got into the hands of people who had forgotten that it was formed to promote high-performance soaring in Britain. As a further stupidity, an opening day for the competition, June 20, was announced, with the result that the *Daily Express* spiked the *Daily Mail's* guns by sending a Mr Beardmore (husband of novelist Barbara Cartland) across the previous day in a Professor; he refused to say whether he was towed across.

On February 15, 1931, the Silver C certificate was instituted and the names of those who had already qualified for it were announced as Kronfeld, Hirth and Groenhoff. Kronfeld was at first allotted No 1 but this was later politically changed to 2.

For the 1932 German Nationals Kronfeld had a new sailplane, the Austria, with a flimsy looking unstrutted wing of 30 metres span, a pod for the pilot hanging below it and a tube to support the tail. It was designed for the ultimate in cross-country slope-soaring, but he took it into a cloud, wherein it broke up and he had to descend by parachute. I heard that the owner of the land below was furious because his cows kept injuring their feet on projecting bits of Austria.

In 1933, racial laws forbade Kronfeld to fly in Germany, though he turned up at the 1933 Nationals and was greeted by old friends: even *Flugsport*, which supported the regime, said they were pleased to see him. So he toured other countries, starting with the first glider mail flights near Vienna with a new two-seater machine, "Austria 2", which later settled here. In Italy he flew over Vesuvius, looking down on seething red-hot lava; in France he eventually sold his Wien to a M. Lumière.



Robert Kronfeld photographed in 1930 at Itford

At the beginning of 1930 a tremendously vigorous character, C. H. Lowe-Wylde, founded the Kent Gliding Club (the first BGA Club), called himself the British Aircraft Co, and began producing a series of gliders of which the BAC 7 was a two-seater; then he added a motor to it, having decided that gliding instruction should be given with a motorised craft; but early in 1933 he suddenly side-slipped to earth with fatal result, and it was assumed he had fainted due to overwork. Kronfeld came to settle in England and joined the Master of Sempill and Gordon England in developing this machine as the "Drone". When he flew it to France on a few shillings' worth of petrol, the Press called it "his little glider 'plane" as if the only difference between a glider and an aeroplane was one of size.

In June 1938 Kronfeld became Manager and Chief Instructor of the newly formed Oxford University and City Gliding Club, where he invented a new gadget for training in open primary gliders: a vertical bar stuck up from the glider's nose and across it were fixed three horizontal bars, one above the other: the pupil had then to keep the middle one on the horizon. At this time Kronfeld seemed to have changed his outlook on the usefulness of motorless flying: now he advocated simple gliding as an introduction to powered flight, whereas in 1932 he wrote that a motor pilot with experience at soaring would be a better pilot than one without it. Yet in a talk to the London Club around 1938 he outlined a scheme for a sailplane which would fly so fast that it would win all the prizes by going farther than all its rivals before the thermals gave out. (There were no speed points in those days.)

Just before the war Kronfeld had a scheme for taking over the Oxford Club as a privately owned gliding club, having mistaken the word "Proprietary", in the title of the legal owners of the London GC, to mean that it was privately owned, but gave up the idea on finding that he would not qualify for a government subsidy. About this time he became a naturalised British subject.

When in 1940 the Government decided to develop troop-carring gliders in reply to their use by the Germans, Kronfeld joined the organisation and gave it all the help he could. But as to his attitude to soaring, when I met him at a gliding get-together during the war and tried to introduce the subject, he replied "Soaring is idealism". And when I saw him in 1947 just after his return from a flying visit to the Swiss gliding people, he had been quite obviously taken by surprise at their enthusiasm.

In 1948 Kronfeld was testing a large "flying wing" tailless glider and when it was on aerotow it suddenly turned over and the strain on his body was such that he must have died instantly. His younger companion parachuted down, but suffered many burst blood vessels in the head, like the American glider pilot who suddenly flew into the downgoing side of a violent rotor, showing that Kronfeld had been subjected to extreme negative *g* forces.

Kronfeld was married in 1936 and had one son, known to his friends as "Bill", born in 1939, who flies at Lasham with the Imperial College Club. He has the Gold C with a distance Diamond, and won the Lasham Regionals in 1971.

Kronfeld Cross-country Competition

As mentioned in the April issue, p86, the Gliding School at Oerlinghausen commemorated Robert Kronfeld's historic flight with a competition open to all cross-country pilots. His son Bill was invited to present the prizes on May 18 and in a short speech made the following comments on his father's love for gliding.

"He was constantly pushing forward the frontiers of gliding knowledge, whether it concerned the development of gliders themselves or the meterological conditions which sustain them. While my father's feats of aviation are well recorded perhaps his most notable contribution to gliding was his constant endeavour to enable others to see and enjoy the pleasures of soaring flight.

"During the ten years from 1929 he visited nearly every country in Western Europe giving lectures and demonstrations in the art of gliding and soaring to both Royal families and the public alike. From the experience gained during these years he progressed to evolving techniques on instruction and establishment of clubs, so well recorded in his book Kronfeld on Soaring and Gliding."

Bill Kronfeld added: "In particular his effort played a very major part in encouraging the development of the gliding movement in Britain."

Postcript: Sigi Baumgartl won this event with a 725km triangle. Norbert Kreft was second with a 394km triangle and Günther Woithe third with a 347 triangle. The 20 participants flew a total of 5000km. It is intended to make this an annual event. Bill Kronfeld received, in honour of his father, the Gold Medal of the Austrian Aero Club.

The Silver C "error"

As to the timing of the Silver C, L. A. de Lange, Past President of OSTIV, pointed out to what he called "an historical error which has been perpetuated all over the world for many, many years" when he made a speech in July, 1978, at Chatearoux during the World Championships.

He did some research and found that during the period from December 1930 to October 1931 six Silver C badges were awarded. When first publicised the order was given as Robert Kronfeld, Wolf Hirth, Günter Groenhoff, Kurt Starck, Otto Fuchs and Herman Mayer although later Wolf Hirth, who actually made his first Silver C flight long after Robert Kronfeld's completed his three legs, was placed as No.1.



WEATHER CHARTS BY FACSIMILE

T.A.M. BRADBURY

Gliding pilots often wish that there were up to date weather maps available on T/V in the morning before they plan cross-country flights instead of in the evening. There are in fact many types of weather maps available, if one can obtain a radio facsimile recorder.

This year the National Gliding Championships at Dunstable had the use of a NAGRAFAX facsimile meteorological chart recorder which was provided by courtesy of Hayden Laboratories who are the UK agents for the Swiss manufacturer Kudelski. Facsimile machines are often large and heavy pieces of equipment. The NAGRAFAX is small, compact and portable. It weighs only 11lbs and can run off 110/220 volts AC or from batteries giving 11 to 35 volts DC. Facsimile machines usually give their best results when the signals come *via* a land line but in western Europe very good results are possible using the stations which broadcast on VLF bands. The NAGRAFAX was equipped with a VLF radio synthesiser receiver which fits on top of the recorder. This receiver covers the frequency range from 100 to 200kHz (3000 to 1500 metres). It took its power supply from the recorder and its signals from a fertile bar aerial which was mounted indoors close to the receiver.

When tuned to the 100kw transmitter near Paris the recorder produced charts which compared in clarity with those one would receive on a good land line. Reception was entirely automatic. The set became ready to record within five seconds of switching on the power. As soon as the transmitting station sent out the starting signal the recorder automatically selected the correct scanning rate and then the required line spacing. (These vary from chart to chart; some charts contain fine details which can only be resolved by scanning at slow speed and using the maximum number of lines per millimetre, other charts need less detail and are sent out faster.) At the end of the chart the recorder shut down and returned to stand by. A series of bulbs lit up to show when the set had selected the correct recording speeds.

To receive the many facsimile broadcasts which go out on the H/F bands a stable communications receiver is needed. A private set was used at Dunstable. The set was connected to the NAGRAFAX through the interface which replaced the VLF receiver on top of the recorder. This interface was set to take the required type of transmission (characteristics vary) and had a visual indicator to show when the receiver was correctly tuned.

H/F reception was not as trouble free as the VLF reception because the operator had to watch that the signal strength remained adequate, and change frequency when the signal faded. Weak signals resulted in poor quality charts because of interference, or missed charts because the automatic start could not distinguish the tones.



How the NAGRAFAX was used at Dunstable

The set was usually switched on soon after 0200 and left to provide a set of charts for examination at a more convenient hour. Well before breakfast there was a large selection available. These ranged from analysed surface and upper air charts to forecast charts showing the patterns expected 24hrs later, and the wind and weather at periods throughout the day, generally centred around midday. Charts showing the important weather areas are more familiar to airline pilots than glider pilots but they can be useful to both classes. These charts show the expected positions of high and lows, their central pressure and direction of movement, and the positions of fronts. Instead of the familiar isobars these charts show irregular boundaries marking the zones of weather types which are significant to aircraft. The zones are usually but not exclusively associated with fronts. Some charts refer only to high level flight while others are meant for low levels. Since many of the areas outlined coincide with poor or non existent soaring conditions the charts are worth some study by glider pilots.

By mid morning a new set of charts was available, based on the 0600 observations, and the forecast charts extended beyond 24hrs to 48 and 72hrs ahead. At three hourly intervals plotted charts showing observations over western Europe and the UK were available for analysis by the user.

Some Limitations

Radio fax does not at present provide adequate plots of upper air soundings, or a sufficiently close network of hourly observations. These are only available at more important airfields which have land line reception. At gliding contests teleprinter data is still needed to fill this gap but for much day to day gliding the facsimile charts would be good enough.

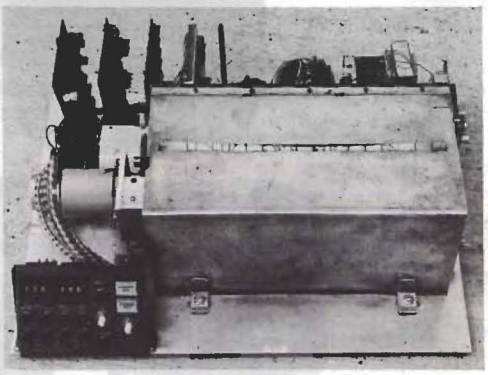
Presentation

The NAGRAFAX produces charts on an eight inch wide roll of metallic paper which is much narrower than the size used at many Met offices. This means that the charts are far smaller than the originals but the definition was good enough to allow even the smallest lettering to be read on almost every chart. The largest charts received fitted into an A4 (foolscap size) transparent envelope which kept the rather delicate paper from crumpling when handed round at briefings. This small size keeps down running costs and makes it possible to display a sequence of charts on a small board.

Usefulness during the Contest

The wealth of information provided by the facsimile charts was very welcome during a contest which was badly handicapped by persistent bad weather. On many days the NAGRAFAX was kept running continuously for up to 12hrs a day as Competition Director and competitors waited for a chance to get a day's flying. Alas many of the charts were far from encouraging. In olden days the bringer of ill-tidings was in some danger of having his head chopped off and even in modern times bad news seldom adds to the popularity of the messenger. After viewing a particularly dismal series of charts Geoffrey Stephenson, the task setter, was heard to murmur that there were some things it might be better not to know. At a more hopeful occasion a competitor (and airline pilot) remarked that the facsimile would be an excellent investment.

Home Made Version



Alan Dibdin of the Cambridge University GC thought he would like to pick up the facsimile broadcasts and about a year ago designed such a machine which took him six months of winter evenings to construct. The photograph shows that while it is rudimentary and he can already see ways of condensing the equipment, it is nevertheless compact, weighs only a few pounds more than the commercial machine described above and, most important of all, works beautifully.

It cost in the region of £150 and Alan, who is an electronics engineer, thinks it is well within the capability of someone similarly qualified to build their own. He picks up the German transmission, runs it every evening and hopes that eventually it will help him spot the perfect Diamond distance day. The paper costs £26 for four rolls and this will give 600 charts.

If anyone is interested in constructing their own machine, Alan, who lives at 52 Sandy Road, Everton, Sandy, Beds, says he is happy to give advice.

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ACCIDENT PREVENTION



The consequences of a wrong decision are occasionally serious – so it has proved this year with two fatal accidents after cable breaks. (See p186 for details.) Here BILL SCULL, BGA Director of Operations, tries again to get the message across.

THE WRONG DECISION

After a cable break or launch failure and with the glider restored to a safe flying attitude the decision to be made – "can I land straight ahead?" is, on the face of it, a simple one. Time and time again pilots who fail to take this option reap the consequences of a turn made at too low a height – they spin in and spinning accidents are rarely survived.

The factors which influence a pilot when he decides *not* to land straight ahead, even when there is adequate space to do so, obviously warrant detailed examination as they are evidently the key to accident prevention.

The critical case

When a straight-ahead landing is marginal, that is there is doubt in the pilot's mind as to whether there is sufficient airfield ahead, is obviously the critical case. For any given circumstance, height and position of the glider after the "recovery"* and weather conditions (wind strength, severity of gradient and turbulence), the skill of the pilot may determine whether a landing ahead is possible or not. If a sideslip is necessary as well as using the airbrakes and the glider ends up fairly close to the upwind boundary of the airfield, then obviously the pilot who cannot sideslip will probably reject the straight-ahead option – especially if his judgment is poor and confidence in his ability is low. If below a certain height the alternatives are hazardous, then it might be better to go ahead with the risk of running into the boundary fence than turning. Certainly in terms of survival the boundary fence is to be preferred to spinning into the ground.

From the teaching point of view practice at "critical" straight-ahead cable breaks is essential. The two problems are taking some risks in the interests of comprehensive training and, at some large airfields, the difficulty of creating realistic situations. If you can land straight ahead for a given set of conditions from, say, 600ft, then obviously the intermediate possibilities of an S turn or a dog leg are inappropriate.

The factors which will increase the likelihood of a pilot taking the straight-ahead option are:

a) confidence in his judgment and the ability to make a steep approach.

b) suppressing the convenience factors – the tendency in most pilots to try and get back to the launch point.

c) reducing the haste with which the pilot acts and takes decisions.

The last point (c) warrants amplifying. The pilot whose training has been less than comprehensive (and that is most pilots) may regard the launch failure or cable break as an emergency but this is not necessarily the case. That it might become one is not disputed but haste may well be the key to the problem. Hasty and reflex actions show up in a number of ways:

a) opening the airbrakes even before the nose has been lowered and speed regained.

b) over-controlling the recovery from a nose-up attitude (too much emphasis on push the stick forward perhaps?!).

c) in some cases turning before speed has been regained or, even, the nose has been lowered.

Patently if any of the above occur then training was wrong and the hazards are great.

The key therefore is for every pilot to realise that if he delays in making the decision to land straight ahead then the height lost and the distance flown is, in all but rare circumstances (see later), unlikely to make the landing ahead impossible. This point is confirmed by most of the spinning accidents following a cable break in which, almost certainly a straight-ahead landing would have been possible. If the accident was a fatal one then the real reasons will never be known; even if he survives they still might be difficult to establish.

Rare circumstances

Perhaps the one situation where delay – while flying straight ahead – could be critical is from some of the smaller gliding sites. If the field is only 800 yards long and the typical launch height in a crosswind 600ft or so, then the critical height occurs sooner and the likelihood of being below a height where a 360° turn can be made safely much greater. It is not relevant here to comment in detail on these circumstance except to say that an "awkward height" cable break might require a less-usual pattern such as a 180° turn (having flown forward some distance first) and also a good possibility of landing off the strip.

One other factor which I suspect is neglected during the launch is maintaining an awareness of the glider's position and height during it by looking out. While during the early stages of an aerotow it is quite easy to say to yourself (and believe it) that "if the cable breaks now I'll land straight ahead on the airfield and now into the field just beyond the boundary etc" the short time, particularly on a winch launch, makes doing this more difficult.

More emphasis on the problems during training, an awareness of the risks if the wrong decision is made and a state of mind which accepts that the cable may break on any or every launch is the way to fly safely. Remember it could always happen to you.

*"Recovery" hereafter taken to mean the return to a normal attitude, attainment of a safe speed and checking this speed.

USE NEGATIVE FLAP FOR TAKE-OFF

DEREK PIGGOTT

Shortly after the first of the Kestrels and Nimbi arrived pilots were still having some difficulties in preventing a wing touching the ground during the take-off in no wind. The word soon spread around that a negative setting of the coupled flaps and ailerons gave better lateral control on the ground run.

At first I was very sceptical and continued to recommend the zero setting because it seemed likely that, if anything, the range of aileron movements might even be reduced by the upward deflection. There was little or no real evidence to show an improvement and I thought that it might just be an impression gained by pilots using negative flap after experiencing a bad swing or ground loop. It is surprising how much quicker pilots will react to a wing drop after such an experience. They seldom get caught out again!

However, while I was at Cambridge trying out John Hulme's PIK 20D on a very windy day I was able to sit on the ground facing into wind and test the aileron effectiveness at all the flap settings. At positive angles the aileron was totally incapable of lifting a wing off the ground. The aileron control improved with each flap setting upwards showing a very clear advantage in using the maximum negative deflection. This effect is likely to be the same for all the present day machines in which the ailerons are raised and drooped in conjunction with the flaps.

The explanation is that with the very small wingtip chords and low speeds at the start of the take-off roll, the wing is operating very close to model aircraft conditions. Although when the glider is on the ground the angle of attack of the wing is well below the normal stalling angle for the aerofoil, the very low speeds and consequent low Reynolds numbers reduce the stalling angle. In this critical situation any large downward deflection of the aileron results in the airflow separating with a resultant loss of effectiveness. Raising the ailerons and so reducing the amount of downward movement improves the situation.

Left hand on release control

The worst conditions where the negative flap for take-off becomes really desirable are when there is a 3 to 5kt wind with a tail wind component. In this case the flaps are set in the full negative position and the pilot is advised to keep his left hand on the release control until the glider has gained enough speed to raise the tail into a more normal flying attitude. By then there is always ample aileron control and the left hand can safely be moved to lower the flap *gently* to help the glider leave the ground. The handling in the air is worse with the flaps and ailerons drooped, giving a lower rate of roll and considerably increased adverse yaw. Of course, on machines with ailerons which are not interconnected with the flaps a positive flap setting has no significant effect on the rate of roll but assists by reducing the take-off distance.

Much depends on the towplane or vehicle giving the launch and these precautions are seldom needed on a good winch or cartow where the acceleration is rapid. Pilots flying these types for the first few times on aerotow are well advised to choose a day with a reasonable amount of wind. The flaps can then be set to zero and no change need be made reducing the risk of pulling the wrong lever and of overcontrolling on the stick.

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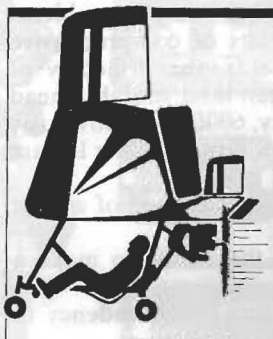
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So, all right, it was nearly a flop. But...



Rhoda Partridge

Autumn 1978 Rowland Greenhalgh was looking for a 15m glass ship. Second-hand. He didn't enjoy that winter. Off every weekend in ghastly weather to inspect possibles. It cost a lot. But, worse, it ate up his precious weekends.

Betty Greenhalgh went with him for company and driving back through the grot, after yet another fruitless quest, she said: "This is a ridiculous way of looking for a second-hand glider. Why don't they hold auctions like they do for cars?" After a brief astonished silence Rowland said something on the lines of "Eureka!" and they set about organising a glider auction.



. . . the joys of Shobdon.

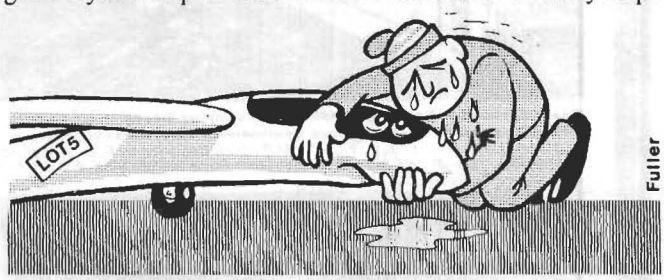
Early spring someone at Shobdon said to me: "What do you think about this glider auction they're organising here?" I said: "But you can't auction GLIDERS!" I knew all about car auctions. (I'd never been to one, but it takes more than a little thing like that to stop me from developing a prejudice.) Seedy men flogging shiny amalgams of three crashed cars with a forged logbook and certain to return to its component parts on the drive home. No, you can't auction gliders. Gut reaction. Tell you what happened.

Rowland and Betty advertised the auction, got bumph printed, circularised the clubs, went to the BGA Weekend and advertised again. April 19 saw the hopeful trailers roll onto the airfield. They contained a Grunau Baby, a Skylark 3A, a Skylark 3B, a red, white and blue Dart 17, and a Sprite (like a GPR K-6E plus). The idea was that prospective buyers should have a good look, compare the gliders offered and possibly fly. The owners had a chance to sample the joys of Shobdon and then, on Saturday, April 21, the auction would take place. Rowland and Betty had arranged for Mr Biddle (a top Midlands auctioneer, innocent of gliding) to conduct the proceedings, armed with a nice wooden hammer.

Marjorie Hobby from Flow Technology turned up with a station wagon full of goodies and price lists. Russell Whigg arrived in a smart van with "Life Support" written on its side and lots of lovely valves, shiny regulators and various shaped oxygen bottles within. Some sightseeing gliding people came on Saturday morning. Club members inspected the goings on. Betty was hospitable with tea and cakes in her caravan.

At one o'clock Mr Biddle climbed onto one of those caravan step things and, hammer in hand and wearing a lovely hat, set about selling. We stood uneasily about, pretending not to be there. It was cold and there weren't a lot of us. Mr Biddle put on a beautiful performance and, by the time he'd finished, I reckoned he'd sold three of the gliders. Which surprised me because I didn't think any buyers had turned up. I was right. They hadn't. So gliders were derigged and hopeful trailers rolled sadly away. Once they were safely out of sight the wave cloud developed up to 10 500ft.

That evening over comforting drinks we discussed the reasons for the failure. What mistakes had been made? Was the idea worth persevering with? Chris Riddell said: "With gliders you're up to the knees in emotion. How can you put



. . . up to your knees in emotion.

that beautiful thing, that kindly creature with whom you've shared so many wonderful experiences, up for auction? It would be like a slave market." Actually he didn't say "slave market" but he forbade me to print what he did say – and he'd just put his Sprite up for auction. Interesting.

From the buyers' point of view it's all too sudden. You would need to think about it and bargain and get some fun out of the transaction. A wooden hammer is too much of a shock. People who came suggested that it should be held near a motorway. Some said that it would make a pleasant annual get together. A chance to look at the market, to see accessories and to have a good gossip. The idea of combining it with a gliding holiday didn't get much support. Too many eager non-buyers anxious to fly new types.

Should it be held in the autumn and give time for a happy winter's fettling, or in the spring? What should it be called? A "sellers meet?" I believe there's a good idea somewhere, it just needs thinking out. Rowland and Betty are game for another try. If you've got any ideas they would be really pleased to hear from you at 28 Lickey Square, Rednal, Birmingham. Rowland is an intelligent chap. He bought my Std Cirrus.

WINTER BAROGRAPHS

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BASIC AIRMANSHIP FOR POD-ENGINED MOTOR GLIDERS

Brenda James

They don't play my accident record at the underwriters ball. Undertakers yes, underwriters no! Nevertheless, having made a lot of mistakes in flying my SF-27MCY motor glider I regard myself as something of an authority on what can go wrong with motor gliders, which is practically everything! As apparently a large number of PIK 20Es plus possibly some Motor Nimbi or other similar craft may appear on the scene before long, perhaps I ought to get some of my experience down on paper.

First the generalities

Motor gliders are gliders of about Std Cirrus performance and as such give a great deal of sport. They soar and cloud fly just like any ballasted Standard Class ship. They are also perfectly good powered aircraft and if you are using them only to get a cheap (50p) launch to 2000ft you are missing a lot of fun.

At a quarter throttle you have 75% revs and can cruise at 70kt for 250 miles at 45mpg. This is a very useful performance and you can visit continental gliding competitions and other gliding clubs very cheaply. Against this is the fact that the engine is very lightly mounted and everything tends to shake loose, so you have a good deal more maintenance to do than with an ordinary glider. It is important to do quite a few long power flights in the aircraft when you first start flying it to get used to the problem of power flight before you get faced with a long retrieve.

The engine should give a take-off run of 250 yards then another 250 yards at 20ft until you get 55kt, which is climbing speed and should give you 400ft/min. I usually throttle back at 500ft QFE to save engine wear and if I find a thermal circle in it and not switch off the engine until I have 2000ft QFE. This is because putting the engine away is a bit of a performance and if you lose the thermal at 1000ft because you are concentrating on getting rid of the engine you have to start the engine, find the thermal, pick a field, decide whether you can get to the airfield etc, which is a bit too much to do all at once. The idea of doing a cross-country, picking a field and starting the engine at 300ft on the approach sounds very nice but if the engine does not start at once you are in a bit of a predicament. I usually decide at 2000ft what I am going to do, below 1000ft I usually land. One can land with the engine running, which enables you to taxi to your trailer or hangar and it is easier to start the engine in the air than on the ground. When you cut the ignition with a hot engine the engine "ticks over" at about 3000rpm, so if you have to bale out go under the wing or you will get chopped up like salame.

Taxiing is a particular joy. Gliding has hitherto prospered on a supply of willing helpers to retrieve, drive winches, take wingtips and the like but this supply shows signs of drying up. Being able to taxi across to the other side of the airfield is another way to make you more independent. In high winds you will need a wingtip runner and also in long grass. Taxiing fast allows the ailerons to work; relatively inboard outriggers still occasionally snag on grass but the turned down wingtips of the PIK 20E only allow taxiing on hard surfaces.

Retractable out-riggers tend to break and they are not very clean when retracted. Mine unscrew and can be dumped at the launch point for contests, the nut being covered in tape so the wing is quite clean. If the brake is applied with one hand, the throttle adjusted with another and the elevator controlled by ones knees on the stick, one can do a 360° turn on the spot in light air which is a nice party trick and sometimes useful, but as indicated it's really a three'handed job. I once taxied into a deep puddle and got bogged down having to stand up in the cockpit and remove shoes and socks before I could step out of the aircraft. Harsh braking with throttle open makes the aircraft tip over onto its nose with some abrasion to the skin beneath it. Tipping right over is unlikely but if it happens you won't be able to get out if the aircraft catches fire, so watch it. The C of G of gliders is behind the wheel so that the tail stays on the ground. If the aircraft yaws while moving across the ground there is oversteer and the tail overtakes the nose in a spectacular ground loop with wings parallel. This feels like a well executed parallel turn while skiing but it can damage the aircraft. This can happen in an ordinary glider when landing or even when being towed off, but the tendency is much worse in a motor glider since the C of G and the point of thrust are further aft.

Spares of anything that moves

If your battery is flat you can't start the engine in flight unless you have a valve lifter, but as my engine does not have valves anyway, it can't be done. Usually you buy a new battery at the start of every season, spares of anything that moves, *eg* prop and engine are a good investment. You need a good tool kit in the glider including a 12v soldering iron and a volt ohm meter, since electrical connections tend to come unstuck due to vibration. The best barograph arrangement is a Bowden cable from the engine strut to a lever machine on the smoked drum which records when the engine is out. You can't run the engine in the fuselage, at least not for long, so this usually satisfies the official observer.

Always make sure that the engine brake is off when the engine is running as this way you get more engine revs and you can use it to stop the prop when you cut the engine. The general drills for take-off engine stop engine restart etc are very much like Cardinal Puff, so you need mnemonics. Mine are TMFGCH then CBSITCB which are the standard power and glider take-off vital actions. I once forgot that I was flying a glider and did the first drill and not the second and ended up taking-off (just) with the dive brakes open. As you use the dive brakes a lot for taxiing and running up the engine this is an easy error to commit. Finally I say BBC (Barograph Brakes Canopy) so it all gets pretty obsessional. The engine must be locked out otherwise it will dive back into its little kennel when you throttle back. With the prop stationary this won't happen as it has less drag than a

running one. (I have done this experiment, so I know.)

To start the engine first thing in the morning I chock the wheel and stand outside the cockpit; this is very bad airmanship but if you put on the chute, get strapped in and then the engine does not start it is an awful sweat to have to get out again.

You can save on the battery by parking your car across the nose of the glider and connecting the two up with jumper leads. A shower of sparks shows that you have got the connections wrong. When she fires she surges forward and a collection of dents in the side of my car is a tribute to the efficacy of this procedure.

I often use "easy start" (an aerosol can of ether) for the first start. After a hundred turns or so the carburettor usually gets itself primed – a bit lazy but it works. Never carry it in the aircraft; a can of ether on board is just more than one's nerves can stand. Another way to prime is to turn the prop while your hand is over the intake. There should be enough suck to get any oil out of the carburettor and a look down the intake shows that the fuel is flowing. The engine on its pole is beautifully accessible once you have removed the carburettor fairing and thrown it away, so you would be crazy not to inspect it carefully every day to make sure nothing has fractured, unscrewed or fallen off.

Engine maintenance should ideally follow a long period of apprenticeship on worn out Flymos and other clapped out lawnmowers (which I have had). To get the engine to start you need three things; compression, petrol and a spark. You turn the prop by hand to feel the compression or looseness in the big ends. If it is the same in both cylinders it is probably OK. To see the spark you will need to use the starter to turn her over as with modern transistorised ignition nothing much happens below 500rpm. To see the petrol you use the means described above. If petrol does not flow, strip the carburettor and spend the next hour on your hands and knees looking for screws and springs in the long grass. The engine runs on 4% oil in petrol, so if you lay it up, the petrol may evaporate leaving oil in the carburettor. The answer is to turn-off the fuel and let the engine run down under power until the carburettor starves dry. I carry a polythene funnel beaker and gallon container plus a 1in plastic pipe 6ft long stuffed down the tail behind the engine's little kennel to mix oil with the petrol which I syphon out of a convenient car. Oil (not necessarily two-stroke) is usually available only in gallon cans so it is worth carrying that on board as well.

The tail is very heavy so that the aircraft does not tip on to its nose when you open the throttle. You must, therefore, expect the aircraft to be a bit of a handful in a spin. Don't spin and don't cloud fly if you have any fears of getting into a spin.

With negative *g* the loads on the engine catch are the weight of the engine plus the force exerted by the gas spring. Negative *g* manoeuvres must be avoided.

When you restart in the air do have a definite drill as you can easily leave the fuel switched off. I once found that the fuel line had become disconnected at the carburettor, but as the electric fuel pump was running enough fuel jumped the gap to keep the engine running very nicely. Silicone rubber usually sold as pond sealer at pet stores is a very useful material, being a convenient way of locking nuts, sticking things and damping down vibration. At first you often find

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instruments unscrewing themselves from the panel and falling on your lap, and a Bohli compass is difficult to mount in such a way that it does not shake itself apart. Silicone rubber on all the nuts and screws stops them unscrewing but is soft enough to break down when you wish to take things apart. A proper 360 channel ten watt set is well worth while but by the time you have installed this, plus an AC system to drive the rev counter and the engine hours, plus all the DC electrics for fuel pump, ignition, starter and ignition cut-outs instruments etc, you have a very complicated electrical system which you simplify by using different coloured wires for everything. When someone resprays the inside of the fuselage you are back to square one.

Vibration breaks wires away from their soldered joints so leads should be supported and vibrating parts damped down with a lump of silicone rubber. Certainly you need a circuit diagram drawn on a card in the aircraft and written in a work book which is carried on board. I once delivered a baby and told the mother it was a boy when in fact it was a girl. This was absentmindedness not tact but subsequently I have always written things down and ticked them off. The result is that if you go continental touring you need a lot of paperwork in the cockpit, the grey book, maps, C of A, insurance, passport, logbook etc, etc, plus sleeping bag (as a cushion), washing things, shaving things, pyjamas (I am a prude) and you can even rig a sort of tent over the staked down wing and sleep in there.

The tool kit has to be pretty comprehensive, spare plugs, plug spanner, set of small spanners and socket set light weight (13A twin core), jumper leads, screw drivers, plastic tape, penknife, small spares (nuts, fuses, screws, Schrader valves etc), plus a check list for everything. In fact it is beginning to look more like a job than a recreation with the nasty feeling that six gallons of petrol can come pouring over your shoulder and set itself alight if you make a serious blunder.

The amount of time required to work on the aircraft on the ground is high in relation to the amount of flying you do and in relation to the amount you would do on an ordinary passive glider, so you really need a hangar rather than a trailer. Even filling up with petrol takes about 30 minutes if you filter the petrol. The fuselage is very heavy with a high CG, particularly if the tank is full, so great care in rigging and derigging is required, also the fuselage cradle needs to be very strong, otherwise it will land on its side and petrol and accumulator acid will slop about inside.

I feel the petrol tanks must be put in the wings as the extra two feet away may make all the difference. The subsequent plumbing will be a bore to make fool proof but unless this is insisted upon I feel there is going to be a long series of nasty accidents.

It is a great advantage not to have to wait a long time on the grid for a tow, to motor to another club on an overcast day or to motor back from a long gliding cross-country.

Motor gliding is a very good training in general airmanship – there are not many commercial pilots around who have installed their own radios, changed an engine and performed their own C of A, nevertheless for sport many pilots might prefer something a little less demanding.

Contents of A/C Toolbox

Locking wire, Spencer Wells Artery Forceps, spanners, screwdrivers and nylon pot scourer (for getting insects off leading edge), Schrader valve inserts, caps, tool and extension. Spare plugs and plug spanner. String. VOM 12 soldering iron, electric wire and spare connection. Small mole spanner, penknife and file. Fuses, solder and tyre pressure gauge. Large pads of paper tissue, as your fingers usually get oily and dirty when you work on the engine and you don't want to get oil all over your maps and knee pad etc. Thin polythene tape and sealing tape for wing roots.

DRILLS

Take-off	**T**rim neutral throttle friction tight
	Mixture fully rich magnetos both on
	Fuel on and sufficient for flight (flaps)
	Gauges (and glider)
	Carburettor cold. Canopy locked
	Hatches and harness
	CBSITCB (you already know)
	Finally **B**arograph. **B**rakes. **C**anopy
	Check airspeed to 45kt
Engine off	**C**heck engine locked in up position
	Throttle back
	Cut ignition
	Apply engine brake
	Using mirror and starter bring prop into vertical position
	Wind engine down into kennel and check that it is locked down
	Fuel off, check fuel pump off
Restart in air	**C**heck airspeed to 45kt
	Fuel on, fuel pump on master switch check on
	Unlock
	Wind up and lock in up position
	Throttle open
	Ignition on
	Press starter and pray

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THAT'S IMPOSSIBLE!

PAUL WHITEHEAD

"If something can go wrong, sooner or later it will." With apologies to a man named Sod, that sentence applies to all walks of life and gliding is no exception. If the right series of circumstances occur at the same time the seemingly impossible can happen. For example, we all know that after release on a winch launch the cable drops to the ground. Something to do with gravity I believe, but the point is that it never goes up. Never?

Not so long ago a low hours pilot was taking a young passenger on his first flight. All went well until at 700ft when the pilot was forced to lower the nose and release to prevent the T-21 entering cloud. He was then somewhat surprised to see the parachute flash past him, still going up, closely followed by 20ft of launching cable. Surprise turned to alarm as the whole lot draped itself over the port wing, a mere 4ft from the cockpit.

Glider began to roll and yaw

Things continued to happen rapidly as the weight and drag of the cable with its parachute caused the aircraft to roll and yaw left. The resultant 70° of bank had the beneficial effect of allowing the cable to slide down the wing towards the tip.

Unfortunately the lever which makes the aileron move on the T-21 is exposed and it was this projection which halted the launching cable on its journey towards the wingtip. Thus frustrated, it changed direction and began sawing into the leading edge until stopped by the main spar (while all this was going on the glider had entered a steep spiral and at 400ft had turned through 180°). Something had to give and the aileron operating lever snapped off.

The cable, now free once more, moved towards the wingtip and detached itself in a cloud of sawdust, taking with it a substantial piece of leading edge. This left our pilot at 200ft with the relatively easy task of continuing the turn for another 90° into wind and arresting the high rate of descent. The not so easy bit was rolling the wings level with one aileron in order to complete a landing near the winch.

So how did the impossible happen? Like most accidents it was a combination of factors which made the parachute assume the aerodynamic properties of a kite and rise above the glider.

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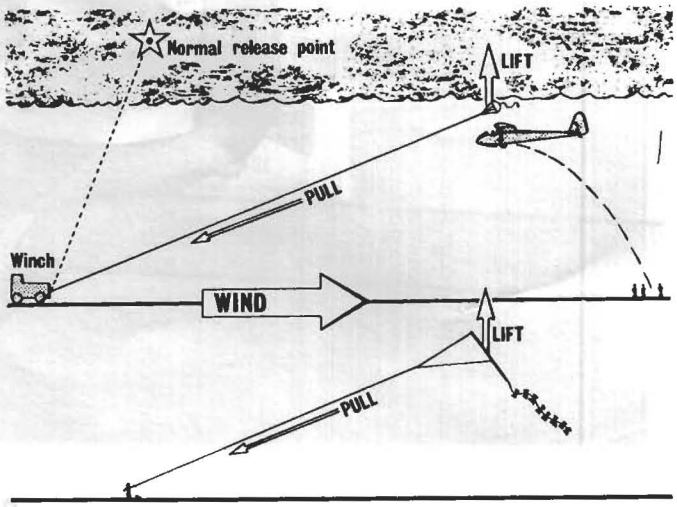
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First the parachute (a standard ex-ejection seat drogue as used by many clubs) didn't have a knot in the rigging lines. This knot would have prevented the canopy opening fully and presenting a large surface area to the on-coming air. It is interesting to note that the Air Cadets only use this parachute with a knot in the rigging lines 33ft from the edge of the canopy.



Secondly, the winch driver was pulling in the cable at high speed for several seconds after release. This ensured that the parachute opened quickly and provided it with the speed it needed to generate lift. If the throttle had been closed when the glider released, the cable would have fallen normally.

Thirdly, the glider was no longer climbing. Finally, because the launch was terminated by the pilot to avoid cloud, he was not over the winch. Indeed he was only about 30° above the horizon to the winch driver. This put the parachute into a position whereby it had an angle of attack to the relative airflow, which is just how a kite develops its lift.

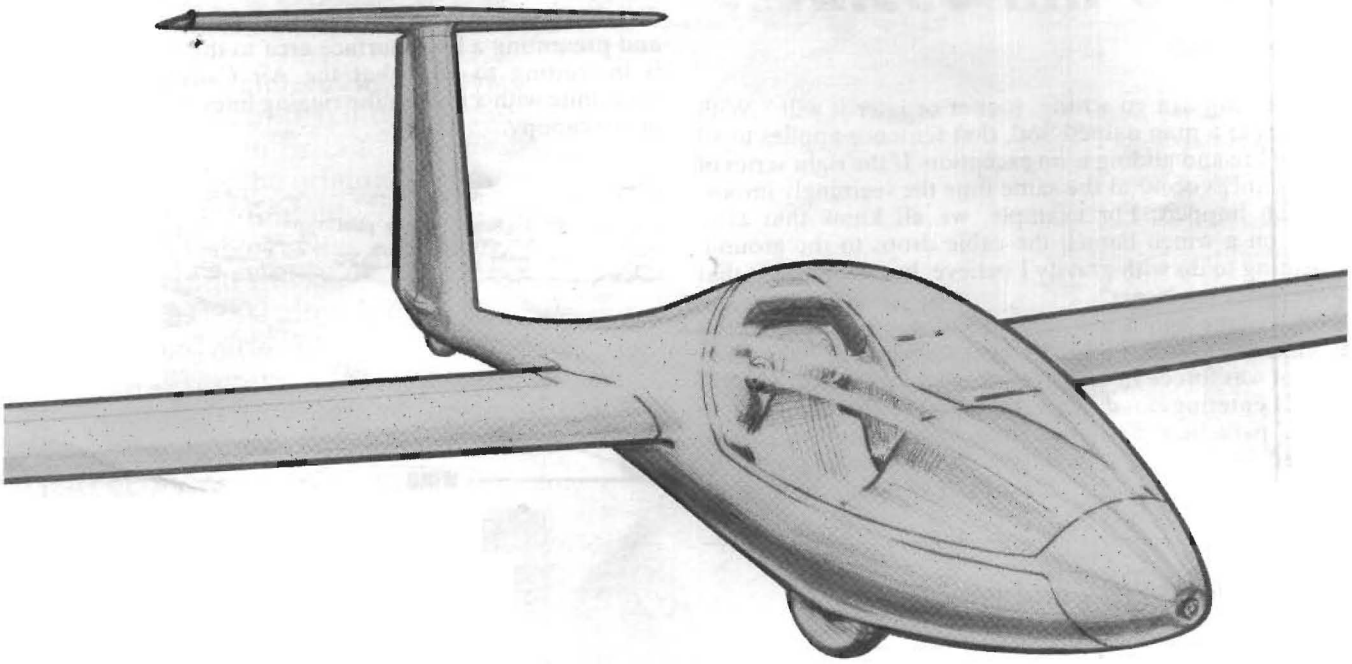
Throttle opened too late

There are several different occasions in daily club flying when the pilot needs to release the cable before the top of the launch – simulated cable breaks, excessively fast launching as well as the example given. In all of these the winch driver is happily pulling in the cable quite rapidly at the moment of release. Another example may be the abandoned slow launch when the winch driver opens his throttle too late, *ie* after the glider has released.

It is difficult to know how to prevent a reoccurrence of this kind of accident. A higher standard of winch driver training would ensure that power is cut immediately the glider releases. Knotting parachute rigging lines would seem to be essential. Although this accident occurred with an ejection seat drogue, any efficient parachute is equally at risk. I have seen one club (civilian) using a Phantom brake parachute which seemed to me to be a trifle risky. Unfortunately less efficient parachutes would defeat the object of putting them into the launching cable. I wish I knew the answer.

The final word must go to the young passenger. He thought it was great and when could he do it again, please?

...ANNOUNCING...



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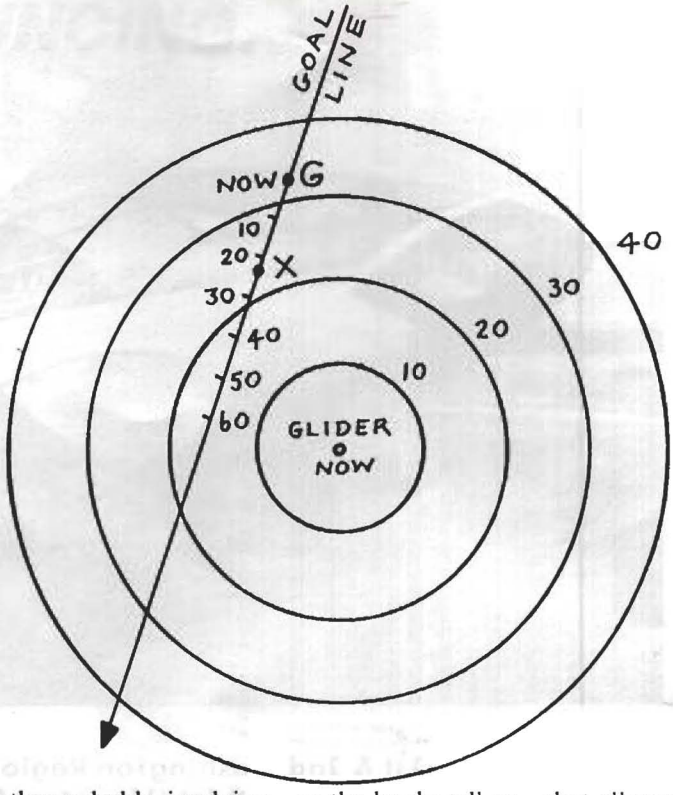
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Final glides on windy days – THE ARM-CHAIR PILOT



Everyone knows that the best-speed-to-fly theory applies whatever the wind, because it is obvious that to make the highest speed over the ground one cannot do better than make the highest speed through the air. But what happens on the final glide? Does the standard theory still apply, even though relative to the air the goal is a moving target on account of the wind?

The common calculators and the books both assert that the theory still applies, but argument is hard to come by. Thus the **New Soaring Pilot** says (p273) "In the presence of a headwind, the details become rather more complicated. Equation (16.31) still relates the optimum gliding speed to the rate of climb and the wind does not appear in this part of the calculation - a result which involves about a page of mathematics to display formally."

Now if after a page of mathematics the wind cancels out of the equations, the Arm-Chair Pilot wants to know why. Here is the argument that convinced him.

Consider the situation relative to the air, so that the goal (G in Fig 1) is sliding past. You are climbing in a thermal at four knots. The circles in Fig 1 show how far you can go through the air, arriving at ground level, in 10, 20, 30, . . . minutes from now, if you use the best-speed-to-fly theory (and you certainly cannot do better, through the air). The marks on the "goal line" show how far the goal has drifted in 10, 20, 30, . . . minutes from now.

Look at the point X, where the x-minute ring intersects the goal-line at its x-minute point. It shows that 23 minutes from now you can be in a bit of air at ground level just as the goal drifts by! But it also shows that it is impossible to arrive at the goal any earlier, because to do so you would have to beat the best-speed-to-fly theory. So the standard theory holds, implying – as the books tell us – that all you have to do on windy days is to adjust the height at which you leave the last thermal to allow for the wind, but not to adjust the speed. The calculators do it for you. It is just like catching a bus: whether the bus is stationary or moving, it pays to run as fast as possible if you want to board it as soon as possible.

A final twist is to consider what happens if the rate of climb is falling off in the last thermal. According to Arm-Chair Pilot theory, you must leave the thermal the moment you have the necessary height to reach the goal flying at the best-speed-to-fly appropriate to the rate of climb at the moment of leaving (recall Rule 2: set the MacCready ring at the critical rate of climb). But on Fig 1 the circles would then not be equally spaced, the outer ones crowding together. The argument would clearly still apply, however, and Rule 2 triumphs again.



HOW TO GO SOLO AT 15

PETER IRVING



Peter with Brian Richmond

I first started to learn to fly gliders at the Newcastle and Teesside Club (Carlton Moor, North Yorkshire) when I was 11 years old, which was as soon as my legs were long enough to operate the rudder pedals. Since that time I have had over 250 launches, most of which were with my friend and instructor Brian Richmond. In October 1978 I still had to wait a further 14 months before I would be allowed to fly solo in England. At that time, however, we had the good fortune to have Werner Müller, a member of the German National Club team, visit our club and during the evening discussions I was delighted when he suggested I should visit his club in Germany where the age limit for solo flying is 14 years.

Naturally I was interested and excited and Brian and I spent the long non flying weekends during the winter months planning our trip. The excitement began to build up as Brian and I set off on Wednesday morning, April 11, for Germany. On the Thursday morning before Easter I found myself in Friedeberg, Germany, starting a ten day gliding holiday. I was immediately made welcome at Werner's home by his wide Edda, and son and daughter, Jan and Meike, both solo glider pilots and not much older than myself.

On the first day at the Waterkant GC after three check flights with the duty instructor, I was told to take the K-7 round on my own. This I did with a feeling of excitement and pride. I had to keep glancing at the back seat to convince myself no one was there. Upon landing I expected the usual congratulations and remarks, which is normal at my own club, but nothing was said except the instructor told me to take two more launches straight off. Surely I thought my flight was worth more comment. Other than the odd slip or skid, which I am sure no one would notice, everything went smoothly including the landing!

After the third landing however, things started warming up, especially my backside! I was grabbed and tanned by everyone on the field (about 30 people), while held in a bent position by the strongest person. I think I still have the marks to prove it. Then I was presented with a bouquet of twigs and had my hand shaken by the same 30 people, after which I had my German A badge pinned on my jersey by the CFI – I was initiated.

During the rest of my holiday I attained my B and C badges, flew the K-8 and the K-6CR, managed to get 25 solo flights and 6½hrs soaring. Both my friend and myself were interviewed by a reporter and there was an article and photographs in the local German newspaper. In all a most enjoyable and unforgettable holiday. Now roll on next January when I will be able, hopefully, to fly on my own, once more.

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DUNSTABLE, MAY 19-28
THE 1979 NATIONALS

A personal view by JOHN WILLIAMSON (MAGPIE)

May 19-28, 1979, signalled, for me, the end of a private legend. Dunstable has been my golden place – hot sun; fast flying; exciting finishes; day after day of tasks which extended happy-tired pilots to their limits. The legend is broken. Blown down by gales. Trodden into the mud of the camp site. Dissipated by the long weary wait for something to happen!

Tom Bradbury, contest meteorologist, sums it up. "Except for the very first day the competition weather was controlled by a block giving warm anticyclonic circulation over western Russia and a cold cyclonic flow over the British Isles and Western Europe. For more than a week the flow of upper winds showed a deep slow-moving depression centred just west of the country. This system steered a series of surface troughs and lows across England, resulting in an alternation of thundery showers and periods of more prolonged rain. There was much less sunshine than usual and, except for the first Saturday, there was some rain every day. The nine days' rainfall exceeded nine inches."

Practice

How much practice does a pilot need? This was to be my last Nationals under the aegis of the RAFGSA so it was to Bicester that I went to get a few hours practice. The ship – that most prestigious of AWS-17s, flown by George Lee in Finland and France. I hadn't flown her since the Nationals of 1977 but ten hours and 750km in three flights restored our mutual co-ordination and honed clean the rusty spots. Ralph Jones had flown and won a regional contest already: John Delafield had hardly flown at all. He dusted the gel powder from his hands at 5pm on the Thursday evening and declared himself ready for the fray two days hence. His half-completed carbon fibre Nimbus had left the factory only weeks before, and he completed it virtually single-handed in the evenings after commuting home from his London-based job. His new computor-vario had arrived from America only that morning!

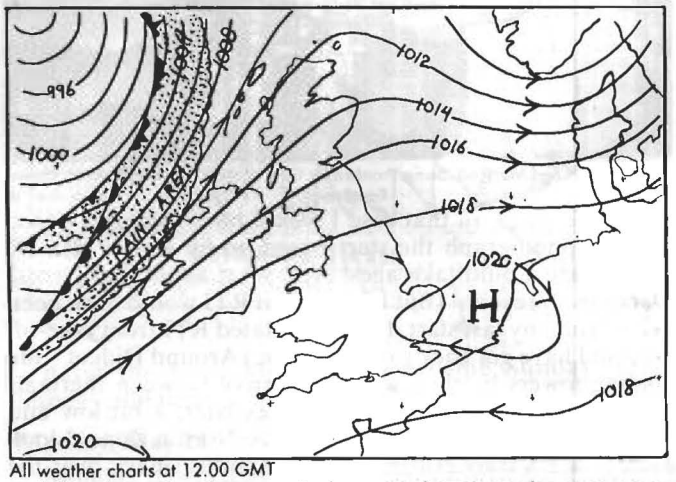
Arriving

The customary babble of greetings as old frields gathered in the bar, wrestled with the booking-in procedure, sorted out caravans and tents. A notice chalked up at 10pm "Rig early. Tow out straight after 09.30 briefing." Magic! Dunstable comes good again!!

Saturday, 19 May

The day dawned clear and bright. Bubbles were in the air and the weather forecast confirmed all that we hoped to hear.

Tom Bradbury: "A ridge moved across England and developed into a small anticyclone. The subsidence inversion limited convection to about 5500ft but below the inverson thermals were moderate to strong in spite of the arrival of pre-frontal cirrus. Many thermals were marked by shallow cumulus."



All weather charts at 12.00 GMT

After introductions and the opening speeches we were told by Tom to expect cumulus by 10.30, but that there was a threat of cirrus from the north-west. Geoffrey Stephenson set 65 pilots in the three Classes to fly 408km – south-west into Somerset, then home *via* Shakespeare's Stratford and Husbands Bosworth airfield. The 20-strong Standard Class (which also hosted a couple of SHKs) was to go first, followed by the 22 in the 15 metre, with the 13 Open Class sweeping up the rear. Ten thirty comes and goes. No cumulus but John Jefferies reports soarable to over 3000ft. We wait. The radio chatter begins as club pilots all around set off on 300 and 500km flights. Still no cumulus. Tom reports a mid-morning sounding from Larkhill which indicates a strong inversion has developed which is restricting convection. JJ still soars happily and easily. We wait. At 11.45 the Standard Class is at last launched, to fly the fall-back task of 256km. South-west, but only to Didcot, then complete the original quadrilateral. The 15m Class goes at 12.15 and the Open at 12.45, both also on the shorter fall back task.

Mike Throssell (SHK) is credited with the first contest start at 12.24. Just under 90 minutes later Ralph Jones (Nimbus) is the last to leave. Cumulus are visible to the north-west but so too is the encroaching cirrus and most of us hurry away to be sure of getting back before the thermals are affected by it. Rika Harwood, with her band of start-line spotters, sends us efficiently on our way, her sing-song radio style very clear and precise. Some minor fumbles ensue as impatient pilots queue up to go through the "gate". Radio interruptions by non-competing pilots are mercifully few. I doubt if anyone not immediately concerned could bear to stay tuned to 130.1 whilst a Nationals start is going on!

****

Magpie's day: "Out on course I feel I have made a mess of the short first leg. Beyond Aylesbury I nearly turn back but think I may not get back before the Recognition Time



John Hands, Chief Marshall, being thanked by Carr Withall, Contest Director. Photo: Ray Brown.

Interval expires. In that case I would have to dump water, land, re-photograph the start board, re-fill water, take-off and restart. Could take ages! And what about that cirrus? Decision – press on! (But I forgot that RTI would have been taken from my last start. I had calculated RTI from take-off – I could have got back easily, in time.) Around Didcot – the cooling towers belch steam but I arrive between thermals and miss the 'boomer'. Five minutes later, a bit low and having to divert to go round the Brize Norton Zone, I look back to see a truly powerful little cumulus smack over the towers and a twinkling of glass wings. The pack is coming!

Hurry – under cumulus now – across the Cotswolds to Stratford. Thermals average 4-5 kt so set speed ring and fly at 95 – 100kt on average. Keep overtaking Kestrels on the glide but find they are still around in the next thermals. I am flying too fast but the penny doesn't drop and Hamish Brown in his elderly Kestrel stays with me past Leamington, round Bosworth and across Northampton where we pick up a strong one to about 4000ft. It's all downhill now, with rows of cumulus to beckon us on to Dunstable and the high cloud in retreat. Hamish somehow beats me home by 20sec. We have done about 99km/h but five minutes later Bernard Fitchett gallops in having flown, at 114km/h, the fastest ever closed circuit contest task in the UK! For my money, and on his day, he is without peer in the world!"

****

A very early arrival had been John Cardiff (ASW-20) but he quickly realised that he had mistakenly missed out the third turn point and so would earn distance points only to the second, Stratford. At 15.55 he set out again in a belated attempt to salvage something from the day. Meanwhile, by 16.30, virtually all competitors were home, except poor George Crawshaw, whose solitary telephone call in early afternoon was the sole action of the day in the retrieve control tent. I could commiserate, having been in that horrid position myself, twice last year!

In the shadow of Bernard's brilliant flight three other Open Class pilots – Chris Garton (Nimbus), Steve White (Jantar) and Ralph Jones – topped 100km/h. In the 15m Class Rocky Stone (Mini Nimbus) had made a great comeback to his old form, by completing at 101.5km/h. Brian Spreckley (ASW-20) did 100km/h. Ted Shephard (Cirrus 75) won the Standard Class at 87.8km/h with Tim MacFadyen (SHK) in hot pursuit. Ted's was his first day win in 25 years of competing in Nationals. As he put it himself it

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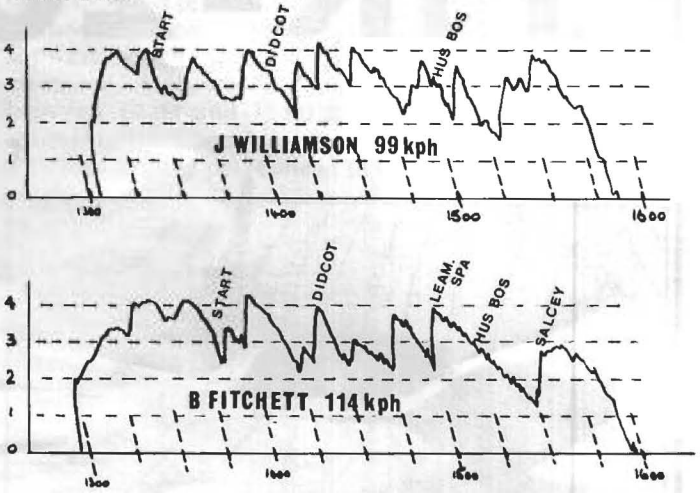
Ted Shephard in triumphant mood. Photo: Ray Brown.

was nice to find his true form at last! In all the excitement he had forgotten to switch on his barograph but got docked only ten points for this nominal infringement. At last, shortly after 19.00, John Cardiff got back safely, to score 620pts. In all he had flown 481km, and when a local soaring



John Cardiff who later became a day winner. Photo: Jane Randle.

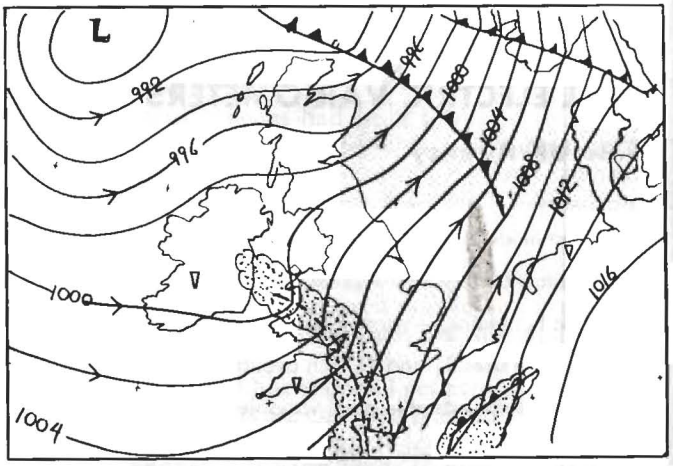
Kestrel floated to earth at 20.30 we knew we had missed a potentially very big day indeed. As it was most people were content that we had opened with a successful, albeit short race. The irony is that a short race on a good day effectively devalues itself because the spread of scores is so small. The Open Class spread was 350pts, with Bernard 100pts in the clear. The 15m Classes spanned 370 and the Standard 520pts. The margin of Bernard's win was so great that it was important to find out how he had done it. The answer was a classic piece of careful dolphin flying. He flew on average 20kt slower than I did (our wing loadings were identical) and, by thus conserving his height, he needed to stop for only seven significant thermals to my ten. He also caught the Didcot "boomer" which I had missed. The *piece de resistance* was a 70km run from 4000ft at Leamington Spa, round Husbands Bosworth, over Northampton and on to Salcey Forest where he arrived at 1500ft, theoretically needing 3000ft for a final glide commensurate with the strong conditions. Having taken what he needed he then flew along a further street which left him well above the ideal final glide. When I tracked him down in the barograph room he was ruefully wondering whether he had in fact "blown it" by stopping at Salcey! The comparison between our barograph traces, seems interesting enough to include them here.



After the Lord Mayor's Show came Sunday, soggy Sunday and then . . .

Monday, May 21

Monday dawned as wet and miserable as Sunday, but a front cleared through at 08.30. Tom Bradbury: "The task area lay between a retreating cold front which had given about an inch of rain overnight and an approaching trough. The area of showers ahead of the trough expanded into a 60 mile wide belt of overcast skies with rain which reached the turning points earlier than expected."

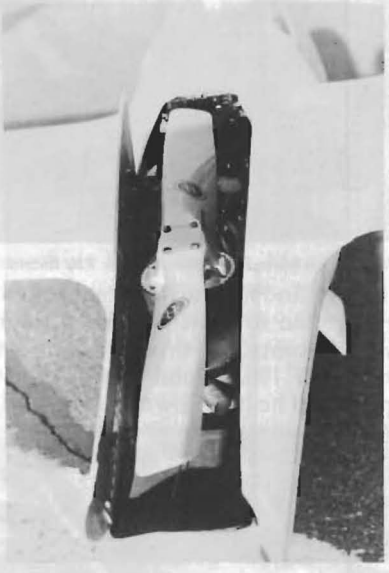


Carr Withall, the Contest Director, was cautiously hopeful that some flying would be possible even though the next trough was due in mid-afternoon. The Open Class was nevertheless stood down and the 15m and Standard were required to form a launch grid and report back for rebriefing. Geoffrey set a 150km out and return to alternative turning points Thurlaston, Lutterworth or Husbands Bosworth. The 15m Class launched first, at 12.40, as the cirrus from the advancing trough was beginning to thicken overhead. Many pilots dumped their water on tow and quite a few needed relights. By 14.00 both Classes had launched and most had set off to the north. Then it started to rain at Dunstable with eight pilots stranded on site, waiting in the

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Nick Hackett, Standard Class Champion, thanking the organisers. Photo: Ray Brown.

hope that the trough would clear away before the last launch deadline of 18.00. In fact the rain stopped at 16.00 and by 16.45 it looked hopeful. Gordon Camp (Std Libelle) led the way and by 17.05 seven had gone. Tony Hanfrey (Mosquito) decided not to bother.

Meanwhile the retrieve control tent, deserted on Saturday, was a veritable beehive this day, with Joan Hiscox and Elspeth Newport-Peace valiantly keeping the paperwork in order, listening to plaintive pilots over the noise of chattering spectators and sometimes making heavy weather of some of the place names. Joan thought it just as well the turning points weren't in Wales!

Most people had landed within 10km or so of the turning points but it was difficult to know whether coming or going. None of the seven late starters got very far although Gordon Camp *did* score. Neither of the first day winners did well. Rocky got zero and Ted only half the day winner's points so that the overall lead changed hands in both Classes. Day winner Nick Hackett (Jantar) took over pole position in the Standard Class while Brian Spreckley did well enough to top out in the 15m, keeping day-winner Simon Redman (LS-3) in third place overall. Malcolm Wilton-Jones (Astir) took second place for the day in the Standard Class, having turned Lutterworth. He damaged his wingtip when it struck a steel pole which had been thoughtfully added to his field as the first stage of an electric fence. He wasn't the first pilot to come to grief in the field - a large monument in one corner commemorated a previous notable aviation event. *"HERE FELL PERCY PILCHER 1899"*

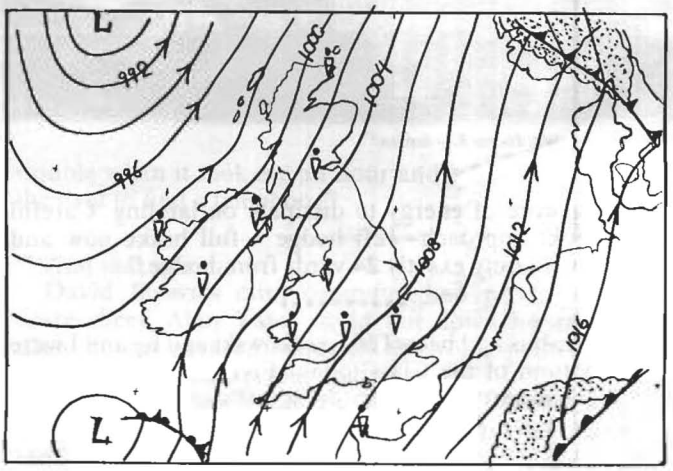
Sixteen pilots dropped in for tea and buns at Husbands Bosworth. If some of them had turned any spare height into even a short distance towards Dunstable the overall scoring in the 15m Class may have been very different. "Y", the qualifying distance which determines the maximum score of the day winner, was only 1.5km south of the airfield, and Simon's score might have been substantially greater had some of his rivals glided it out to the bitter end.

Rika sat, slightly wind-blown, under her umbrella until after 18.00 - "just in case!".

Tuesday, May 22

Yesterday's struggles were forgotten as Tom told of moderate SW winds, 6/8ths cu with bases rising to 4000ft by mid-afternoon. If he mentioned showers I wasn't listening! Optimism had set in!

Tom Bradbury: "Fresh SW winds brought numerous showers which turned into thunderstorms during the afternoon. A shower-free gap made it possible to launch between 14.00 and 15.00 but a line of thunderstorms extending from South Wales to Birmingham reached the Stratford turning point ahead of competitors.



Geoffrey set a 306km triangle for Open and 15m Classes, with a fall back to 206km if necessary. Standard Class got the 206km triangle as primary task, with fall back to out and return Butterworth, 156km.

John Hands required us to form grids without delay; Tim Newport-Peace on the public address prompted us in due order to proceed from the trailer park. Actually the wind picked up considerably and it was soon evident that Tom had been optimistic.

By midday all Classes had been relegated to fall back tasks and by 13.00 Open and 15m were summoned to rebrief - out and return to Stratford, 175km. Launching started soon after, with the Open going from hangar ridge.

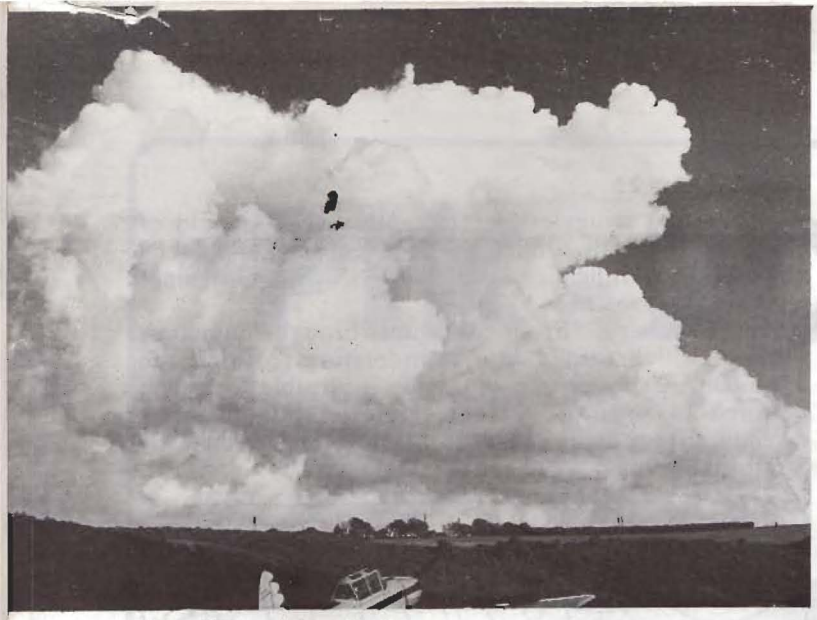
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Magpie's day: "Odd, sitting in cockpit just behind the ridge, watching the glider in front plunge out of sight only 20 yards away! Hope the tug pilot can see what's in the hollow!

As soon as the start line is open I get going. The thermals are strong and showers are expected later on. No one delays much but I am in the first gaggle to leave.

It's easy enough but wind tends to blow me eastwards. Soon we are past Buckingham. Brackley now, and the first of the big cumulus looms ahead. In five minutes it'll be raining, so quickly under it at Banbury - 1500ft or so but it should be all right. People behind might have trouble though.

A Nimbus, ahead and above, leads me on but somehow we miss the lift and press on into sunshine. Suddenly quite low - no thermal - ground is awfully hillocky here - maybe get across escarpment north of Edgehill. The Nimbus has long since disappeared and my concern is to clear the trees on top of the ridge. At 100ft below, the trees writhe in the fresh wind, and then an extra 300ft as we go out over the valley. A bonfire confirms the wind is along the hill. More turbulence - quick, a field! The ASW-17, at over 1000lbs,



A promising start! Photo: Ray Brown.

has a big store of energy to dissipate on landing. Careful circuit, 50kt approach- 12ft hedge - full brake now and touch down safely exactly 24 yards from hedge."

****

The Nimbus had been Ted Lysakowski and he and I were at the bottom of the Class today! Five got back but only Bernard Fitchett seemed to do it without any particular difficulty. Even so he took over 2hrs, at 85km/h. Again Chris Garton was second, with John Delafield third. Mike Carlton (Nimbus) and Ralph Jones were the others.

In the 15m, Dave Watt, flying the first French-built AWS-20F, struggled gamely for nearly four hours to get home at 49km/h. Andrew Davis (Mini Nimbus) was second, 25km short.

In the Standard, Jeremy Wheeler (Cirrus 75) - like Ted Shephard a veteran of many a Nationals - was day winner, very convincingly, when he fell only 15km short on the way back from Lutterworth. Nick Hackett, Mike Throssell and Tim MacFadyen shared second place, more than 50km further back. The day scores in each Class were devalued by the rule that allows not more than 5pts per kilometre flown. Thus the effective limit is set by the furthest non-finisher, with speed points added as a bonus for those that *did* finish.

Wednesday, May 23

To the roar of a gale and the patter of rain, task flying was cancelled after a delayed briefing. A "Comps" forum was staged by Gordon Camp and his Competitions and Badges Committee. The Open Class was declared obsolete (by 15m devotees!) and the ridge pole of the marquee snapped very loudly in a vicious gust, which effectively terminated discussion. When the gales subsided I flew a Grunau Baby on the hill for an hour! Marvellous!!

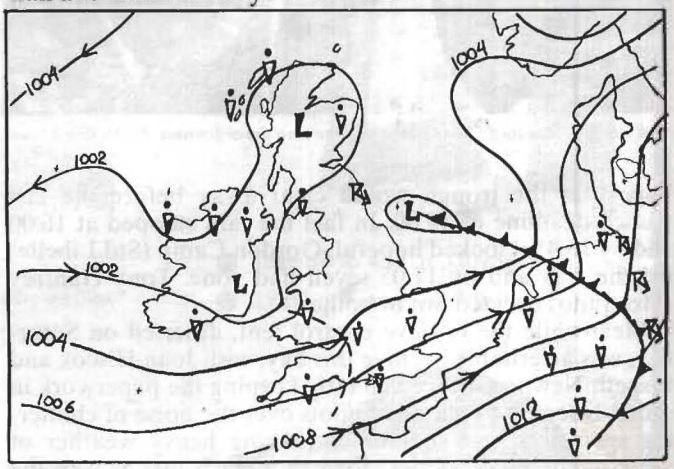
Thursday, May 24

Tom today promised a slacker wind gradient but warned that this may only mean that when the showers arrived they would stay much longer. They did. Tasks were set, and JJ soared for two hours but the local overcast persuaded Carr that we couldn't fairly be sent off. When we were finally stood down one or two pilots got some good cloud flying practice.

Friday, May 25

The optimists, clutching at straws, were encouraged by the BBC in the early morning forecasts and again at briefing, when 190 and 160 triangles, with a choice of second turning points, were set for Open/15m and Standard Classes. We all had to go first to Caxton Gibbet, and then Open/15m to Husbands Bosworth or Stoke Dry reservoir, Standard to Pitsford reservoir or Kettering.

Tom Bradbury: "A week ridge delayed shower development until late morning but yet another trough moved in from the SW bringing numerous heavy showers with some hail and thunder early in the afternoon."



Ropehandlers Rory, David, Phil and Rob did their stuff and the Classes were efficiently launched in the order 15m, Standard, Open. Nobody was keen to hang around to test the thermals. The threat of yet more rain was spur enough. The 15m Class all departed between 11.44 and 12.19; the Standard between 12.00 and 12.19; the Open between 12.21 and 12.53.

****

Magpie's day: "As Rika opens the Open Class flood gates I am poised perfectly for a start. Away at once and dolphin downwind towards Caxton Gibbett. Henlow, Old Warden and Biggleswade pass in quick succession, then an ominous gap in the clouds ahead is terminated by a curtain of rain actually falling on the turn point. Not feeling suicidal I turn

Andrew Davis, second in the 15m Class. Photo: Jane Randle.



Tom Bradbury, the Met man, thanked by Carr Withall. Photo: Ray Brown.



John Williamson in his last Nationals as a mem



back towards St Neots and a fresh new cumulus. Climb to 5000ft and by this time Caxton is clear and I go in and out again quickly. It's going well! Grafham Water – racing dinghies having lots of fun down there. Hurry on towards Kettering and decision point. Good clouds beckon towards both Hus Bos and Stoke Dry. Choose the latter and get round quickly and easily. Back now towards Kettering where I come across a whole gaggle of Standard Class aircraft. And then – disaster ahead! A massive cu-nim sits firmly across track, completely blocking the direct route home. The decision must be made quickly and I opt to return to the still bubbling sky to the east, even though the upwind track is theoretically better. Soon, to my horror I am back to the dinghies on Grafham Water, 25km downwind of track. But a decent thermal materialises and I climb up to take a cloud to 7000ft. Emerging over Alconbury I radio a tentative message of hope to the crew still at Dunstable. I have to fly well south to get round the rain but it seems to go well. But then the rain gets me. A last minute thermal, totally unexpected gets me from 500 back to 2000ft near Barton le Clay but then a smooth grass field claims me 15km short of home."

****

Only six pilots made it back to Dunstable. John Cardiff reversed his earlier misfortunes by beating everybody at 69km/h. He was joined in the 15m Class by Peter Cook (Mini Nimbus) and Dave Watt, and by Justin Wills (Mosquito) who flew *Hors Concours*. Bernard Fitchett, at 68km/h, led John Delafiield and Chris Garton home in the Open Class. Best scorer in the Standard was Ted Shephard (again!) who missed by only 10km. Many pilots reported finding lift very low down, as I had done. Dave Watt flew smack into 8kt at 700ft when all seemed lost. All the finishers discounted skill as the main factor in their success, Lady Luck being the more vital contributor. Several of the finishes were pretty dramatic. Bernard reportedly had to dive down into ground effect and sneaked up onto the site from below, with just enough speed to get round the hangar to reach the finish line. Andrew Davis had the mortification of falling only 2km short.

The most spectacular stories came from a mixed gaggle who seemed to be easily home at 4000ft and only 20km out. None of them made it, being sucked down midst torrential rain within minutes. Chris Rollings (PIK-20) discarded one field because it was much to close, and then he only barely reached it, to land without use of brakes.

As people came in, hours later from their impossibly muddy fields, a high-pressure hose was organised and a long queue of gliders formed so that wheel wells could be emptied of Bedfordshire clay. A washroom conversation sums it up; "How did you get on?" "Oh! Rather enjoyable in a masochistic sort of way. I knew I was going to have



The Open Class grid. Photo: Ray Brown.

trouble when it took me an hour and a half to walk out of the field to find a telephone"

****

And that was that!

David Brown's mini computer had produced its last score sheet. Alan Yates could put down his magnifying glass, having perused hundreds of turning point negatives, with only one infringement noted.

At the Saturday briefing a Service of Thanksgiving was held instead, in which the main functionaries resembled certain pilots, and the choir could have been twins of various crews and officials. A collection in aid of the British Team Fund raised over £62. Later that day the rain broke all previous records and a new spring burst out of the hillside below the clubhouse in the middle of a smart blue tent!

On Sunday tasks were set and for a long time it really looked as though we might actually fly. But by late afternoon Carr decided enough was enough and we towed back to the trailers.

And on Monday the Director was carried into briefing in a rubber dinghy, resplendent in his airways captain's uniform, to finish up daubed with mud and soused with buckets of water! The phoney briefing did contain one grain of truth – the 30 000ft wind was quoted as 120kt, southerly. The jet stream far above our heads was winding up our resident depression still further, just in case anyone thought they might fly next day, after we had gone. Bernard Fitchett donated one of his day-winner's glass tankards and Andy Gough conducted a Dutch auction in aid of Team Funds. His powers of extortion were such that a further £108 was raised. The successful final bidder was Philip Jones, who gallantly handed the mug to Rika, who in turn promised that it would be auctioned for keeps at the 50th anniversary dinner later this year.

member of an RAF team. Photo: Ray Brown.



Bernard Fitchett, Open Class Champion, getting ready for take-off. Photo: Jane Randle.



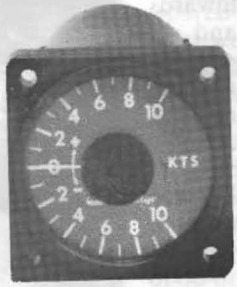
Dave Watt, 15m Class Champion, being presented with the Slingsby trophy by Dudley Hiscox. Photo: Ray Brown.



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The first six pilots for the 1980 Team Squad had selected themselves by coming first and second in the three Classes. Four of the faces were new - Dave Watt, Andrew Davis, Nick Hackett and Tim MacFadyen. Nick thought he would probably wish to fly in the 15m Class next year. Tim was a bit surprised at finding himself in this new limelight.

Prizegiving was held at 12.00, with Dudley Hiscox doing the honours. The three Champions and their runners up received the appropriate trophies and voiced the thanks of all of us to the organisers who had coped with us so well, and the crews who had supported us. An additional trophy, the Firth Vickers, was won by Mike Throssell, highest placed of those competing in their first Nationals.

The wettest ever Nationals was over!

FINAL RESULTS

OPEN CLASS

		DAY 1 19.5 256km ■ Didcot Stratford-on-Avon Husbands Bosworth			DAY 2 22.5 174km ⇄ Stratford-on-Avon			DAY 3 25.5 190/187km ▲ Coxton Gibbet Husbands Bosworth or Stoke Dry Res.				
Pilot	**Glider**	**Speed**	**Pts.**	**Pos.**	**Speed (Dist.)**	**Pts.**	**Pos.**	**Speed (Dist.)**	**Pts.**	**Pos.**	**Tot. Pts.**	**Fin. Pos.**
Fitchett, B.	**ASW-17**	114.3	1000	1	82.5	911	1	68.7	1000	1	2911	1
Garton, C.	**Nimbus**	107.2	904	2	67.25	813	2	55.4	932	3	2649	2
Delafield, J.	**Nimbus**	97.9	782	10	54.3	731	3	65.75	985	2	2498	3
Jones, R.	**Nimbus**	101.9	834	4	51.9	716	5	(183)	805	5	2355	4
Carlton, M. R.	**Nimbus**	98.8	794	8	52.3	718	4	(183)	804	6=	2316	5
White, S. A.	**Jantar 2**	103.8	860	3	(106)	324	9	(183)	804	6=	1988	6
Robertson, D. J.	**Kestrel 19**	99.3	801	5=	(130.2)	437	6	(158)	657	10	1895	7
Brown, H. F.	**Kestrel 19**	99.3	801	5=	(107)	327	8	(163)	688	9	1816	8
Lysakowski, E. R.	**Nimbus**	94.4	737	12	(80)	194	11	(184)	811	4	1742	9
Randle, M.	**Kestrel 20**	94.6	739	11	(115)	365	7	(152)	620	11	1724	10
Williamson, J. S.	**ASW-17**	98.9	795	7	(69)	141	12	(174)	751	8	1687	11
Roberts, D. G.	**Kestrel 19**	98.7	793	9	(92)	255	10	(137)	527	12	1575	12
Pope, M. H. B.	**Kestrel 19**	87.8	650	13	(37)	0	13	(118)	414	13	1064	13

15m CLASS

		DAY 1 19.5 256km ■ Didcot Stratford-on-Avon Husbands Bosworth			DAY 2 21.5 Alternative ⇄ Husbands Bosworth Thurlaston or Lutterworth			DAY 3 22.5 174km ⇄ Stratford-on-Avon			DAY 4 22.5 190/187km ▲ Caxton Gibbett Husbands Bosworth or Stoke Dry Res.				
Pilot	**Glider**	*Speed*	*Pts.*	*Pos.*	**(Dist.) Kms**	**Pts.**	**Pos.**	**(Dist.) Kms**	**Pts.**	**Pos.**	**Speed (Dist.)**	**Pts.**	**Pos.**	**Tot. Pts.**	**Fin. Pos.**
Watt, D. S.	**ASW-20F**	91.0	844	12	72.1	92	5=	49.4	685	1	62.6	980	3	2601	1
Davis, A. J.	**Mini Nimbus**	96.3	923	5	72.1	92	5=	147.5	535	2	(184.6)	884	7	2434	2
Stone, A. J.	**Mini Nimbus**	101.5	1000	1	-	0	17=	125.0	428	3	(182.0)	868	9	2296	3
Kay, A.	**Vega**	98.0	949	3=	80.2	110	3	108.0	350	5	(174.2)	819	11	2228	4
Glossop, J. D. J.	**DG-200**	88.3	805	15	72.1	92	5=	116.3	387	4	(188.3)	907	4=	2191	5
Spreckley, B. T.	**ASW-20**	100.2	981	2	72.1	92	5=	106.8	342	7=	(157.6)	713	17	2128	6
Watson, A. J.	**Mosquito**	96.2	922	6	72.1	92	5=	122.1	347 +	6	(159.2)	724	15	2085	7
Cook, P. G.	**Mini Nimbus**	80.5	690	20	72.1	92	5=	100.1	310	9	63.9	984	2	2076	8
Campbell, D. R.	**ASW-20**	86.2	773	18	72.1	92	5=	94.8	285	10	(188.3)	907	4=	2057	9
Rollings, C. C.	**PIK 20D**	96.2	921	7	83.2	116	2	51.8	80	19	(183.1)	875	8	1992	10
Stafford-Allen, P. R.	**PIK 20D**	92.6	869	10	-	0	17=	92.6	274	11=	(177.6)	840	10	1938	11
Redman, S. J.	**LS-3**	96.6	927	4	87.2	125	1	106.8	342	7=	(134.2)	565	21	1959	12
Sheard, P. G.	**Mini Nimbus**	90.4	836	13	-	0	17=	79.0	210	14	(186.9)	899	6	1945	13
Webb, M. J.	**ASW-20**	89.7	826	14	72.1	92	5=	92.6	274	11=	(162.9)	747	14	1939	14
Dixon, R. T.	**Vega**	92.4	866	11	76.2	101	4	70.0	167	15	(168.2)	781	12	1915	15
Cardiff, J. D.	**ASW-20**	78.7	662	21	50.9	46	15	52.5	84	17=	69.3	1000	1	1792	16
Wells, M. D.	**Mosquito**	95.6	913	9	58.1	61	14	52.5	84	17=	(151.4)	674	19	1732	17
Lusted, E. J. F.	**DG-200**	87.3	790	16	72.1	92	5=	67.6	155	16	(152.4)	680	18	1717	18
Purdie, P. G. H.	**Mini Nimbus**	85.7	767	19	-	0	17=	48.5	64	20	(163.1)	748	13	1579	19
Aldous, R. F.	**Mini Nimbus**	95.9	917	8	-	0	17=	42.6	36	21	(139.1)	596	20	1549	20
Hanfrey, A. W.	**Mosquito**	87.0	785	17	-	0	17=	37.3	11	22	(158.6)	720	16	1516	21
Aldridge, K. R.	**PIK 20B**	77.3	632*	22	38.7	19	16	80.5	217	13	(111.2)	420	22	1288	22
Hors Concours															
Wills, J.	**Mosquito**	98.1	949	3=	DNF			DNF			56.5 (below 3)	930		1879	

STANDARD CLASS

		DAY 1 19.5 256km ■ Didcot Stratford-on-Avon Husbands Bosworth			DAY 2 21.5 Alternative ⇄ Husbands Bosworth Thurlaston or Lutterworth			DAY 3 22.5 156km ⇄ Lutterworth			DAY 4 25.5 157/156km ▲ Caxton Gibbett Pitsford Res. or Kettering				
Pilot	**Glider**	**Speed (Dist.)**	**Pts.**	**Pos.**	**(Dist.) Kms**	**Pts.**	**Pos.**	**(Dist.) Kms**	**Pts.**	**Pos.**	**(Dist.) Kms**	**Pts.**	**Pos.**	**Tot. Pts.**	**Fin. Pos.**
Hackett, N. G. G.	**Std Jantar**	80.4	878	7	87	310	1	88.5	293	2=	140.6	503	3	1949	1
MacFadyen, T. E.	**SHK**	83.3	927	2	72.1	236	6=	88.5	293	2=	136.4	482	5	1903	2
Shephard, E. G.	**Std Cirrus**	87.8	990*	1	55.1	151	14	82.1	261	10	146.1	531	1	1902	3
Thrassell, M. G.	**SHK**	75.2	795	8	72.1	236	6=	88.5	293	2=	143.9	520	2	1809	4
Rowland, C. D.	**Std Cirrus**	82.6	915	4	77.7	264	4	69.5	198	18	126.9	435	11	1789	5
Wheeler, J. H.	**Std Cirrus**	71.5	724*	10	34.6	48	17	141.3	557	1	132.6	463	9	1727	6
Camp, G. W. G.	**Std Libelle**	82.1	907	5	37.1	61	16	85.3	277	6=	135.4	477	6	1689	7
Keogh, B. F.	**Std Libelle**	81.7	900	6	72.1	236	6=	78.0	240	16	104.9	325	16=	1673	8
Hall, R. A.	**ASW-19**	82.9	920	3	-	0	20	81.6	258	11=	134.9	475	7	1623	9
Gough, A. W.	**Std Cirrus**	69.1	695	12	78	265	3	86.1	281	5	122.6	413	12	1621	10
Hogg, A. J.	**Std Cirrus**	68.3	683	14	72.1	236	6=	81.6	258	11=	133.1	466	8	1613	11
Woodford, J. M.	**ASW-15B**	72.4	749	9	72.1	236	6=	83.9	270	8=	115.4	377	13	1600	12
Bromwich, R. C.	**Std Cirrus**	66.3	651	16	74	245	5	81.6	258	11=	127.4	437	10	1560	13
Taylor, T. R.	**Std Cirrus**	70.5	719	11	29.6	23	18	80.8	254	15	139.4	497	4	1464	14
Breeze, D.	**Astir**	57.6	510	18	72.1	236	6=	85.3	277	6=	105.9	330	15	1320	15
Wilton-Jones, M.	**Astir**	56.54	482*	19	81	280	2	71.5	208	17	104.9	325	16=	1271	16
Cooper, B. L.	**Std Cirrus**	68.7	689	13	72.1	236	6=	83.9	270	8=	59.1	96	18	1259	17
Smith, G. N. D.	**Std Jantar**	66.8	659	15	59.1	171	13	67.8	189	19	-	0	19=	997	18
Crawshaw, G. H.	**DG-100**	(43)	11	20	51.6	133	15	81.6	258	11=	111.9	360	14	732	19
Hynes, K.	**Astir**	65.0	630	17	29.1	21	19	-	0	20	-	0	19	651	20

*= 10pt penalty (barograph); + = 10pt penalty (turning point photo). DNF = did not fly

BGA AND GENERAL NEWS

THE GOLDEN JUBILEE GLIDING DINNER

If anyone who was gliding in 1950 still has a copy of *Gliding* magazine published that winter the group photograph on page 169 will bring back some nostalgic memories. There, complete with funny hats, are Doc Slater, Frank Irving, the Goodhart Bros, Gil Phillips, Hugo Trotter, David Carrow, Alan Yates and co – all astonishingly recognisable despite the passage of thirty years.

The picture was taken at the BGA's Coming-of-Age Party to celebrate our 21st birthday and among the notables present were: Douglas Culver (organiser of the famous "gliding lunch" in 1929 that started the whole thing off), E. C. Gordon England (first Chairman of the BGA), C. H. Latimer Needham (holder of the first British C), Lord Brabazon, Sir Frederick Handley Page and Past Presidents Lord Sempill and Prof Sir David Brunt. Cabaret, provided by the Cambridge, Derby & Lancs, Surrey, Imperial College and London clubs, was by all accounts a wow – the *pièce de résistance* being ". . . the famous turn of the green and red Fairies, Lift and Sink". If these gentlemen (?) will own up in time we promise to ask them for a repeat performance at the Grosvenor House on November 30 when our Golden Jubilee will be well and truly celebrated.

The report of the goings-on ends by remarking that the guests left after midnight "skidding and slide-slipping home, hoping they will be fit to attend an equally successful Jubilee party in 1979". If they, or anyone else, have not yet reserved their tickets they should contact the BGA Office immediately for an application form. A deposit of £5 per ticket is required on application and the balance will be payable in November. (Total all inclusive ticket price is estimated to be about £19).

CABLE BREAK FATALITIES

Two fatal accidents, one at North Hill and the other at Watergate Wath (near Ripon) - a none BGA club - happened within a fortnight of each other. Both accidents were similar, the sequence of events being a cable break followed by a turn at a height which did not warrant such action. In the event both gliders spun from the turn.

The first on April 22 at North Hill was to the pilot of a Pilatus B-4, Mr D. Silverlock aged 26 years. The cable break was at 250ft (approx). The glider was turned to fly a circuit and spun from the final turn.

The second accident, on May 6 was to a Schleicher K-2. The evidence as to the height at which the cable break occurred is inconsistent but suggests a figure between 100 and 300ft and was probably nearer the lower figure. A turn was started from which the glider evidently spun, it being unlikely that it could get into a near vertical nose-down attitude in any other way. The passenger, Mr P.J. McGrath from Leeds, was killed and the instructor was seriously injured.

W.G. Scull
Director of Operations

GOOD LADDER DESPITE WEATHER

John Cardiff, London GC, tops the Open Ladder section of the National Ladder with 5578pts, which is a high score in view of the quality of the season. Alison Jordon of Imperial College leads the Club Ladder with 3911 gained in two flights.

Open Ladder

Leading pilot	Club	Pts	Flts
1 J. Cardiff	London	5578	4
2 G. Corbett	Essex	5022	4
3 D. W. Lilburn	Yorkshire	4910	4
4 P. Harmer	Royal Aircraft Est	4207	3

National Ladder

Leading pilot	Club	Pts	Flts
1 Alison Jordon	Imperial College	3911	2
2 J. Jeffries	London	2800	2
3 P. Reading	Imperial College	1234	1
4 C. Pullen	London	705	2

Michael Randle, National Ladder Steward, says that the BGA Competitions and Badges Committee want to consider any possible changes to the National Ladder rules before the new Ladder Year begins on October 1, so if anyone has any ideas they should send them to him at 1 Bell Close, Cassington, Oxford, as soon as possible.

"My own view" he writes to Ladder Stewards, "is that the current rules give a reasonable balance. A possible shortcoming is that open-ended tasks, which are usually downwind, are scored too highly compared with closed circuits or attempts there at.

"Comments are invited on two suggestions already received. Imperial College wants a flight in a club glider to score on both Open and Club Ladders. From elsewhere has come a demand that height gains should be devalued in comparison with cross-country flights. Wave participants should speak now or forever hold their peace!" Michael adds.

PAST PRESIDENT'S TOP JOB

Ken Wilkinson, a past President of the BGA, has been appointed deputy Chairman of British Airways, previously having been their Engineering Director.

After graduating from Imperial College with first class honours in mechanical engineering, Ken took a post graduate diploma in aeronautical engineering in 1938. He then joined the Royal Aircraft Establishment at Farnborough and was involved in wind tunnel and flight research. Later on he worked at Blackbushe, developing equipment and gliders for the airborne forces.

Ken has spent his entire working life in aviation. After being Chairman of BEA he spent four years from 1972-1976 with Rolls-Royce, first as Managing Director and then Vice Chairman, and over the last three years has overseen the unification of the former BOAC and BEA engineering functions.

BALL-JOINTS SOURCE OF HAZARD

An incident at Lasham in June involving an Astir CS has drawn attention to the potential hazard of the standard German ball-and-socket type of connector, in this particular case the in-line type.

The starboard aileron pushrod inside the centre-section became disconnected in flight. Fortunately the pilot landed safely.

On inspecting this connection it was found possible to insert the ball about three-quarters of the way into the socket where it could become jammed. The connection would withstand a good shaking and would operate the aileron on the ground. Due to the orientation of

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the component on the end of the pushrod, its condition could not readily be observed through the inspection hatch.

The component has been changed but it was felt that a general warning should be circulated. In fact there was an accident earlier this year to an ASW-20 at Lasham due to the elevator being unconnected or becoming disconnected.

1981 BRITISH TEAM MANAGER

Applications are invited for appointment as honorary Team Manager for the British Team at the next World Championships in W. Germany in 1981. Bids must be received by the BGA office before September 1, 1979.

NEW PRINTER FOR S&G

Our printer, John Daly of Creative Packaging, who has steered us through more than 30 issues has been taken ill and for this reason we are moving to a new firm with the next issue – Blackfriars Press of Leicester. But we would like to thank John for his tremendous efforts over all these years and to wish him a speedy recovery.

CLUB AND MOTOR VEGAS TO COME

Vickers-Slingsby are to introduce a simplified "club" version of their Vega 15m Racing Class sailplane, with the first deliveries scheduled in October. The new aircraft, to be known as the Sport Vega, will retain the Vega's rotating trailing-edge airbrakes but will have no flaps, and instead of retracting main and tail wheels will have a fixed landing gear. Currently quoted ex-works price is £7950 plus VAT, against £10 300 plus VAT for the Racing Class machine.

The Sport Vega was announced at Kirkbymoorside on April 28, when Slingsby entertained about 140 soaring pilots from clubs all over the UK and the Irish Republic, and invited them to fly three demonstration Vegas and a Rumanian IS-28B2 two-seater trainer, for which the company holds a sales agency, at nearby Wombleton. More than 40 pilots sampled the Vega, some in short-lived convective conditions. Comments heard on Wombleton field were unanimously enthusiastic.

The ownership of Vickers-Slingsby recently changed with the establishment by the National Enterprise Board with private enterprise partners of British Underwater Engineering Ltd as a holding company to operate Vickers-Slingsby and a number of offshore engineering interests acquired from the Vickers group. Managing Director, Jim Tucker, said their formal name is now Slingsby Engineering Ltd, but the company's continuation in aviation was assured despite the company's name and ownership – the NEB's partners in the enterprise being American offshore engineering contractors Brown and Root, and deep-sea diving specialists Wharton-Williams Ltd.

"There is a common thread running through our three main fields of activity – submersibles and offshore engineering; other marine work mainly for the MoD, and aviation – and that is work in high-technology composite laminates," Mr Tucker said. "As long as our aerospace activities continue to be profitable, there is no cause for winding them up and we are assured of NEB support in continuing in this field."

Mr Tucker frankly admitted that the open day was designed to repair the company's reputation with the UK soaring movement which had become somewhat tattered during the three years of delays and disappointments from when the Vega was first announced. Evidence of the company's newly restored commitment to soaring was plain to see when visitors toured the shops where Vegas are now coming off the line at a rate of one a week. "The annual capacity of our current Vega moulds is 60 aircraft. We are planning to build 48 racing Vegas a year and 'top up' with 12 sport models," he added.

By the time of the open day, 17 Vegas had been delivered – five to the United States – and the first export to continental Europe was about to depart. Two of the US machines are being retained for some time by distributor Don Sprague and loaned to leading competition pilots for the US Nationals.

Following introduction of the Sport Vega this autumn a powered Vega will follow but there is at present no company project for a new two-seater trainer. Meanwhile, the company's arrangement under which it sells the Rumanian IS-28B2 and the IS-28BM2 motor glider on behalf of British Aerospace, who accept them in part payment for One-Elevens, was currently under review, Mr Tucker said.

Other current aviation activities at Kirkbymoorside centre upon Aerospace Developments' AD 500 airship, for which Slingsby designed and built the prototype gondola, and production of another 25 Venture motor gliders for the ATC, under a £750 000 repeat contract following the completed delivery of the first 15. Despite its specialisation in high-technology laminates, Slingsby would retain the capability of working in wood, steel-tube and fabric structures and would look at any proposition to build replica aircraft for the film industry "providing it would end up the right way in our balance sheet," Mr Tucker said.

R. R. RODWELL

Correction: *The British National record for goal and return, held by M. R. Carlton and C. M. Greaves for a flight on December 23 in South Africa should be 692.02km and not 629.02km as printed in the last issue, p134.*

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MG RECORDS FOR TUG WILLSON

Tug Willson claims the British National and UK Motor glider records for a 300km triangle in a Pik 20E for a flight of 306km at 57km/h from Lasham on June 18.

PHILIP WILLS MEMORIAL FUND

The Trustees of the Philip Wills Memorial Fund thank the following for their donations received up to June 10.

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P. Bolton	A. J. Littleford
A. D. Bould	D. D. A. Loraine
M. Breen	R. J. Lovell
J. Brenner	A. Lowens
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J. R. Jones	C. J. Wilson
J. A. Knight	I. R. Wilson
Marshall D. Kochman	R. B. Witter.

CHANGES AT THE PIK COMPANY

Eiri Avion, manufacturers of the PIK 20D glider and PIK 20E motor glider, have had a major re-organisation of their management structure. The company, which was previously self-contained and had taken over Molino Oy some years ago and is now to become a division of EIRI, the parent company, to obtain management expertise and financial control. As a result Eiri will discontinue the PIK 20D when the current batch is completed and concentrate on the PIK 20E for which it has a considerable order book.

During late summer it is probable that a prototype Standard Class glider will be built using many PIK 20D and PIK 20E ideas, but this will not be the PIK 20C (of which none were built). A modified, non-flapped, wing section will be used on a new fuselage incorporating the PIK 20E forward hinged canopy.

A new 15m flapped sailplane will be developed for the 1980s, building on the knowledge gained in manufacturing nearly 350 PIK 20s, and should be very competitive in performance and price.

GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	Name	Club	1979
95	I. D. Parker	Imperial College	19.5
96	G. C. Metcalfe	Surrey & Hants	19.5

DIAMOND DISTANCE

No.	Name	Club	1979
1/150	C. J. Curtis	Four Counties	19.5
1/151	I. D. Parker	Imperial College	19.5
1/152	G. C. Metcalfe	Surrey & Hants	19.5

DIAMOND GOAL

No.	Name	Club	1979
2/891	F. Townsend	Derby & Lancs	24.2
2/892	T. G. Armstrong	Highland	9.5
2/893	A. D. Bould	Fulmar	9.5
2/894	P. Gibson	Wrekin	9.5
2/895	T. I. Allsopp	Four Counties	9.5
2/896	G. Beniston	Four Counties	19.5
2/897	Pam Newall	Bicester	9.5
2/898	M. P. Kemp	Kent	5.5
2/899	B. L. Cooper	Booker	6.5
2/900	P. F. Whitehead	Clevelands	9.5
2/901	C. J. Curtis	Four Counties	19.5
2/902	A. Lowens	Shropshire	6.5
2/903	R. W. Clemo	Four Counties	6.5
2/904	T. J. O'Donovan	Kestrel	19.5
2/905	B. A. Toulson	Dorset	6.5
2/906	A. Clarke	Humber	19.5
2/907	E. Hamill	Humber	19.5
2/908	N. Spencer	Doncaster	19.5
2/909	A. Buchanan	Southdown	19.5
2/910	R. G. Forrest	Enstone	19.5
2/911	G. J. Print	Stratford	1.6
2/912	R. G. Tomlinson	Buckminster	19.5
2/913	P. France	South Wales	19.5
2/914	G. P. Stingemore	Four Counties	19.5

DIAMOND HEIGHT

No.	Name	Club	1979
3/407	A. Lowens	Shropshire	29.4
3/408	S. B. Marshall	SGU	29.4
3/409	R. Allan	Deeside	14.5

GOLD C COMPLETE

No.	Name	Club	1979
698	Carol Simmonds	Phoenix	6.4
699	M. L. Murdoch	London	7.3
700	M. W. Durham	Kestrel	15.4
701	F. Townsend	Derby & Lancs	24.2
702	T. G. Armstrong	Highland	9.5
703	A. D. Bould	Fulmar	9.5
704	P. Gibson	Wrekin	9.5
705	N. J. Heaton	Clevelands	9.5
706	Pam Newall	Bicester	9.5
707	M. P. Kemp	Kent	5.5
708	C. Joques	Clevelands	11.3
709	B. L. Cooper	Booker	6.5
710	C. R. Scorboraugh	Midland	21.4
711	P. F. Whitehead	Clevelands	9.5
712	R. W. Clemo	Four Counties	6.5
713	T. J. O'Donovan	Kestrel	19.5
714	A. Lowens	Shropshire	6.5
715	N. Spencer	Doncaster	19.5
716	P. France	South Wales	19.5

GOLD C HEIGHT

Name	Club	1979
Carol Simmonds	Phoenix	6.4
M. L. Murdoch	London	7.3
A. A. Thompson	Eagle	13.2
M. W. Durham	Kestrel	15.4
N. J. Heaton	Clevelands	11.3
S. S. Mackintash	SGU	29.4
B. Purslow	Blackpool & Fylde	24.4
R. Allon	Deeside	14.5
C. Joques	Clevelands	11.3
C. R. Scorborough	Midland	21.4
B. Holburn	Narthumbria	13.5
J. A. Little	Northumbria	13.5
A. Lowens	Shropshire	29.4

GOLD C DISTANCE

Name	Club	1979
F. Townsend	Derby & Lancs	24.2
T. G. Armstrong	Highland	9.5
A. D. Bould	Fulmar	9.5
P. Gibson	Wrekin	9.5
N. J. Heaton	Clevelands	9.5
T. I. Allsopp	Four Counties	9.5
G. Beniston	Four Counties	19.5
Pam Newall	Bicester	9.5
M. P. Kemp	Kent	5.5
B. L. Cooper	Booker	6.5
P. F. Whitehead	Clevelands	9.5
C. J. Curtis	Four Counties	19.5
R. W. Clemo	Four Counties	6.5
T. J. O'Donovan	Kestrel	19.5
B. A. Toulson	Dorset	6.5
A. Clarke	Humber	19.5
A. Lowens	Shropshire	6.5
E. Hamill	Humber	19.5
N. Spencer	Doncaster	19.5
A. Buchanan	Southdown	19.5
R. G. Forrest	Enstone	19.5
G. J. Print	Stratford	1.6
R. G. Tomlinson	Buckminster	19.5
P. France	South Wales	19.5
G. P. Stingemore	Four Counties	19.5

SILVER C

No.	Name	Club	1979
5212	R. W. Smith	Kent	16.4
5213	N. C. Skanes	Bicester	16.4
5214	D. Starer	London	16.4
5215	A. F. Ratcliffe	Doncaster	21.4
5216	A. M. Sobino	Bicester	15.4
5217	J. Bottomley	SGU	20.4
5218	C. M. Davey	Phoenix	5.4
5219	R. Hill	SGU	29.4
5220	J. H. Griffiths	Stratford	16.4
5221	J. Crampton	Buckminster	5.5
5222	Jill Povall	Hambletons	7.5
5223	Diana Bull	Midland	6.5
5224	R. Perry	Dunkeswell	6.5
5225	C. J. Pullen	London	3.5
5226	M. Hughes	Bath & Wilts	6.5
5227	N. F. Holmes	Midland	6.5
5228	R. Fisher	Southdown	5.5
5229	R. J. Smith	Bicester	5.5
5230	L. Horribine	Angus	5.5
5231	P. Reading	Imperial College	16.4
5232	T. W. Eagles	Bannerdown	27.4
5233	E. M. Palmer	Southdown	9.5
5234	J. C. Turner	Thames Valley	5.5
5235	N. P. Smith	Essex	6.5
5236	P. J. Hutchison	Bicester	5.5
5237	R. J. Somerville	Coventry	5.5
5238	R. C. Gunkel	Kent	6.5
5239	P. Guthrie	Imperial College	15.4
5240	A. P. Pool	Cambridge Univ	6.5
5241	F. P. L. Walters	Hambletons	13.5
5242	P. A. H. Tee	Cambridge Univ	19.5
5243	R. J. Nicholls	Midland	19.5
5244	J. Founds	Hambletons	19.5
5245	D. J. Johnson	Herefordshire	19.5
5246	M. Knight	Doncaster	19.5
5247	C. F. Cales	Surrey & Hants	19.5
5248	J. R. Mathews	Southdown	5.5
5249	R. Taylor	Surrey & Hants	6.5
5250	B. W. Svenson	Wolds	19.5
5251	M. J. R. Lindsay	Norfolk	15.5
5252	J. A. Bevan	Birmingham Univ	19.5
5253	D. Baldwin	Derby & Lancs	19.5
5254	D. E. Howell	South Wales	19.5
5255	A. W. Pearl	Essex	22.4
5256	D. Wilson	Humber	19.5
5257	A. Massman	Cairngorm	12.5
5258	R. E. Archer	Wyvern	19.5

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OVERSEAS NEWS

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CLUB CLASS CONTEST

Thirty-three pilots from more than ten countries competed in the International Club Class Contest at Örebrö, Sweden, from June 14-24. Two Czechoslovakian pilots flying VSO-10cs were the winners, Martin Brunecky coming first and Jaroslav Vavra second. Horst Schluter (W. Germany) was third in a Mistral.

Of the British pilots, Chris Rollings (Club Astir) was 17th with John Glossop 23rd and Andrew White in 26th place, both flying K-6Es.

There were eight contest days out of ten with tasks up to a 530km triangle.

HANNA REITSCH BREAKS OWN WORLD RECORD

Whilst staying with Karl Striedieck in the USA, Hanna Reitsch broke her own goal and return world record on April 7 with a flight of 850km along the Alleghenies in Karl's ASW-20.

MOTOR GLIDER WORLD RECORDS

Günther Cichon, Germany, claims the MG goal and return record with 833km for a flight in a Nimbus M on the 23.5.1979. Also absolute and gain of height in the same glider on 27.5.1979 of 10 300m and 8 700m respectively.

HAHNWEIDE CONTEST (April 28-May 5)

Poor conditions with low temperatures, rain and snow showers set the scene for this year's well attended competition, resulting in five contest days for 15 pilots in the Open Class, and four each for the 15m (22 pilots) and Standard Class (35 pilots).

Triangles of around 200km were set on the first day which was threatened by snow showers. This was followed by four days of no flying. A Cat's Cradle with 7TPs was set for the second task with a 10% bonus on the kms flown for those who landed at Hahnweide at the end of the day. The winning distance was 416km.

The Open Class flew the next day in appalling conditions but managed to extract a contest day from it.

A much better day with strong lift and cloudbase at 6000ft followed but pilots were not allowed to take-off with waterballast because of the state of the base field.

Because of the few contest days so far achieved the last Sunday, which is normally set aside for prizegiving, was used to fly another task, but over-development and numerous snow showers made a lottery of the conditions pilots found themselves in.

Leading results: Open Class, Otto Schäuble, 3134pts; 15m Class, Stig Oye (Denmark), 2156pts; Standard Class, Andreas Hämmerle (Austria), 2073pts.

DUTCH NATIONALS (Terlet, June 10 - 23)

With only one task in the first week, the opening day, and five in the second week, which was hampered by unforseen changes in the weather and very poor visibility, the 18 pilots in the 15m, and 14 in the Standard Class, had a very difficult time.

Also the last two days had to be cancelled on the grid because on one the clearance came too late while on the last day visibility never reached the minimum required.

Dick Réparon, George Schuit and Jaap van Steinfoorn flew Open Class gliders, the latter an AWS-20L (16.5m). However, Dick broke his Nimbus 2 on the first day and had to retire from the contest.

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The 15m Class flew triangles of 437, 348, 308.5, 204, 301, 301kms. The Standard Class triangles of 308.5, 347, 240, 180.5, 263, 263kms. On two days, the first and third, no-one completed the task.

Of the total 55,160kms set, 39,340kms were flown, in other words 71% was achieved, in 855hrs flying time.

On the last contest day both leaders dropped from first place. World Champion Standard Class, Baer Selen flying the Vega in the 15m Class with a 92pt lead that morning managed only 7th place for the day. While Theo van 't Rood with a 272pt lead in the Standard Class was one of the two pilots who did not score that day.

Final leading results: 15m Class, Jaap van Steinfoorn, ASW-20L (H'cap 1.5%), 5296pts; Baer Selen, Vega, 5233pts; Daan Paré, Mini-Nimbus, 5002pts. Standard Class, Huub Selen, Std Libelle, 4706pts; Onno Blankenzee, ASW-19, 4511pts; Ton de Bruine, DG-100, 4183pts.

GERMANY'S FIRST 1000KM TRIANGLE

Klaus Holighaus took-off from Hahnweide on May 7 in his Nimbus 2c with 200 litres of waterballast at 08.30hrs, 15min after the first cumulus appeared over the Swabian Alps, cast off there and flew a 1000km triangle *via* Kandern in the Black Forest and Geishausen near Straubing. His average speed was 105km/h. Weather was anticyclonic. – *Luftsport.*

FLORIDA'S NEW SOARING CENTRE

As a result of a holiday spent with an ex student of mine near Miami last year, and having had the freedom of his PIK 20D in some of the best soaring conditions I have ever seen, I sold my share of the Three Counties Aero Club, we sold our house, packed our belongings and made for Sebring, Florida, where we started a new soaring school. We opened for business in January.

Elsie, my wife, now runs the office, holds wingtips, signals, etc, my son Peter flies the Super Cub tug and I instruct in our K-7. We have a PIK 20D in the fleet and a Twin Astir on order.



Derek briefing Peter on one of the good days.

The conditions here are superb and it is soarable nearly every day of the year, although it gets a bit too convective on summer afternoons. Ten knot plus thermals are not all that rare and cloudbase so far has been up to 8000ft.

Since starting here, Peter has gone solo and obtained his A, B and C and Silver C height and distance, having only flown power before, while I have finally made my Diamond distance.

Sebring is in the middle of the Florida peninsula and is famous for its motor racing, but we hope it will become well known for its cross-country soaring. It seems that the very good conditions here largely go to waste with only a few private owners going cross-country. Most of the gliding schools only seem to be interested in *ab-initio* training and local soaring.

The countryside is interesting with many lakes, orange groves and also cattle ranches. The outlanding situation is no problem as there is an airfield about every ten miles.

Florida is a holiday state with many attractions. Disney World is close by and worth a visit, there are many gardens, water shows and marine aquaria. Kennedy Space Centre is also within a day's trip distance. If any glider types are coming this way, give us a ring (813) 655 2397, any day except Tuesdays.

DEREK P. W. JOHNSON

AUSTRIAN MET FORECASTS

Met forecasts specially for glider pilots are obtainable by telephone from Vienna throughout each day from March 1 to September 30 from 05.30hrs GMT, and give weather situation, upper winds at 1500, 3000 and 5500m, thermals expected, cloudiness, freezing level and any cautionary information. From 1500hr GMT similar forecasts are obtainable for the following day – *Flugsportzeitung.*

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C.F.I. DEREK JOHNSON



On the last day of the Norfolk GC's task week a 308km out and return to Silverstone was completed by four pilots in our photograph. From left to right they are Mike Lee, Alf Warminger (President), Alan Goodfellow and Dennis Cooper.

CLUB NEWS

Copy and photographs for the October-November issue of S&G should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 47725, to arrive not later than August 11 and for the December-January issue to arrive not later than October 9.

June 14, 1979

GILLIAN BRYCE-SMITH

BATH & WILTS (Keevil)

Three of our members did very well in the Nationals. Andrew Davis came second in the 15m Class with Chris Rowland fifth and Bob Bromwich 13th in the Standard Class, this being Bob's first Nationals. We are waiting to hear how Steve Parker fared in the Western Regionals.

We organised a week's soaring from May 26 to June 3 which was notable for the abnormal rainfall. Jim and Anita Kettlety's caravan nearly floated away with water to the wheel hubs and lapping their front door. However they did manage to fly their Astir later in the week.

Friday, June 1, was promising but proved to be rather disappointing. The RAF were using Keevil for most of the day and we had no tug pilot, but the few who got away from a wire launch were lucky. Even they had strict instructions from our CFI, Ron Lynch, to fly away and not come back until the permitted time, or else!

Bernard McBride flew the club K-6E to Lasham for Silver distance following his son David and Mike Hughes who had flown to Lasham in the K-6E earlier this year. Jim Gardner and Dave Parker attempted a Gold C distance but had to turn back. Jim (Pilatus) landing at Hinton-in-the-Hedges. They kindly got their tug out to launch him so that he could fly back to Keevil. Andrew Davis attempted a 500km but had to turn back.

Two members visited Aboyne during this week and enjoyed good soaring but no great wave flights.

Earlier in the season on May 5 Andrew Davis flew a 300km triangle, but was brought down by a snow storm at Upavon a few miles from home. The following day he tried again and completed it at an average speed of 91.5km/h, narrowly missing the United Kingdom record which stands at 105.4km/h.

Incidentally, we have been very fortunate in our dealings with the RAF - they don't often use the airfield at weekends and have been most co-operative when they do.

J.A.L.

BLACKPOOL & FYLDE (Chipping)

Our membership is now almost at its maximum and the number of gliders on site at the last count was 23.

Silver C distances across the Pennines were completed by four members; Geoff Wilkinson to Harrogate, Dennis Cheetham to Ripon, Bill Gill to a public park in Pontefract and Ted Massey to Dishforth. Barry Parslow gained Gold height at Portmoak, having to leave 6 up above 12 000ft because his oxygen mask was in his car!

Much work has been done this winter improving the drainage on the airfield by a few stalwart members. A new trailer park is under construction and we hope to obtain a bar licence shortly

F.T.

BRISTOL & GLOUCESTERSHIRE (Nympsfield)

The new facilities in the clubhouse are nearly complete with greatly improved sleeping accommodation. Catering arrangements are also greatly improved and midweek pilots can now have cooked lunches at very reasonable prices.

The season has started well with several 300km and Silver distances. Holiday courses are also doing well with many early visitors opting for a second week's flying with our summer course instructor, Shadrack, and tug pilot, Keith. The T-21 has finally gone, much to the regret of many of the older hands.

After a long delay the new "Whitebread" winch is operational. With an automatic transmission system and foolproof (we hope) controls, it's proving extremely useful and has eliminated the long delays when changing ends.

Ron Sandford has replaced Harold Jefferies as CFI.

The Western Regionals proved a bit disappointing due to poor weather, but superb catering on the two Saturday nights by Sue and "Chalky" helped to compensate.

R.A.R.

BUCKMINSTER (Saltby Airfield)

We are now preparing our case for the Coal Board inquiry in October (The Vale of Belvoir Mining Project) and should we fail we will have our own 700ft ridge of slag right on top of the airfield in ten year's time.

However, we are all enjoying the improved weather this year and congratulate Mick Webster, Philip King, Eric Whittle and Ray Tomlinson on their Diamond goals. Philip King has already repeated his flight, making him clear leader at the top of our club ladder with two flights of over 300km so far. Our congratulations also to John Crompton on completing his Silver C.

We have recently had a visit from a number of members from the Northumbria Club with a promise of more visitors at the end of July. This is the second year that this migration has occurred and it was good to see them all again.

L.E.M.

CAIRNGORM (Feshiebridge)

Our season started during April and we have been running courses ever since. We hope to continue operating full time into the wave season, September/October, if enough interest is shown from visiting syndicates and clubs.

Since April we have had one A and B Certificate, seven Bronze C legs, a Silver height, duration and distance and a Gold height. Our



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club T-21 reached 10 000ft, our syndicate Swallow flew to Glenrothes and our Bocian has been above Gold height with course members on three occasions.

We now have two working winches and an excellent new workshop which has already been used to C of A our aircraft. We are still waiting for confirmation of our £5000 grant to improve the airfield by removing stones and resurfacing and reseeding the airstrip.

A.M.

CAMBRIDGE UNIVERSITY (Cambridge and Duxford)

The three weeks intensive flying at Duxford, starting at the end of May, gave an impressive number of launches but the indifferent weather precluded the more ambitious badge flights. However, on May 19 Colin Dews completed a 500km triangle for a needed Diamond and other members covered good distances. John Evans was airborne for five hours above the Cambridge site which made him the club's youngest Silver C pilot. Peter Tee and Peter Poole have also completed their Silver C's.

Anthony Edwards is the new President with Andrew Hulme as Chairman.

The streamlined winch has been tested and found to be more than promising.

A.L.

COTSWOLD (Aston Down)

Although two years since warned of the intention to sell Aston Down, we are still launching gliders happily, albeit looking over our shoulders from time to time to see if the bailiff has arrived. Against this day we have our airfield purchase fund earning interest and several other schemes in abeyance.

The season has started well with members showing a healthy interest in competitions. Congratulations to Tim Macfadyen (SHK) on coming second in the Nationals' Standard Class and Chris Batty (Diamant) for gaining 7th place in the Western Regionals – his first contest.

New gliders on the site include Larry Bleaken's Open Nimbus, a Sie 3 and our first Vega. Two more Vegas are due before the end of the year and as it appears to perform well on the wire they should prove popular. The club has obtained a K-8 for early solo pilots. A change in the near future is possible for the Skylark 3, to bring in a more modern type to back up the Astir, now returned from its long repair session.

Unfortunately, with membership still requiring a waiting list and many new *ab-initios* swelling the lists, a rash of troubles reduced our two-seater fleet to a single aircraft. At last we are back to full strength and morale amongst the queueing *ab-initios* is rising.

Congratulations to Tony Parry on going solo and to Ron Turrell and Bob Gardner on completing their Silver Cs.

J.D.H.

DERBY & LANCS (Camphill)

"April brought us sweet spring showers, it snowed and snowed for ruddy hours"... and indeed, despite the optimism of our last report, the first flying day on which we could not see some snow from the field was May 19. Despite the weather, or perhaps because of it, work on refurbishing the club ready for the great open week of August 3-11 has proceeded apace with the keymark so far being our magnificent new kitchen and dining room.

This year's courses, based for the first time on the new K-7 and the K-13, are being voted a great success as is the performance of the new Jaguar winch, home built under the direction of Peter Blacklin, and bringing our winch fleet up to three.

At the AGM, Stan Armstrong was elected Chairman and tributes were paid to Derek Cooper who has shouldered the load for so long. New Committee members include Malcolm Blackburn (Secretary), David Reed (Treasurer), Eric Wilkes (Finance Director), Dave Smith (Technical Officer), Ken Richardson (Site Chairman), Dave Martin and Geof Prestwich.

We look forward to welcoming Uniglide from September 23-28.

S.G.

DONCASTER & DISTRICT (Doncaster Airfield)

Flying charges have been increased. On the redeeming side, winch launches have not increased in price since 1976 and are relatively inexpensive at 75p.

On the soaring front Diamond goal flights have been completed by Nev Spencer in his Astir CS and Eric Hamill in the club K-6. John Shorter landed 20km short of the airfield for the second time on his attempt. Many other cross-countries have been attempted, most notable being 190km by Martin White in the Sky. Congratulations to Andy Ratcliffe, Martin Knight and Dave Broadhead on Silver distance.

Doncaster's trade fair was in early June and John Stirk (Std Libelle) and Alan Pepper (K-6CR) gave aerobatic displays.

The Ouse GC have joined us while they search for a new site. Since our grip on Doncaster Airfield is tenuous, to say the least, we are interested to see what turns up.

E.T.R.

DORSET (Tarrant Rushton)

We are pleased the following members have gone solo this year: Bob Collins, Jim Chapman, Tony Godfrey, Paul Turner, Rod Harrington, Garry Shaw and Brian Francis. Then, Chris Hilton followed Bruce Niven to the "edge" of the map (North Hill) and balanced there for five hours to complete her Silver C. News of this invasion force must have been conveyed to those on the ground, as the airfield was deserted when they landed (with the inter-club trophy safely locked in the clubhouse!).

Ted Henman has finally switched on his

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barograph and completed his Silver C with a height claim; but commiserations must go to Richard Lowndes who landed just 3km short of a 300km attempt in the Skylark. Meanwhile, we await confirmation from the BGA of three Diamond goal claims. But the greatest news is the first place overall of Robin May at the Western Regionals.To put Dorset and Badger on the map in his first-ever competition can only be described as fantastic.

Finally, the Tarrant Mk VII winch is at last providing us with some positive launches on new piano wire, and maintaining a continuous queue of rusty pilots wanting "check" flights.

B.Mc.

DUMFRIES & DISTRICT (Falgunzeon)

A warm welcome to our new CFI, Ben Bennett, who is giving Ian Steel a breather for a while. Many thanks Ian for all the hard work in the past.

Flying started earlier this year, though once again we were unfortunately grounded during the winter due to site conditions.

Due to the absence of the K-2 (C of A and extensive refurbishing), the T-21 is having a hard life being used for training and solo flying. It can still show its paces though, being recently taken to more than 4000ft by club members who then had to struggle to get down.

A club expedition to Husbands Bosworth during early May was well rewarded with three Silver C distances to Dunstable and two Silver heights. Congratulations to Dave Chesney, Ian Carruthers and Ryan Fenion. Ryan's success was even more sweet as he was flying the bent Pirat he's painstakingly repaired during the winter.

During the same week Frank Smith and Ryan Fenion attended an advanced instructors' course run by Brian Spreckly, National Coach, at the Coventry Club. Cloud flying, developing cross-country techniques and a superb flight to Booker, mostly above cloudbase, in the Twin Astir made it a very worthwhile three days.

F.S.S.

ESSEX (North Weald)

With over 5000km of cross-country flights up to May 19 the season has started very well.

The weather was not kind to our Easter Comps but tasks were set and attempted on all four days, with Neil Smith in a club K-8 beating the pundits (on handicap!) on Day 3. Mike Jefferyes (DG-200) won the syndicate shield for the best individual flight over the period, and our thanks go to Tony Manwaring for the excellent organisation of a successful competition.

Our courses have been blessed with kindly weather, with only three non-flying days in the first nine weeks: Craig Turner has soloed after an eight year break.

May 19 was a day to remember with 2500km flown, 6-8kt lift and sink in proportion, ending somewhat earlier than expected with an unusually strong sea breeze making the Sawbridgeworth area very popular for landing out exercises. Ken Durno and Guy Corbett flew Diamond goals this day, with Mike Jefferyes falling out with 487km flown.

Congratulations also to Mark Newland-Smith (solo and hogging the K-8s), Alan Pearl (Silver) and to others flying a total of 15 Silver legs including distance by Dave Fairbanks in the syndicate Prefect. Albert Scurfield flew distance to Challock to gain the Essex/Kent trophy - a shortlived triumph since Kent flew back the next day to regain it with a further Silver leg.

Eric Macdonald has designed and built a beautifully engineered reverse pulley system to join our F-100 trucks: we now expect high launches as of right with all that lovely launch power available.

Finally - and by no means least - our warmest congratulations go to Mike Throssell (SHK-336) for fighting his way to fourth place in the Nationals Standard Class - thereby gaining the Firth-Vickers trophy as the highest placed "first-timer" in the competition.

G.N.

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HEREFORDSHIRE (Shobdon)

This substandard early summer there have been a few wave and cross-country days. Dennis Johnson took the club K-8 to 8000ft in a big cloud and a fortnight later took her to Long Marston to complete his Silver C in time for Competition Enterprise. Don Touser did two 280km triangles in his Std Libelle and Tony Greatrix soloed and qualified for the K-8 soon after.

The impeccably unpickled PIK wings came back from Finland to delight Chas Nightingale, our CFI. Bryce Bryce-Smith dropped in from Cambridge but would have preferred to have photographed us.

Paul Whitt (450hrs) and Ivor Corkell (600hrs) converted from Std Cirrus to their new Vega. Their comments - stable on tow, exceptionally sweet feel in the air, needed to re-learn steep approach and definite roundout, unsticking on take-off and use of flaps needed thought, but any Skylark and above pilot should have no problem. Ivor managed (without difficulty) to open the canopy on his second flight and trembled for a long time after his safe landing.

The Lakes GC made their annual visit with club gliders, instructors and tug. It was mixed weather but we like having them.

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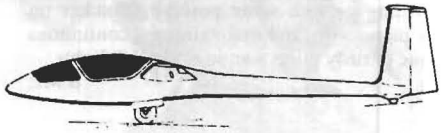
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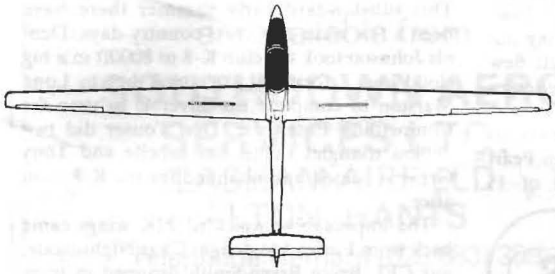
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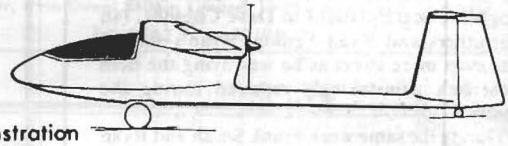
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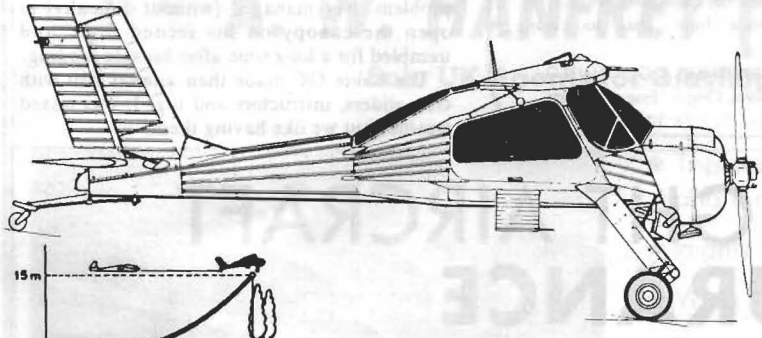
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The new loos, ablutions, kitchen and dining facilities are to be started in July. The three gliderless pilots waiting for their Mini Nimbus are suffering withdrawal symptoms.

R.P.

HIGHLAND (Dallachy)

Things are looking up and occasionally going up (10 000ft one weekend in May) at the Highland GC at last, with some welcome new members swelling the dwindling ranks of the faithful.

We now provide flying on Wednesday evenings for the Venture Scouts from Gordonstoun School. At Easter we once again welcomed the Heriot-Watt University GC with their K-13 for a most successful week in which three of their members went solo.

The Oly 2 has been roused from its winter sleep and launched into the thermals once more.

We congratulate Trevor Armstrong on his 300km triangle gained whilst competing in the Inter-Services Regionals, and George Hobben on his Silver distance.

The awards for 1978, presented at our annual uproarious dinner-dance in March were as follows: Club Ladder trophy, Trevor Armstrong; Altitude trophy, Henry Dyce and the CFI's trophy for the member contributing most to the club, Martin Knight.

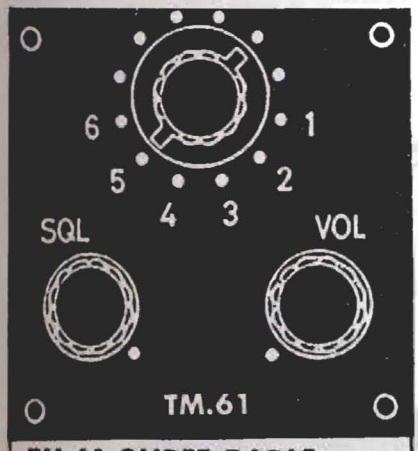
We have now acquired a generator which provides much-needed power in the hangar as well as in the clubhouse, and we have applied for a telephone, much to the relief of the farmer who handles our calls just now.

The granting of a 25yr lease by our landlord has been rather marred by the council refusing to grant long-term planning permission. They are hoping to attract industrial development, heaven help us!

Our CFI, Jeff Howlett, resigned recently at very short notice because of pressure of work. We thank him for all he has done for the club, and hope he will continue to enjoy flying with us now that he has been relieved of the burden of responsibility. We haven't got a replacement for him yet, but someone is working hard on it.

Two of our lapsed solo pilots, Shirley Howlett and Alasdair Macphail, have gone solo again: we are glad to see them back in the air.

R.E.T.



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KENT (Challock)

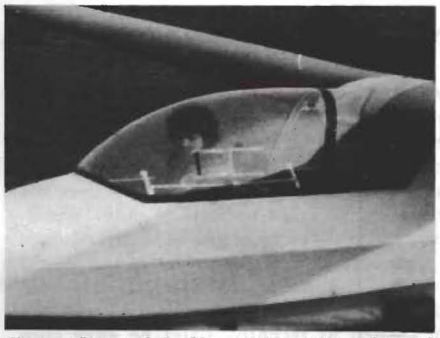
Cross-country fever has hit Challock. The Spring Bank Holiday weekend produced some good, if showery, weather and a Gold distance/Diamond goal for Mike Kemp (PIK 20B) with an out and return to Whittlesey, Cambs. There have also been some good flights of over 200km by Tim Gardiner, Dave Harris, Ray Hatton, John Hoye and Tony Moulang. There were also Silver distances by Tony Goodman, Martin Cooper, Mike Neech and Alan Smith, the last three being on the same day and to Ringmer.

The club fleet has been considerably improved by the addition of an Astir which we hope will encourage even more cross-country flying.

Our task week suffered the most appalling weather with only two out of nine days suitable for cross-countries. League One honours went to Tim Gardiner (Vega) and League Two to Alan Smith (Skylark 4).

Finally a brief mention for Roy Hubble who recently completed 21 years as CFI. He was one of the founder members at Detling in 1956, taking over as CFI two years later. To mark the occasion Roy was presented with a carriage clock at the end of the task week.

D.H.



Tracey Storr of the Newcastle and Teesside GC photographed just before her first solo.

MIDLAND (Long Mynd)

The soaring season is well underway with the first serious attempt of the year for Diamond goal by Andy Brierley landing just a few kilometres short in the club Dart.

A tug syndicate has been formed so by July we hope to have not only regular aerotow facilities but also a new club two-seater – a Silene. These should both increase the cross-country flying in readiness for our task week from August 11-19. The private owner fleet now includes a Kestrel and a Vega is expected at any moment.

D.W.

NEWCASTLE & TEESSIDE (Carlton)

Flying began again at Easter after one of the longest lay-offs we can remember. However club flying activities were overshadowed when Norman Reville, our CFI for the past 17yrs, announced his intentions of stepping down. The Committee and members wish to record their thanks and appreciation for the dedication to the club and his achievements during this long period as CFI, and we wish him all the very best in the future. Albert Newbery has taken over as CFI.

Tracey Storr (17), Jonathan Smith (18), Peter Irving (15) and Phil Nicol (20) have all gone solo and it is pleasing to see such a lot of young talent.

Peter Irving's achievement at going solo shortly after his 15th birthday needs more explanation, see p175.

Our congratulations also to Ken Culty on achieving his five hours in April.

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NORFOLK (Tibenham)

After nearly 20yrs as CFI, Joe Podolski has retired. In that time he has steered the club from bankruptcy to being one of the major gliding centres in East Anglia. He has concentrated on safety and has pioneered with motor gliders. His place will be taken by Roy "Woody" Woodhouse who will continue also as Secretary.

Laurence Edgar, still holder of the World two-seater altitude record he set in 1952, proved that he could scratch a K-13 in half a knot when he visited us recently. Later he gave club members an informal illustrated talk on his many exciting flights and adventures.

Task week this year surpassed all previous task weeks - a total of 6520km flown in five days, 3132 of them on the last day when Diamond goal was set and achieved by four pilots. Three already had their 300km, but for Alan Goodfellow, who has been gliding since 1935, it was a great day. We plan another, four-day, task "week" over August Bank Holiday.

Four members flew to France to "twin" our club with the Rouen Gliding Club. Who needs Euroglide?

M.T.B.

NORTHUMBRIA (Currock Hill)

A second K-7 imported from Germany is in service and intended primarily for solo flying. Views on future development of the club fleet are being collected and circulated to members *via* the newsletter. A record number of first solos over the last year means that a publicity campaign is needed to attract *ab-initios*.

The new clubhouse is now licenced and partly occupied, though considerable work is needed before an official opening later this year.

On May 13 almost all the private owners were airborne in wave with several climbs of over 10 000ft. It was interesting to hear the Ulster GC over the radio, apparently in equally good conditions.

A.T.

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OXFORD (RAF Weston-on-the-Green)

The long grass may not be such a problem this year. The contract has gone to a local company and their team of vehicles seems very efficient. Flying weather however has been mediocre. Vivien Gouldstone flew the K-8 50km to Twinwood Farm, while David Haigh has become at 18yrs old one of our youngest Silver C pilots. The Speed Astir has also made its appearance, to a rather mixed reception.

It seems from recent radio conversations that many cross-country pilots do not realise how much parachuting activity goes on at Weston. If the weather is fit for cross-country flying you must assume that parachuting is taking place here fairly intensively. Every time you go straight over our heads, we get the complaints. A one-mile detour would make all the difference. Perhaps the next issue of the half-million map will be marked accordingly.

P.H.

SCOTTISH GLIDING UNION (Portmoak)

The gloomy days of the bad winter seem far away and while there have been no exceptional soaring conditions, the steady addition of cards on the ladder shows the cross-country situation to be very healthy.

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The open day was on May 20 with all the usual attractions, a large number of visitors and a healthy profit.

The new catering arrangements have been operating successfully for some time and have received nothing but praise. Work to improve the clubhouse continues – the next project being to renovate the exterior.

A club task week is planned for September 17-21 with hopes of rounding it off with a grand dance to which all local farmers will be invited in the interests of maintaining good relations.

R.H.

SOUTHDOWN (Parham Airfield)

The usual springtime soaring fever has brought with it a number of new and reformed syndicates. We are pleased to welcome the LS-1, Kestrel and Astir and they will soon be joined by at least one K-6. Our airfield has coped with an increase in syndicate ownership from four to approximately 20 aircraft within six years and is now felt to have almost reached its top capacity.

Although generally very poor, the weather was sufficiently good for Rod Watson (Kestrel), Peter Henderson (SHK) and Angus Buchanan (K-6CR) to complete 300km triangles. Our complement of cross-country pilots is increasing now that Dave Felix, Ted Palmer and Jim Heath have completed Silver distance.

Our task week, hopeless for flying, turned into the gastronomic event of the decade and thus was voted a huge success.

A recent change in the club hierarchy has seen the very popular Jim Tucker stand down after untold years as deputy CFI, this challenging position now being held by Chris Backwell.

B.A.B.

SOUTH WALES

The long winter followed by a long spring finally relented and permitted the use of the site once again in April, allowing Dennis Bryan a well deserved Gold height to 13 800ft in May together with a Gold height climb by "Dick" Dickson (Cobra) on the same day. Dick followed this a few days later with a 300km to Market Harborough and back, accompanied by Peter France, our CFI. Both pilots took the prize pot of £20 instituted to encourage the 300km downwind dash.

We now have a large red bus of some ten litres engine size with the improbable member of 007 to be converted into a winch. The Rallye made its return with a new £6000 (phew) engine whilst we still await the arrival of a brand new syndicate Speed Astir.

We can't record every solo and Bronze but assure our readers that they continue to be turned out, albeit slowly.

I.H.S.

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STAFFORDSHIRE (Morridge)

During the club course week on Friday, June 1, John Davis and Tony Boyce scratched for 27min; Gordon Brocklehurst and Mike Mitchell soared the K-8 for an hour (Mike for another Bronze leg); Tony managed 22min then Geoff Davies took it up for 55min while Phil Barnshaw got away for 2¼hrs.

Charles Webb and Judy Graham had a long flight over the Manifold valley while Alan Jones managed a C flight and first Bronze leg. Flights were up to the airway at 3000ft above the field. Geoff Davies at 2000ft was struck by a bird, thought to be a swift, but although the noise was alarming there was no damage to the glider.

P.F.F.

STRATFORD-ON-AVON (Long Marston)

The first ever club open day was a great success thanks to superb weather on Sunday, May 27, the only fine day of the Bank Holiday weekend. Every available two-seater was utilised for air experience flights and thanks to the two K-2 syndicate machines kindly loaned we flew a record number of visitors and were compelled to close the list by 18.00hrs. The highlight of the show was a tremendous display of aerobatics by Dave Parfrey in the Pitts Special. Thanks to John Dutton's excellent organising ability the day ran very smoothly and all club members who worked so hard retrieving and marshalling so unselfishly are sure to make any future event equally successful.

On the flying side, Gary Print achieved a Gold distance with a 300km triangle, Raglan Castle/Gartree Prison, on Friday, June 1 in the club Skylark 3B. It was a truly sterling performance on a really marginal day, taking 7½hrs.

New members are joining in increasing numbers particularly following local press advertising and other publicity for the open day and July courses.

H.G.W.

SURREY & HANTS (Lasham Airfield)

We are all fettled up with nowhere to go. Sadly our splendid cross-country briefing room remains largely unemployed with fog, gales, hail and thunder keeping the fleet in trailers and members at home.

May 19 was a pleasant weekend exception with many good flights completed. George Metcalfe took the club Kestrel round our regular 500km triangle – Sherborne, Melton Mowbray – at 80km/h. There were three other 500km flights and two near misses, 485 and 495km by Tony Clutterbuck and Barry Docker. Two club K-8s went Silver distances, C. Coles to Shoreham and I. Smith to Keevil. This day gave the cross-country book a considerable boost with 8600 cross-country kilometres recorded. Some of us old hands recall May 19, 1965 – 300km flown by many pilots, etc.

With Wally Kahn and Paul Thompson in charge of our 65 entrant Regionals from July 28-August 5, really good weather has been booked.

C.L.

SWINDON (South Marston)

Our proud boast in the April issue of having flown five 300kms on the same day was somewhat deflated by the printer deleting the word five! Despite such adversity we are currently trying hard to improve our past record having already completed more than 5000km by the beginning of June, including Silver distances from Colin McKewan and Steve Nash to complete their Silver Cs. The poor weather during the "Hambro cup week" only allowed six pilots to fly on one day, completing over 1300km including three 300kms.

Our usual problems of a shortage of new members and reliable launching facilities are still with us – our resident tug has been laid up since last November. Hopefully our recent massive increase in membership and flying charges has not put off too many, but maintaining a club fleet of five gliders operating only at weekends by a club the size of ours is

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unfortunately getting more difficult. We are currently debating whether or not to say goodbye to our Skylark 4 in an effort to further tighten our belts.

However we are looking forward with optimism to the summer season with its usual crop of flying weeks, parties, barbecues etc and we hope to cultivate two new instructors, Phil Gaisford and Mike Beattie, the former also having got his name down for the British Team Training Scheme.

Visitors are always welcome but please remember that we are only permitted to use the runways and tugs must have permission from Vickers ATC.

J.R.B.

TRENT VALLEY (Kirton-Lindsey Airfield)

Good progress has been made in all spheres since our last report. We have a fleet consisting of T-21, K-13, K-2 and Pirat, 17 privately owned gliders and a hangar extension is awaiting planning permission.

We welcomed a dozen or so members from Baroney when the Lincolnshire GC closed on the loss of its site and have been spellbound by their enthusiasm which, together with two superb twin-drum bus winches, gives us between 100 and 130 launches in a ten hour day.

We are now using Caistor ridge, 9nm east of our site, which is reached by a 2000ft winch launch, prayer and a downwind dash! At the first visit four gliders soared a total of 20hrs before landing at the bottom. Wave has also been worked to over 11 000ft on several occasions.

There have recently been a number of 300km flights, the most noteworthy by Roger Mills in the Pirat while training for the Northerns! He also finds time to edit our newsletter, *"The Cablebreak"*, which is appreciated by us all.

J.R.S.

VINTAGE

The Vintage GC now has at least 45 pre 1945 designed gliders airworthy in Britain and at least 25 more are about to be, or are being, restored. By next year, eight will be converted with transparent doped and varnished aerolene fabric. It is believed that aerolene will resist the sun's ultraviolet rays, and thus stay sound for longer than the previously used medapolin.

Vintage gliders flying over Britain for the first time this summer after lying dormant for many years are a 1933 BAC Drone motor glider at Wycombe Air Park and an SG-38 (primary EoN) at RAF Dishforth. Also resident in Britain for the first time is a Swiss Moswey 3 at Duxford. A Hütter H-17A has just very successfully flown again at Lasham after being painstakingly and beautifully restored by Southdown Aero Services.

Flying with our Vintage Club in Germany is a superb Goevier 2 which has recently been bought by ten members of the Münster Oldtimer Club. This club has been flying a Goe 3 Minimoa for many years.

Our 8th International Meeting from July 14-21 at Thun airfield, Switzerland, promises to be well attended. Eleven sailplanes are being entered from Britain. The oldest of these (and the oldest sailplane ever to have been entered in any of our International Meetings), is Peter Bourne's 1932 Scud 2.

C.W.

WYCOMBE AIR PARK (Booker)

Congratulations to Dave Watt on winning the 15m Class at the Nationals and to the other club members who were well up in the placings.

Our Blue Hut's days are numbered now that the new clubroom has been receiving a lot of attention during the rainy season and should be ready for occupation soon.

A big, if belated, welcome to Sally King, our new deputy CFI, who has already demonstrated the "woman's touch" around the club. We are trying to overcome the big-club problem of *ab-initios* who become "lost" and wander from one instructor to another, by the setting up of instructor groups. The theory is that a pupil can "sign on" with a particular group and therefore have sufficient choice of instructor without progress becoming disjointed.

E.W.

Service News

BANNERDOWN (RAFGSA)

With the summer of 1979 already limping by, we are pleased to record an increase in Silver badge flights at the club. Most notable are durations by Pete Bloomfield, Steve Clemens, Graham Davy, and Pete Woodman. Tom Eagles has completed his Silver C with the club's only 50km attempt so far this year.

The Inter-Service Regionals in May found two Bannerdown members near the top of the Open Class; Andy Hancock (Mosquito) was third and Mick Boyden (Cirrus) fourth. Mick Webb also did well in his first Nationals.

Although soaring days have been few and far between, Keith Darby has been making valiant efforts at his 300km triangle, and Pete White completed over 200km on his first cross-country flight in the Mosquito. We are pleased Chris Cole is now solo.

J.J.H.

BICESTER (RAFGSA Centre)

Instructors galore! The latest group of Assistant Cats trained at Bicester just after Easter included ten who regularly fly here. Mick Alexander, Mick Alford, Alfie Bass, Craig Boston, Mick Dry, John Charlotte-Green, Eric Lake, Nick Murphy, Richard Smith and Steve Smith are now seen in charge of Blaniks and the K-7 or K-13.

All of us who usually enjoy the rear view of a tug flown by Pam Newall were delighted to congratulate her when having escaped to fly a Cirrus in the Inter Services Regionals, she

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Pam with her husband. Photo: Studio Five, Stow-on-the-Wold.

returned with her Gold C complete and a Diamond for a goal flight. We believe Pam may be the first lady pilot in the Services to gain a Diamond. Several other Bicester pilots also competed in this competition with considerable success. Amongst the Bicester pilots in the Nationals was John Delafield who returned to Open Class competition and came third in his new Nimbus.

Although the weather has not been brilliant, most weeks have offered the occasional good day and Silver Cs have been completed by Mick Alexander, Craig Boston, Bob Brownlow, Frank Chapman, Tony Sabino, Neil Scanes and Richard Smith, and about 20 or so others did at least one Silver leg. These included three girls – Gwen Babcock, Alex Robertson and Gill Smith – and Andy (Ginger) Leitch who forgot to take a watch, flew for 7½hrs and bemoaned passing through 2kt thermals to land at 19.45. About a dozen pilots have gained Bronze qualifications or have recently soloed.

J.W.

CRANWELL (RAFGSA)

We are now back to something like normal after the mass exodus of about 20 pilots and crews to the Inter-Services Regionals.

A marked improvement in the weather has seen an upsurge on the flying side. Congratulations to Chris Fisk and Dick Kenny on going solo, to John Renshaw on his Bronze legs and to Derek Beaney and Alvin Grimley on their 50kms.

Unfortunately while Alvin was phoning base a herd of cows found their way into his field and were so impressed with meeting the last surviving Gull 4 that they began eating it, which meant a few nights' hard graft in the workshop restoring it to its former glory.

Preparations are well in hand for our longest day celebrations with flying all day and a barbecue at night.

P.S.

CULDROSE (RAF & RMGSA)

Despite a generally poor start to the season weatherwise, some good local soaring flights have been made, particularly in our newly acquired Dart 17R.

Wednesday evening flying resumed in April. This proves to be so popular that a second evening is now set aside each week for the remainder of the summer.

During the Easter leave period a number of members and aircraft ventured to Yeovilton to take part in their task week. Although weather conditions were mostly unfavourable some useful cross-country flights were achieved.

Five of our pilots and their crews gained valuable experience from the Inter-Services Regionals, the team giving a creditable performance.

Forthcoming events include a gliding get-together at Land's End with our friends from Perranporth (Cornish GFC) and the "longest day" on June 16.

We welcome two new members – William Berry, who takes over from Peter Voute as Chairman, and Malcolm Gay, who steps in as maintainer now that Keith Robinson has left us for a life on the high seas.

J.G.K.

EAST MIDLANDS (RAF Wittering)

The welcome arrival of the sunny weather saw the start of what we hope will be a flood of new members, and was celebrated by a number of Silver claims. Height climbs were made by Pete Butt, Dick Cadd, Eddie McNaney, Andy Wilson and Mick Topham, the latter also gaining his distance with a flight to RAF Marham.

The hard work has continued in the hangar with routine maintainance. The new bus is now on the field, under the control of Steve Carter.

I.M.G.

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FOUR COUNTIES (RAF Syerston)

The close of May was greeted triumphantly with a variety of well earned badges and claims. Martin Johnson flew to Lindholme for his Silver distance while Bren McMasters soared locally for his duration. Four Gold distance flights were made by Trev Allsopp, Roger Clemo, Gary Stingemore and Ben Beniston. We also congratulate Ben on obtaining his Full Cat instructor rating. Well done Chris Curtis who flew a worthy 500km for Diamond distance.

A lazy Sunday in early June, with cloudbase at 500ft, resulted in an impromptu spot landing competition with those of under 150hrs being allowed the aid of spoilers. The club's T-21 was launched with a red anorak marking the spot. Trev Gorely showed us all up by landing, with absense of spoilers, two man-paces from the target.

We were well represented at the Inter-Services Regionals. In the Open Class Steve Hymers (Twin Astir) came eighth and Trev Allsopp (PIK 20D) 11th with Gareth Cunningham (Dart 17) second in the Sports Class. Our thanks to Bannerdown GC who hosted us immediately prior to the Regionals thus giving us the opportunity for pre-Regionals practice. We were also well represented at Nationals level by Hamish Brown (Kestrel 19) who came eighth in the Open Class.

Finally, all are welcome at our mid-summer task week starting on August 27. Accommodation is free and the beer cheap.

L.R.B.

HUMBER (RAF Lindholme)

We have numerous achievements to report since last going to print. First and foremost our congratulations to Keith Mitchell for his win at the Inter-Services Regionals and his elevation to Full Cat Instructor!

Bronze Cs have been completed by Mick Breeze, Clive Brealey and Phil Airey. On May 19 Derek Wilson completed his Silver with a duration and Phil and Clive claimed Silver legs with two heights and a distance. On the same day Neil Windle flew both his Bronze legs in the K-13 and Alan Clarke went to St Neots and back for his 300km Gold distance and Diamond goal. We are fast running out of pupils as we sent Iain Barrow solo on June 2 and our others are coming up to solo standard.

K.M.B.

KESTREL (RAF Odiham)

This month brings a change in our "man at the top", Chairman Lt Col "Wally" Lombard hands over, on posting, to Major Alex Reid. The members presented an inscribed tray to Wally in appreciation of his work on behalf of the club and the AGA.

Saturday, May 26, must be our best day ever. Pete Richie took the Mosquito round a 500km triangle, the first ever from Odiham, to complete his Diamond badge. Meanwhile Tim O'Donovan was taking the new Astir round a 300km triangle. The K-18 did two 100km triangles in

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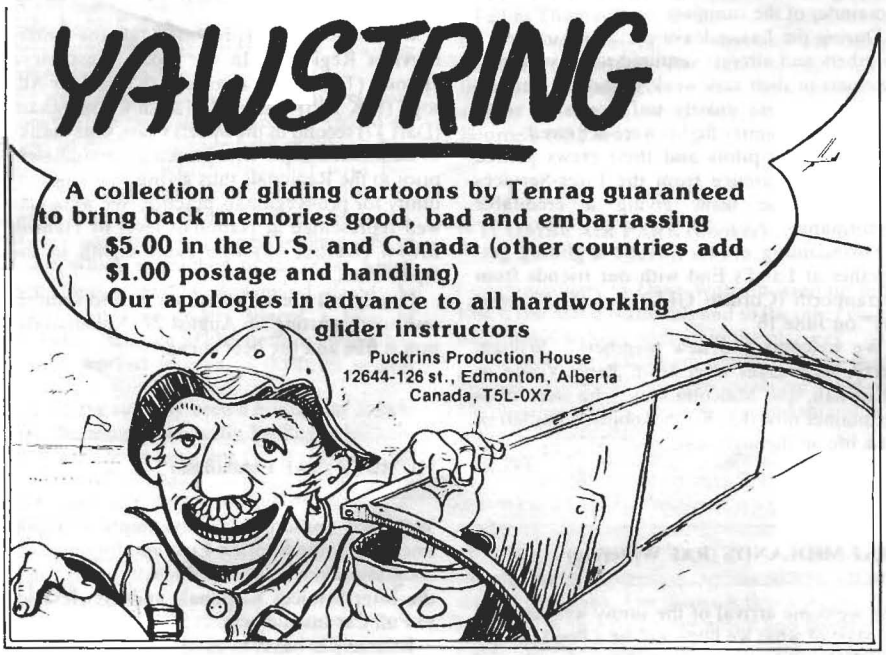
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the hands of Neil Brown and Andy Ginever, Pete Jenkins nearly making it three. The K-8, John Cockfield abroad, did Silver distance. Mark Thorpe met it on landing and attempted to fly back but did 48km. The K-7, apart from training flights, did five hours piloted by Alex Reid whilst Pam Davis and Bev Cooke did an out and return in the Blanik. Martin Darham achieved his Gold height at Aboyne in April.

New Solo pilots are: Mike St Jean, Derek Anderson, Dave East and Mark Wynn; Bruce Dew and Martin Eldridge have their Bronze C; John Cockfield and Ernie Downing Silver height and Alex Reid and Pete Eggleton have Silver distance.

We welcome John McGovern to the club, another addition to the instructors' roster.

P.W.A.



TWO RIVERS (RAF Laarbruch)

The season got off to a flying start with good weather over the Eastern weekend and then Saturday, May 19, produced the conditions to enable Jerry Nield and Bernie McDermott to get their 50km and Bernie his duration over the goal airfield to complete Silver C. Dave Wood flew the Cirrus 300km to Gütersloh and back and Clive Brady (Astir) made most of the flight, landing just short of the airfield.

All this was good practice for the BFG Comps, held again at Detmold, where Two Rivers swept the board, Dave Wood (Cirrus) winning the Open Class and Martin Spalding (Astir) coming second. The Astir was damaged in a field landing on the second day and did not fly again, but there was no one else close enough to beat Martin after the next three days' tasks. We also won the two-seater trophy and the Suez trophy for the aircraft in the best condition for its age – the newly recovered K-13. Dave Collins collected this trophy on behalf of the hard working workshop team.

Dave Wood has retired as CFI and Malcolm Norris has taken his place.

M.H.

WREKIN (RAF Cosford)

The last couple of months have brought a host of achievements. Paul Gibson gained Diamond goal at the Inter-Services Regionals, thus completing his Gold C and John Richardson came fourth in the Club Class; there were Bronze Cs for Nigel Redman, "Grif" Griffiths and Rich Arnall; Bronze legs for Rhod Evans and "Mossie" Williams and A and Bs for Les Cadogan and Roger Kemp.

Several members have recently departed – John Russell our stats ace, "Grif" Griffiths our social and PR man and Roger Kemp. Our thanks to them for their hard work.

During May we were visited by a Mosquito

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We hope to increase our fleet in the next fortnight with the addition of a syndicate PIK 20E.

S.A.B.

WYVERN (RAF Upavon)

Congratulations to Pete Cook (Mini Nimbus) on coming seventh in the Nationals' 15m Class and to Col Ted Shephard (Chairman of the Army Gliding Association) on coming third in the Standard Class.

Despite the poor weather we have had a lot of achievements. Bronze legs were flown by Dave Gioney, Alan Burch, Bernadette Colvert, Mike Cunningham, Lloyd Roberts, Ray and Colin Hornbuckle and Mike Shapland (Treasurer). Merv Kelly completed his Bronze C and Dan Archer his Silver C with a duration flight. Silver height was gained by Mike Cunningham and Lloyd Roberts and Bill Bailey and K. Robinson have resoloed.

Our pilots who flew in the Inter-Services Regionals gained valuable experience, Major Terry Colvert being the most successful.

J.S.

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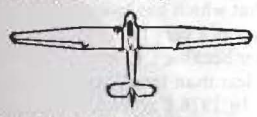
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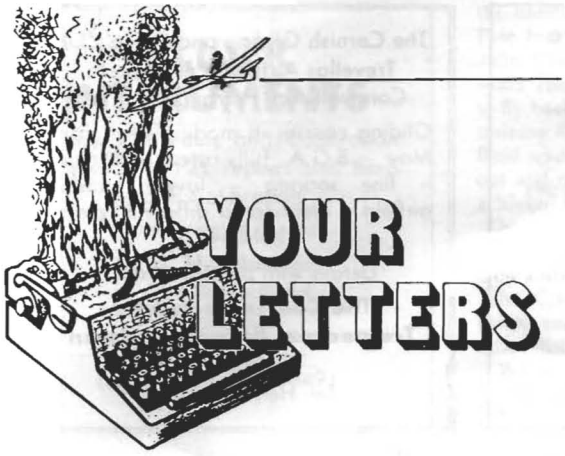
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SLIPPING DOWN THE HILL

Dear Editor,

"Hush" the A in 35 seconds! Naturally the only way to get that was some 40 years ago. Your article by Anthony Edwards in the last issue, "Instant Gliding", p130, brought back those memories.



This photograph demonstrates our will-power and determination to fly, or you might call it slipping down the hillside. It didn't take Land Rovers and other modern gadgets but 24 fellows to launch a Dagling. Naturally we had to be determined to fly and we developed the greatest comradeship between us.

Setting out for what we called a weekend's flying, we had to travel 20 miles on a pushbike, erect our tents and hope the weather was going to be kind. Sometimes we had to wait about three weeks for a launch and then it only lasted 30 or 35 seconds. To get our licence we had to fly straight, a little left bank, little right bank and then straight again into the farmer's meadow, in 40 to 45 seconds – and that was triumph and excitement.

After the weekend's excitement we rerigged the Dagling and put it in a shed, going home tired but excited. Flight or no flight it didn't really matter. There was always another weekend. Naturally I'm still flying at the Norfolk GC where the comradeship can only be described as second to none.

North Walsham, Norfolk. KARL HEINRICH

ELECTRIC UNDERCARRIAGE ALARM - A REPLY

Dear Editor,

My thanks to C. J. Chapman for his suggestions. (See S&G April, "A Modification to the Undercarriage Alarm", p91, following Ian's article in the February issue, p18.) I've checked with an electronics pundit and he agrees that a diode connected across the telephone earpiece may help but is not necessary. Of the twenty or so alarms I have built, the transistors are all alive and well, without diodes. The only failures I have ever had have been a very few ICs. These have been due to reversed polarity from inept fitting by the buyer in spite of colour coded wires! One IC failed in flight from static when flying near a very big storm (mention Reivilo to Bernard Fitchett and he'll tell you how big it was). My alarm now lives happily in a piece of copper tube and gives faithful service.

I thought of a press-to-test switch in the design but it only tests the alarm and not the microswitches. I prefer to unlock the brakes and move the undercarriage lever a fraction to test the *complete* circuit and save a component.

A buzzer? Well, a friend of mine has a motorbike hooter! It depends on what you want as a reminder to get the wheel down. There are times when you may want to open the brakes in flight, without lowering the gear.

I would like to acknowledge help from B. Aperloo and P. Goddard in developing the circuit.

Randfontein, South Africa. IAN ROBERTSON

WHY SELL COCKLESHELL?

Dear Anthony, Stochastic, Raconteur Extraordinaire,
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It would be a loss to S&G if you forsook the hills,
For we do enjoy your articles, yours ever, Justin Wills.

(See the last issue of S&G, "Instant Gliding" by Anthony Edwards, p130.)

BOOK REVIEWS

History of Cambrian Airways by T. G. Staddon. Published Airline Publication and Sales. Price £2.50, 112p, illustrated.

Anyone interested in the history of flying in Britain should add this slim but well printed book to their collection, even though it is about a (*the*) Welsh Airline and not gliders. There is a similarity, though, in the dedicated enthusiasm essential to keeping the airline in business through its many crises, mostly financial, and that which has been devoted to the building of most gliding clubs. Cambrian was a very personal airline, founded in 1935 by S. Kenneth Davies who later became Chairman of the Royal Aero Club, and which eventually had no less than four Captains whose sons flew with the company as first officers. In 1976 Cambrian was merged with British Airways. Plenty of "behind the scenes" stories, and 25 pages of photographs.

ANN WELCH

The Pitiless Sky by Stephen Ashton and **Bravo Charlie** by C. Macartney Filgate. Both published by Frederick Muller Ltd, price £4 95p each.

For sheer escapism, the kind of thing for a holiday read, I can recommend two books which have been written by power pilots. **The Pitiless Sky** is a tightly constructed adventure set during the last war while **Bravo Charlie** is a thriller with a girl pilot as the heroine. Neither represent great literature but they make undemanding, enjoyable reading and the element is at least right with authentic detail.

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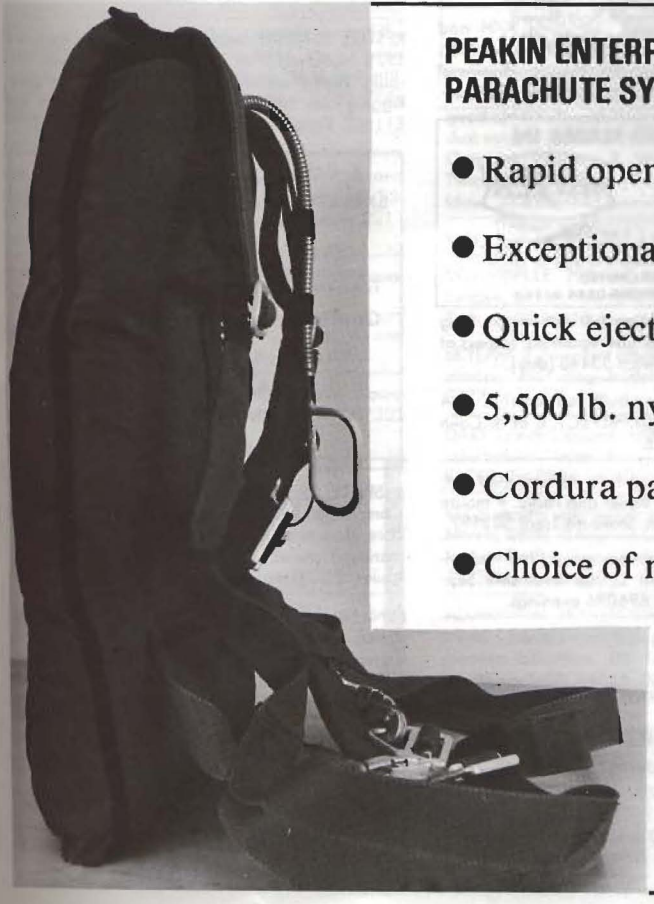
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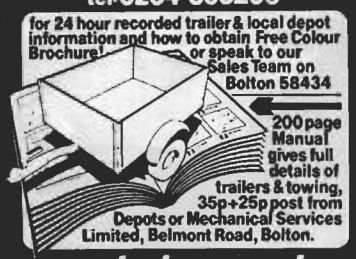
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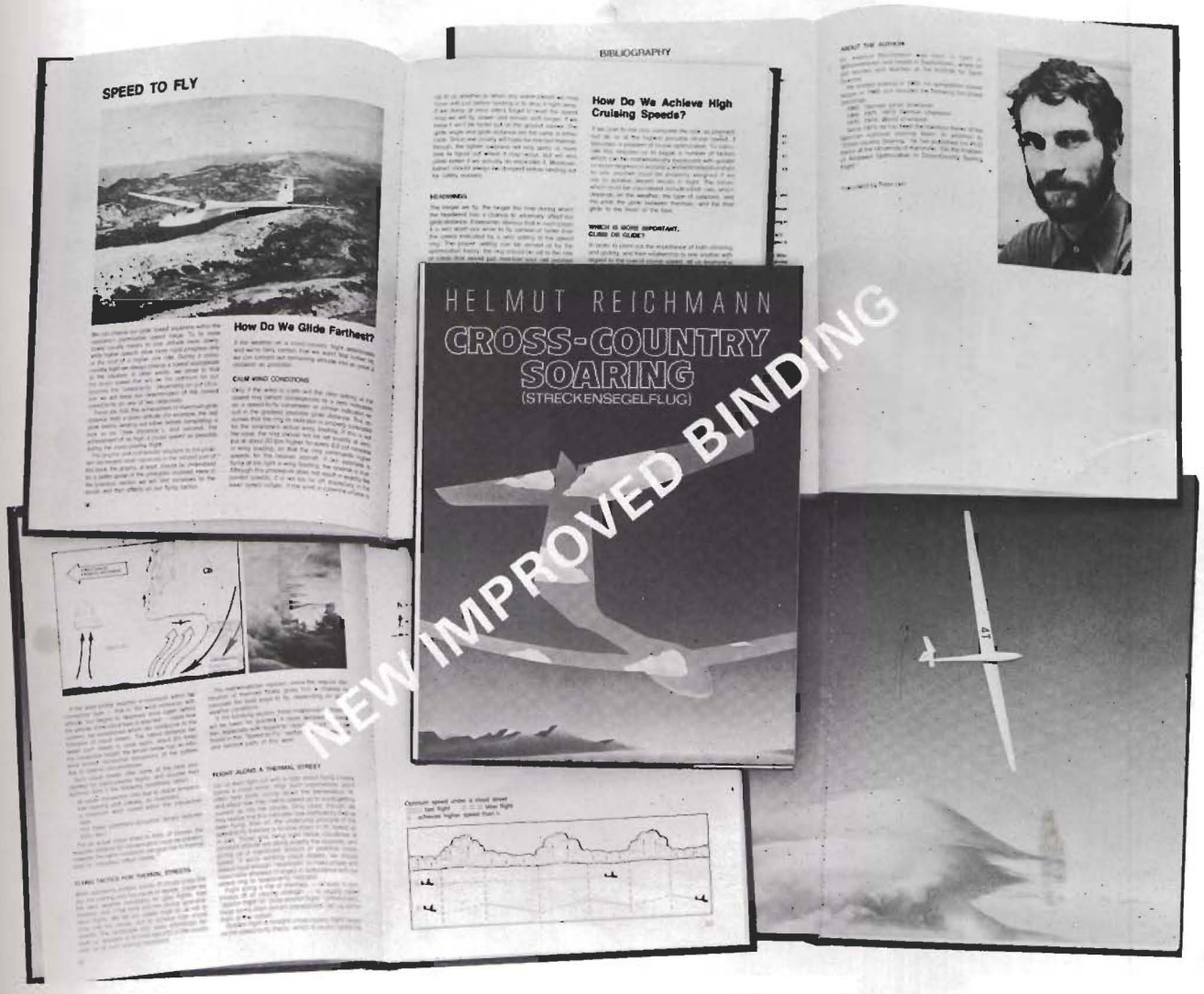
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