

# Sailplane and Gliding

2/6

December 1958

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# SAILPLANE AND GLIDING

OFFICIAL ORGAN OF THE BRITISH GLIDING ASSOCIATION

Edited by Alan E. Slater, M.A., F.R.Met.S.

Published by The British Gliding Association, 19 Park Lane, London, W.1.

Magazine Committee: Anstace Gladstone, Godfrey Harwood, Rika Harwood, Walter Kahn, Peggy Mieville, Colin Moore, Veronica Platt, Ann Welch, Philip Wills

Volume IX, No. 6.

Bi-monthly

December 1958

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COVER DESIGN by Barbara Carrow, showing in the background the names of the 55 countries in which SAILPLANE & GLIDING circulates.

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## NINETEEN FIFTY-EIGHT, AND A NEW COMPETITION FOR 1959

**B**EFORE we know where we are Christmas is on us again, the time of Good Cheer and Bad Thermals. 1958 is nearly gone: it has been a curate's egg of a year, good in parts. After the marvellous weather of 1957, with its crop of broken records, we had the remarkable week-end of 12th-13th April, with our first two 500-kilometres, then Andy Gough's splendid distance record to the boundary of Germany. In Poland Nick Goodhart kept our end up with his second place at Leszno. But apart from these flights, the weather has been pretty frightful.

In other fields the 64,000-dollar question of security of tenure for our many ill-rooted clubs is still undecided. Lasham, Edgehill, Perranporth, each tremble in the balance. The prospect facing the Kent Club is bleak, since, apart from security, Detling is in the approach lane to the new extended runway nearly completed at West Malling.

Our own Ministry of Transport and Civil Aviation help us as much as they can, but are constricted within the national policy, which is to give us no preference at all against the needs of farming or of industry. This, in fact, is unfair, since farming and industry can do without hangars or airfields, whilst without them we must perish. Yet hangars for which we starve are full of stores of food or machinery, idle runways on disused aerodromes are denied us if the adjacent farmer might be slightly discommoded by our operations.

In spite of all this, we continue to expand, almost faster than we can efficiently manage. And with this expansion, up goes the circulation of SAILPLANE & GLIDING. Our cover design gives the proud list of the countries in which we now have subscribers—we make their number fifty-five.

When THE SAILPLANE and GLIDING combined forces, our joint circulation went up about 80%. Since then it has doubled again, and without doubt we now have the largest circulation of any gliding publication in the world. How to expand further?

Our cover design competition raised great interest, though the winning design has produced a good deal of comment and criticism. Perhaps we shall change again. But what we now need is a good supply of really first-class cover photographs. So we announce here a cover photograph competition. First prize 3 guineas, and 1 guinea for every cover photograph published. Whole-plate prints should be sent, preferably of a kind which will make a square picture. The more the better, but please may we not return any unsuccessful ones, unless you particularly want them back.

So to all our readers, once again—

**A Merry Christmas and a Happy New Year**

# SOME THOUGHTS ON BUNGEYMANSHIP

by David Carrow

**T**HE hilltop bungee-launch is different from all other methods of getting a glider into the air, because it must never fail. On most launching sites a trickle down the hillside will spell disaster. This is the fundamental contrast with auto-launch fumbles, winch failures and even aero-tow panics (as far as the glider is concerned!) and therefore a fundamentally different and rather cautious attitude of mind is necessary when bungeeing. It must not fail.

I have learnt this lesson for myself the hard way in the Cambridge Club, where we have a tradition of holiday expeditions to little-known or completely untried hill sites. Of the eleven expedition launches I have attempted to date, two have failed to get me airborne at all, a third which did get me flying gave quite the closest shave one could wish for, two more have been uncomfortable and only six satisfactory. This is too high a dice rate, and the fact that most of these launches have been in various parts of North Wales is a coincidence that reflects not at all on the safety merits of that excellent hill-soaring country. The difficulties arise chiefly from the fact that the standard bungee was designed to cope with pre-war gliders and has not been improved since.

## THE BUNGEY ITSELF

First of all, what is a bungee? A multitude of tiny rubber threads, thirty yards long, bound round and constrained externally in a braided tubular cotton cover of about  $\frac{3}{4}$ -in. diameter. This constraint prevents the bungee from relaxing fully and gives the rubber threads a calculated degree of pre-tension, some three or so times their natural length. The bungee is normally made up in a "V" rope of two 30-yard strands. Fig. 1 shows the tension/extension curves given by Luke Turner, the makers, for a single strand of new bungee over-stretched to 110% extension, and also for our own "used" bungee, three years old, stretched to the recommended maximum extension of 100%. From this graph one observes the comparatively high "breakout" force necessary before any appreciable extension can be obtained; one can also calculate the stored energy at 100% extension which comes out for the "used" bungee

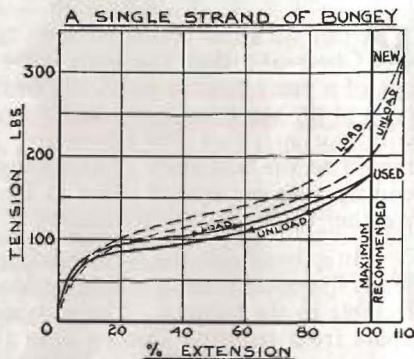


FIG. 1

to 18,000 ft. lb. for a two-strand rope. (Incidentally the area between the loading and unloading curves represents the energy absorption or "shock absorbing" properties of this type of cord.)

A bungee needs loving care and affection; it grows old and loses its elasticity. Oil, that commodity inseparable from gliding, rots rubber very quickly indeed; sunlight is bad and so, obviously, is overstretching. Since it must never fail, a bungee must be maintained to aircraft, not M.T., standards of serviceability and resolutely rejected when u/s with the same firmness that one discards a tattered elevator cable.

## THE ENERGY REQUIRED TO LAUNCH A GLIDER

Now for some figures. Let us wheel a Tutor out on to a flat runway in the calm of the evening and try to get it airborne to a controllable flying speed just above the stall, say, 450 lb. accelerated to 25 kts. Neglecting ground friction and air drag, the energy requirement works out at 12,500 ft. lb. and we have available 18,000 ft. lb., so a nice low hop results, particularly if we insert extra energy by keeping the bungee crew running while the glider is accelerating, giving a run-on or auto-tow effect which can add very appreciably to the energy input (but see later).

Let's try an Eagle in the same conditions; the requirement is to accelerate say 1,200 lbs. to 38 kts. The energy requirement is then 77,200 ft. lb., and as we still only have our 18,000 ft. lb., the result is pathetic. We can in fact store in our bungee a maximum figure of less than one quarter of the energy necessary to get an Eagle flying. Even with an Olympia (670 lbs. and 32 kts. = 30,500 ft. lb.) we can only store rather under two-thirds of the energy needed. These are all flat-site zero-wind figures.

FIG. 2

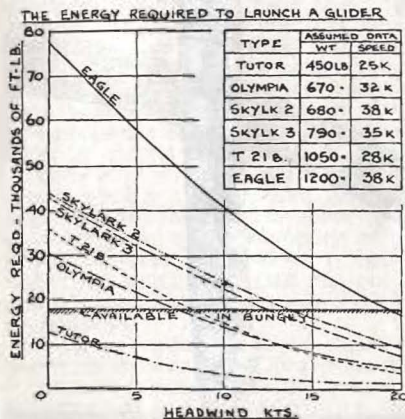


Fig. 2 shows the energy requirements of various modern gliders (again flat-site and neglecting ground friction and air drag) in zero wind and in increasing headwinds. Wind helps by reducing directly the speed requirement; if there is a 10 kt. wind we need accelerate our Eagle to only 28 kts., and so on.

In practice a safety margin is necessary to overcome ground friction, particularly if the ground is rough or covered in heather, or if one has a skidded aircraft. Air drag can, however, be safely neglected.

A down-hill slope can help very considerably. Neglecting friction again, any slope with a vertical drop of 70 ft. will accelerate any glider to 40 kts. (see Fig. 3) An ideal bungee site could therefore consist of a concrete ramp with a drop of, say, 100 ft. and with no bungee needed at all, and there are in fact sites where this could be a sensible suggestion! To take a more typical case, on a 1 in 10 slope, with no run-on of the crew during the launch, a

Skylark III can obtain some 7,000 ft. lbs. energy from the slope while the bungee is contracting, i.e., almost half that in the bungee itself.

The run-on of the bungee crew after the glider starts moving, up to the moment the bungee drops off, produces an auto-tow effect which can add most substantially to the energy input. As a very rough approximation, which errs on the side of safety, a run-on at, say, 5 kts. is equivalent to a corresponding 5 kts. increase in wind strength. But (pace Bill Crease) we must not rely on this run-on; people trip over rabbit holes, and jeeps (the auto-bungee case) can drop dead too. The run-on adds to our safety margin; we must not rely on it.

I proceed now to the solemn enunciation of the First Principle of Bungeymanship:

*"There shall be sufficient energy inherent in the system at the instant the glider starts to move that it cannot fail to get airborne."*

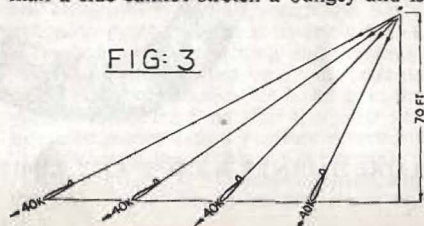
To put the thing another way, in a formula for the mathematically minded:

*"The energy stored in the bungee fully stretched plus the energy inherent in the downhill slope less a margin for ground friction shall exceed the energy requirement of the glider in the wind strength available."*

#### BASIC HAND-BUNGUEMANSHIP

The terms of reference I have set myself in these thoughts do not include the choice of a suitable hill site or launching run except to say that measurements must be made to ensure that there be sufficient distance for the crew to run down the slope for the bungee to reach 100% extension. This is not as obvious as it sounds, and an accident has happened owing to the crew reaching the edge of a cliff with the bungee only partly extended—a worse accident would probably have occurred had the pilot chosen that instant to release his end and bungee his crew into space. . . .

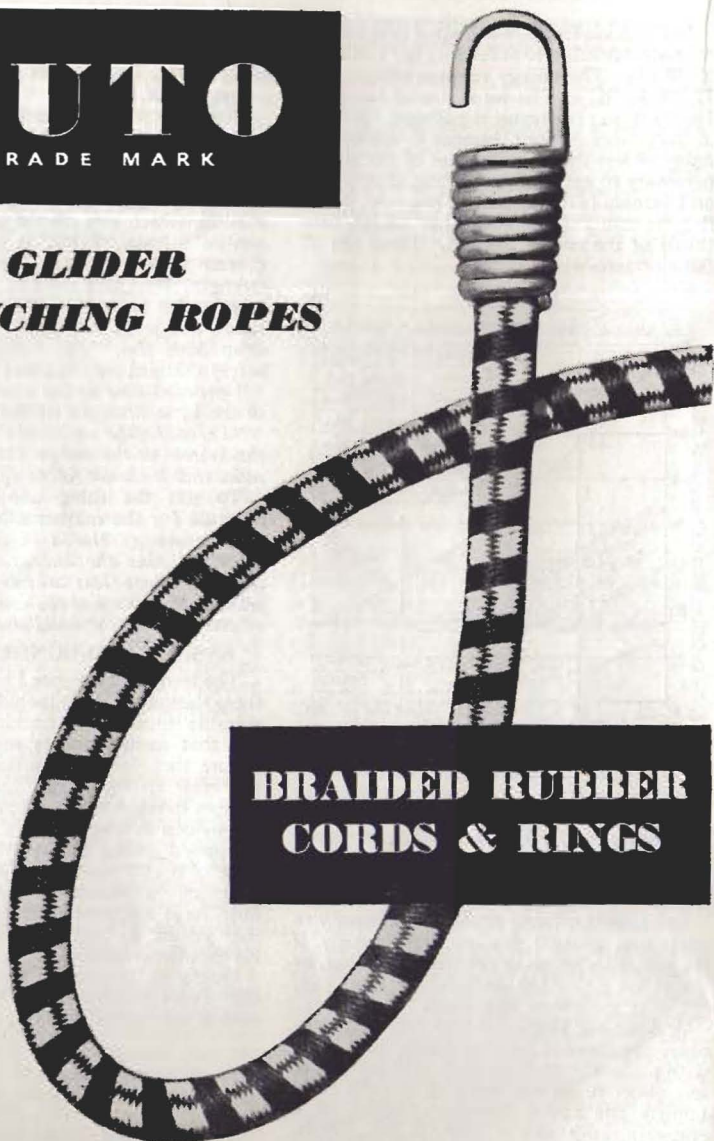
Owing to the comparatively high "break-out" force required (see Fig. 1 again), one man a side cannot stretch a bungee and is



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useless. Two men can put but little energy into the system—remember it is *stored* energy that counts; three is the minimum and more than four a side can overstretch and break the rope. Hence the edict that a hand-bungee crew shall consist of not less than three nor more than four a side. There must be one experienced man per side; the rest may be ignorant bystanders, but they should be carefully briefed.

I have found the airbrakes ideal to signal from the cockpit to all concerned. One shuts them when one is ready, and this has the further advantage of ensuring that one cannot be launched with them open. The wing-tip man then takes over and shouts "WALK" (to take up the slack), "RUN" (all out) and "LET GO" (for the holder-backer, not the bungee crew!) This last should be given when the bungee reaches 100% extension, either estimated by eye, or rather better by using a short "tell-tale" stretch indicator in the rope. Actually, if the correct number a side is used, they will begin to grind to a halt at about 100% extension owing to the steepening of the tension/extension curve (Fig. 1 again), and/or the holder-backer will run out of strength, but a hand-bungee is always a bit approximate.

As far as possible, the launch should be always under the control of the pilot, so that if he starts moving before the bungee is fully stretched, or if his acceleration is then insufficiently rapid, or a wing drops, or some other untoward event occurs, he can break the launch off by releasing the bungee and slide to a halt, possibly by ground-looping with slight damage to avoid a more serious accident. The launch should therefore be made on the Ottfur hook and not on the open bungee hook (the B.G.A. operational regulations have, I understand, been modified to permit this). A short length of 1,000 lb. breaking-strain nylon aero-tow rope may be used to provide the statutory weak link. This weak link must be kept in tiptop condition and replaced regularly to prevent any possibility of a mid-launch break. The usual Ottfur checks should be made before each launch, and during the launch the pilot should release as the bungee comes slack and not wait for the bungee to back-release, as there is a risk of it trailing back and catching on the wheel box or wheel trolley hooks. During the launch the tail should be kept down and the glider hauled into the air as early as possible.

The wing-tip man should not attempt to run forward with the tip: the acceleration is too smart and he may swing the wing round. He should remain stationary and let go.

The success of the launch depends on storing energy in the bungee, and this means that the bungee must be fully stretched. To achieve this, a holder-backer on the ground behind the tail is essential. A reverse-facing hook under the tail, as on some Olympias, is ideal to enable this member of the organization to really do his job properly, with feet dug in and a short piece of rope. One of my ghastly incidents arose through my putting an ignorant bystander on the tail. This holding back is vital and I have no hesitation therefore in stating this Second Principle of Bungeymanship:

*"There shall be a holder backer regardless of how strong the wind is."*

### AUTO-BUNGEYMANSHIP

The principle of using a jeep instead of a bungee crew, with both strands of bungee running parallel back to the glider, and with the glider launching over the top of the vehicle, is now quite widely known and is perfectly safe provided all the factors involved are appreciated. Chief of these is the very real danger of producing a dreaded "bungee bang" with the jeep overstretching and finally breaking the bungee. To prevent this we use a guardrope, twice the length of the bungee, so that at 100% extension the rope becomes tight and the glider is forcibly pulled, regardless, out of the holding-back organization's hands. The guardrope is lightly bound with insulating tape at intervals to the bungee, the intervals being closer near the glider to minimize the risk of the guardrope looping back before the bungee is released and catching on the wheelbox, etc. Fig. 4 shows a plan view of a typical auto-bungee set-up before moving off. One of the chief merits is that only four persons are needed in the system.

Even with the guardrope, the jeep must not be driven too fast through the 100% extension point or there is a very real risk of something overstretching and breaking. This could even be delayed (in an extreme case of the jeep accelerating faster than the glider) until some time after the glider has begun to move, with a possibly disastrous "trickle" resulting. (This has happened).

A steady 5 m.p.h. throughout is ideal, and the jeep should be driven first down the

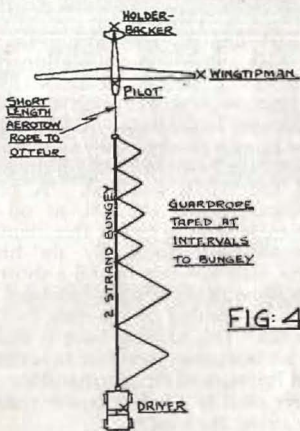


FIG. 4

slope on a dummy run to ensure the ground is satisfactory with no boulders, ditches, etc. Preferably the jeep should not run out of petrol or otherwise break down with the bungee half-cocked (this has happened). A guardrope with little stretch should be used—a thin nylon aero-tow guardrope stretches too much and one reaches the stage of "Who will guard the guardrope?"

The jeep driver must be protected against a bungeebang and there ought to be a quick-release at the jeep in case the Otffur fails. Towards the end of its run the jeep should

make a gentle planned curve to left or right depending on the terrain, so that in the event of a marginal launch the glider fuselage will pass to one side, and provided the jeep driver ducks (this has happened) all will be well. A direct signal by the pilot closing the air brakes tells the jeep when to go and the pilot *must* release the Otffur should the glider begin to move before the guardrope comes tight. In fact, because the forces and factors involved are under closer control, a jeep bungee is probably to be preferred to a hand bungee under similar conditions.

### CONCLUSION

I would like to acknowledge considerable help (not to say argument) from Bill Crease, David Clayton, Laurie Vandome, Ken Machin, Messrs. Luke Turner and several others. Many, if not all, of the ideas are theirs.

Finally, I cannot help recommending bungeeing as a WAY OF LIFE; quite soon it becomes an END in itself and not just a MEANS. I am reminded of the ultimate stage of fishing which my respected father has now reached, where he does not actually take a rod on the water, but just observes the fish and plots out in full detail how to stalk and catch it. On several of our happiest bungee-launch reconnaissances, we have not actually had a glider with us. . .

## BOOK REVIEW

Natural Aerodynamics by R. S. SCORER. Published by Pergamon Press, London, 1958. Price 60s.

HERE is an altogether delightful, stimulating and sometimes deliberately irrelevant account of our atmosphere and its behaviour. Among the digressions, of which the Author warns us in his preface, we can read of dynamic soaring, atmospheric pollution, jet streams, clear air turbulence and the bangs of man-made explosions, meteorites and volcanic eruptions.

Chapters 7 and 9, however, with their careful explanation and theoretical forms of upcurrents—thermal and wave—were surely written for the sailplane pilot. It is a fascinating story concerning which we must each satisfy ourselves that what the author has shown is in accordance with our own experience. Here is a stimulus to better observation and greater awareness of our surroundings as we fly.

Perhaps by this book, to which he does scant justice in his recent letter to SAILPLANE & GLIDING, Dick Scorer will provoke the gliding fraternity into providing some of the information which he says he lacks. It is the very least that we could do in return for this most valuable contribution to the art.

D. H. G. INCE

## Priest's Crag

*Being an account of the travels of four gentlemen and a Skylark from the University of Cambridge amongst the Cumbrian Mountains.*

*Distilled by ANTHONY EDWARDS from conflicting accounts of the events, and censored by JOHN GRIFFITHS and PETER BULMAN.*

SOME time ago it was suggested that Messrs. Griffiths, Bulman and Edwards should take the C.U.G.C. Olympia to Wales this spring. And so it happened that in the middle of March we three set out for the Pennines with the Skylark II in tow. For in March there is a good chance that north-easterlies will blow, setting up lee waves from the Crossfell range. The collection of the various pieces of equipment for the expedition kept Peter busy (I nearly said quiet) for a whole term. The Skylark, it is true, was at Marshall's; the oxygen came from Coton by way of Norwich and the Cambridge Fire Station, the wireless from Girton, and the barograph from London. The axleless trailer at Baldock was united with a trailerless axle from Walsall a matter of hours before our departure.

I think it was a Wednesday when we left Cambridge for the North. We intended to fly at S\*tt\*n B\*nk for a day before proceeding to Crossfell, so we drove up the A.1. With the dark came the snow, and although it had stopped falling by the time we reached York, every mile it lay thicker on the ground. But we were happy—we had four-wheel drive and six fully-inflated tyres . . . well, five and a half . . .

"Peter—take a look at the trailer tyres".

"Oh—that leaves us with five".

So we backed the trailer into a snowdrift, on which we jacked it up, and removed the offending wheel. The Jeep, relieved of its burden, took us up onto the moors past stranded saloon cars. We were confident in her ability to swim, if necessary. By this time John was driving, and I was in the back, sandwiched between suitcases and the trailer wheel, my only experience of the outside world being through the conversation of the two who could have seen out had the windscreen wiper been working.

"I think the road must be more to the right".

"Oh—are you sure there is a road here?"

"Yes, it's on the map."

"—"

"Try reversing".

"Pity the tyres are so bald".

"I think we'll have to get out".

Peter and John stepped from the Jeep up onto the snow, and disappeared ahead in search of the Y\*rksh\*r\* Gliding Club. When they returned, having found the uninterrupted examination of virgin snow by torchlight rather tedious, we started to dig the snow from under the Jeep with our hands, our feet, and the starting handle. The Jeep seemed to be balancing on a mountain of compressed snow by its sump and back axle, with the result that the two hours spent removing the snow from under the wheels were remarkably fruitless. So we set out in search of the clubhouse again,



*Time to "D.I." the vehicles, but at 6 a.m. Anthony Edwards has hardly woken up to what he is doing.*

this time in the opposite direction, hoping to find a shovel. On retracing the Jeep's tracks, we soon came to the turning that we should have taken, and eventually found the clubhouse. We returned to the Jeep with one-and-a-half shovels and more enthusiasm, and an hour later we were back on the right road, progressing like a destroyer in a heavy swell: not much roll, but plenty of pitch. If there had been an onlooker, and if it had not been night, he would have seen no Jeep, but merely a spray of snow lurching through (rather than across) the featureless countryside.

At 4 o'clock in the morning we arrived at the clubhouse, broke in, and unpacked our sleeping bags. The walls seemed to serve no purpose other than separating the snow inside the clubhouse from the snow outside. For some reason (I think it was Peter) we did not settle down to sleep until 6 o'clock. Three hours later, with the snowscape floodlit by a brilliant sun, it occurred to us that we ought to rescue our trailer before its snowdrift melted. So we bought a new tyre—necessary, alas—and towed the trailer a little nearer to the club, parking it in another roadside snowdrift, to the probable confusion of those stranded motorists who had been using it as a landmark.

The wind was unsuitable for soaring the ridge, so towards evening we set off to Carlisle to collect our ground crew, Stuart Waller. After leaving the trailer where we had booked for the night, near Penrith, we drove into Carlisle with the windscreen open because of a fog which had descended. This improved the visibility, because the fog

was then inside the Jeep as well as outside. The poor reader of this article must by now be in the same frame of mind as we were on the following morning—thinking it was time there was some flying. In a cloudless sky we drove up the main road over Hartside, and half way up got out to sample the wind.

"It's a bit light, isn't it?"

"You've got no courage . . . but perhaps it is".

"That's funny—it's coming down the hill".

"So it is".

"Perhaps we should have got a forecast".

"Yes".

We drove down the hill again, and across to the Lake District.

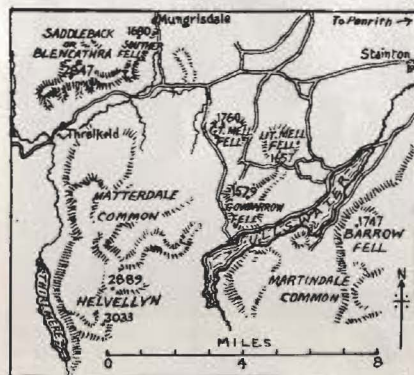
At Christmas Peter and John had been on a preliminary expedition to look for auto-bunij sites, and this is a good place to describe their intended method of catching the Crossfell wave without an aero-tow.

North of Ullswater there are four hills soarable in an easterly wind, arranged in a line north-west to south-east. On the most easterly hill, Little Mell Fell, Peter and John found a launching site, and the other hills—Great Mell Fell, Souther Fell, and Blencathra or "Saddleback" can be reached in turn from there. The theory is that on one of these hills the hill lift will be in phase with the wave lift.

Throughout the expedition the wind blew from the south-east quarter, and we only used one launching site. This was not the one originally chosen by Peter and John, but a much better one only a few hundred yards away on the top of Priest's Crag (Grid Reference 25/425233). We always rigged the Skylark beside the road at The Hause, the top of the pass between Priest's Crag and Little Mell Fell, and then towed it up the hill for launching. A little way to the south-west of the launching site is a flat landing strip eighty yards long, but more of that anon.

That afternoon John pioneered the route back to Saddleback in a fifteen-knot south-easterly wind. He writes:

"Although a polar curve and a map had convinced me that the route was feasible, I felt a little anxious on leaving Little Mell Fell, as Saddleback, seven miles away, was invisible in the haze, and Great Mell Fell looked like one of those conical hills depicted in books on soaring with all the



streamlines going round the sides. I arrived on Great Mell Fell surprisingly low and eventually located lift in a tree-covered gully. I hurtled in and out of this gully for a few minutes, and, after being outclimbed by a hawk, arrived at the top of the hill, went

round the trees, and headed towards Souther Fell.

"On this occasion I lost little height and arrived about half-way up the Fell, five hundred feet below the top. The lift was strong and steady, and I was soon wonder-



*The Cambridge Club's Skylark III flying towards Ullswater after an auto-bungee launch from Priest's Crag.*

ing how to cross the remaining two miles to Saddleback, consisting of hill and snow. A frontal assault from the east ended in a quick turn out of a trap and a hasty retreat past a shepherd waving down at me with his stick. His sheep were not as worried as I was.

"I then tried a flanking movement down the valley to the south, where Saddleback pushes out a succession of ridges like splayed-out fingers, each of which was partly soarable and partly not, due to the down-draught from the one in front. As I crossed each ridge the Skylark was hurled up in the air, shaken up, stalled, and hurled down again.

"I was soon level with the top of the magnificent bowl of Saddleback, which is an 800 ft. rock face rising to 2,800 ft., completely open to the east wind for twenty miles. I crossed over to it, expecting to be thrown up violently, and slowly sank below the top. The wind clearly had more south in it at that height.

"After an argument over the radio, and much manipulation of slide rules, I returned up-wind to Little Mell Fell and landed back on top, feeling very pleased."

Early next day Peter was launched in a light wind, and fled like a startled rabbit to a bottom landing field, taking 100 seconds to lose 650 ft. We went back to breakfast after collecting him. This meal usually occurred before noon, at the King's Arms in Stainton, where we were staying. Here our eccentricities were accepted, and even encouraged, by the landlord and his wife, and we can thoroughly recommend this inn to a future expedition. The bills were trivial compared with the quantity of food we ate, and even Peter's blowing of the coaching horn at 6 o'clock on a Sunday morning did not have us expelled.

That afternoon the wind went round to the south, and a low inversion set in. After much deliberation it was decided to launch me from Priest's Crag, although the ridge was not soarable, to explore a south-facing bowl a third of a mile away. A good launch found me there, and I spent one and a half hours flying locally. I tried both Little Mell Fell and Gowbarrow Fell, but in neither case could I hold hill-top height, and I had to beat a hasty retreat. However, a pleasant, if trivial, flight was spoiled by overshooting a few yards on the top landing strip, resulting in a curious method of damaging a sailplane, wherein a hillock is introduced



into the fuselage after the aircraft had stopped rolling.

And so the following morning—Sunday—Peter and John took the damage to Kirbymoorside, returning on the Wednesday. Meanwhile, Stuart and I spent the time pedalling around the Eden valley on very old female bicycles looking for auto-bunji sites. The only one of note we found is at Grid Reference 35/483232, for use in a west to north-west wind, when Barton Fell should be soarable. This long ridge rises almost straight out of Ullswater, and is very steep for a height of 1,000 ft.

On Thursday, thanks to Slingsby Sailplanes, John was launched in a light wind from Priest's Crag, after we had fired a smoke puff from the bottom of the hill to test the lift, to the consternation of the local sheep farmers. After an hour at hilltop height, the rest of us encouraged him, by radio, to come even lower so that we could take some photographs. This he did, but just then the wind dropped, and he continued on to the bottom to sample another field. After a late breakfast, Peter flew in better conditions, and made the trip to Souther Fell, being unable to drop back on to Saddleback because of cloud. He landed at dusk in a field at the foot of the Fell, having been airborne for three hours.

And so, on Friday, my turn came round again. The conditions seemed ideal for the pilgrimage to Saddleback, but it took some time to get away from hill-top level on Priest's Crag. I arrived on Souther Fell only 500 ft. above the field in which Peter had landed, but so beautiful is this fell that the light wind soon had me 500 ft. above the top. But this was not enough for the step back onto Saddleback: several times I tried creeping round the corner, only to

be met by a rock face and the red ball simultaneously. However, the ridge was soarable for several miles towards Carlisle, and after sampling it I landed at Mungrisdale, at the foot of one of the valleys that pierce the ridge.

On the next day John completed a fifty-kilometre triangle entirely without thermal assistance. This, perhaps the best flight of the camp, deserves to be fully related, but John's promised account had not arrived. I hope he will produce it later, to be printed separately. Unfortunately the material consequence of the flight was the appearance of the Skylark, inverted, in the backyard of the King's Arms that evening. We obtained some oakfaced ply from the local carpenter, and some plastic-to-wood Aerolite. This being colourless, we thought of adding barograph ink to it, but it is hard to fool Ted Warner.

But all was ready in time for Peter's early morning trip to the bottom on Sunday. The wind was strong and smelt of waves. Peter reported extreme turbulence, and it was clear that our little hill was sitting in the down of a wave. I persuaded the others to launch me before returning to breakfast, and I employed the tactics of a previous flight—diving straight for the bowl. By the time I had got the wireless working I was at 3,000 ft. over Ullswater. I turned, to beat back along what was evidently a wave off Barton Fell, but the ground came rushing up to meet me, and in no time I was hill-scraping. For an hour I sampled the valley again and again, without success, and eventually landed exhausted. I had been flying the whole time in extremely rough air, using both hands on the stick, and flying at 50 m.p.h. (at which I.A.S. I was frequently stalled). I finally decided to land when, on making a turn at 55 m.p.h. near the hill, the Skylark behaved like a frightened Tutor as far as aileron was concerned. I shudder to think how a Tutor would have behaved!

I had been working in the belief that the most likely place for a wave was downwind of Barton Fell, and so I did not attempt to fly to Saddleback. But John did, and eventually reached 6,200 ft.

The last flight, on Monday, was a fitting end to the expedition. Peter climbed to 9,700 ft. in a standing wave, thereby completing his Silver C. He has provided a very comprehensive account of his flight, but I am afraid it is too long to include here. He

was aloft for about four hours, and found the characteristic turbulence at the bottom and top of the wave, as well as the normal smooth lift in the middle. Twice he reached his top height, from where he reported cloud base to be about 15,000 ft. The wind was south-east, about 30 knots, and the whole flight was confined to a few miles around Ullswater. From the ground, conditions appeared to be better to the west, but although Peter flew around a little in search of other areas of lift, flying upwind at 110 m.p.h., he could find none.

And so the camp ended. After packing—both clothes and Skylark—we set out on the night trip to the Mynd. Even that had its exciting moments, but, undefeated, we arrived in the early hours of the following day, announcing our arrival, as any sheep in Shropshire will tell you, with the aid of some smoke puffs. We had had to take the Skylark to the Mynd in response to demand from the Cambridge campers . . . the next week the Mynd did not come out of cloud.

The three pilots would like to thank Stuart for his cheerful assistance, Mr. Slingsby for his rapid repair, and Dr. Machin for the loan of wireless and smoke-puff equipment. All were invaluable.

# GLIDING

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A. & C. BLACK

# British Gliding Association News

## B.G.A. Ball

THE annual Ball of the British Gliding Association will be held on Friday, 13th March 1959. Tickets will be £1 per head, inclusive of supper. The usual cabaret will include Jon Pertwee and will be arranged and compered by Michael Pertwee, who will be glad to hear of any gliding people willing to contribute a turn. Write c/o B.G.A.

## Annual General Meeting

This will be held on Saturday, 14th March 1959, and the annual Instructors' Conference and also the Club Managers', Secretaries' and Treasurers' Conference, will be held on the same day.

## Records Homologated

WOMEN'S BRITISH NATIONAL AND UNITED KINGDOM GOAL-AND-RETURN: Mrs. Anne Burns on 28/5/58, in a Skylark III, Lasham-Kidlington-Lasham, 94 miles.

UNITED KINGDOM TWO-SEATER GOAL-AND-RETURN: J. Williamson and Mrs. Ann Welch on 28/5/58, in a T-42, Lasham-Westbury-Lasham, 102 miles.

BRITISH NATIONAL SPEED ROUND A 100-KM. TRIANGULAR COURSE: A. J. Deane-Drummond on 17/6/58, in an Olympia 419, Leszno-Rawicz-Gostin-Leszno, 76.6 km./hr. (47.6 m.p.h.).

BRITISH NATIONAL SPEED ROUND A 200-KM. TRIANGULAR COURSE: A. J. Deane-Drummond on 13/6/58, in an Olympia 419, Leszno - Sroda - Wlkip - Krotozyn - Leszno, 73.05 km./hr. (45.4 m.p.h.).

UNITED KINGDOM SPEED TO A 200-KM. GOAL: H. C. N. Goodhart on 2/8/58, in a Skylark III, Nympsfield-Great Yarmouth, 58.8 m.p.h.

## Ruling on Record Claims

If the same record is broken twice on the same day, the Flying Committee will consider both claims and recommend the award of the record to the best proven performance.

If two record-breaking flights are made on different days, each flight will be considered on its own merits, and if the first flight establishes a new record it will be recommended for homologation as such; and if the second flight does not beat this record by the required amount it will not be recommended for homologation as a record.

If there are two equal performances on

the same day qualifying for the same record, the Flying Committee will recommend that the record be held jointly by the pilots.

## Annual Awards

All claims for annual awards should be sent in to the B.G.A. office by 31st December. No flight will be considered unless it has been claimed by the pilot.

## National Championships

These will be held at the Lasham Gliding Centre from 9th to 18th May 1959, inclusive.

## Safety Conference

A B.G.A. conference with this title will be held on Saturday, 13th December, at 11 a.m. at the Kronfeld Club, 74 Eccleston Square, London, S.W.1. Chairmen and C.F.I.s of all clubs will be invited, and other instructors may attend as far as accommodation permits. Mr. Philip Wills will take the Chair, and Mrs. Ann Welch and Air Commodore G. J. C. Paul will be among the speakers.

## Car and Bicycle Badge

The B.G.A. announces a badge 3 in. in diameter, showing three blue gulls on a pale blue background surrounded by a silver wreath, suitable for mounting on a car or bicycle, on sale at 12s. 6d.

## Official Observer Appointments

The Council have agreed that all existing Official Observer appointments shall terminate on the 31st January 1959. As from that date:

(a) Official Observers will be appointed for a maximum period of five years terminating on the 31st December of the appropriate year.

(b) A fee of 5s. will be charged to cover the cost of registration.

The qualifications for becoming an Official Observer will, in future, be as follows:

(1) The applicant must hold at least a Silver C badge, or be a current gliding instructor, or be a person who has been continuously connected with the active side of gliding for the past three years.

(2) The applicant must be familiar with the F.A.I. regulations for records and gliding badges, B.G.A. certificate and badge requirements, B.G.A. requirements for the award of cups, records, etc.

(3) All application forms for appointment



will have to be countersigned by the Chairman and the C.F.I. of the applicant's club or the C.O. and C.F.I. of the A.T.C. school. Both these signatories will have to be satisfied that the applicant has the above qualifications and that he/she is a suitable person to be entrusted with the privilege of being an Official Observer.

B.G.A. approved C.F.I.s and C.O.s of A.T.C. schools will automatically be appointed Official Observers on application to the B.G.A.

As from 1st February 1959, Official Observers will not be required to give the Oral C tests.

The B.G.A. will start to appoint new observers as from 1st December 1958, and before this date supplies of the new application forms will be sent to all clubs and A.T.C. schools.

The method of testing for the Oral C will be circulated in due course, and the application for C Certificate will be amended accordingly.

## Gliding Certificates

### DIAMOND FOR GOAL FLIGHT

| No. | Name          | Club                | Date    |
|-----|---------------|---------------------|---------|
| 230 | D. S. Bridson | London Gliding Club | 11.8.58 |

### SILVER C CERTIFICATES

| No. | Name         | Club                       | Date of completion |
|-----|--------------|----------------------------|--------------------|
| 760 | L. J. Pike   | Army Gliding Club          | 11.8.58            |
| 761 | E. H. Turner | Empire Test Pilots' School | 14.6.58            |
| 762 | D. Collinson | Newcastle Gliding Club     | 24.8.58            |

### C CERTIFICATES

| Name             | Gliding Club or A.T.C. School | Name             | Gliding Club or A.T.C. School | Name             | Gliding Club or A.T.C. School |
|------------------|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|
| T. Moss          | Windrushers                   | V. F. Griffith   | Bristol                       | D. M. Hall       | 621 G.S.                      |
| J. M. Lowenstein | Surrey                        | M. H. Kuyper     | Crown Agents                  | M. T. Pearson    | 621 G.S.                      |
| G. E. Bass       | 643 G.S.                      | R. F. Tipper     | Army                          | M. W. Smith      | Red Dragon                    |
| J. Bradley       | Andover                       | J. Davidson      | Surrey                        | A. Chapman       | 642 G.S.                      |
| G. P. Morgan     | Cornish                       | J. E. Kavanagh   | Chilterns                     | J. G. Phipps     | Cornish                       |
| R. J. M. Clement | 662 G.S.                      | N. C. Mackinnon  | Surrey                        | M. D. Simpson    | Windrushers                   |
| D. J. A. Todd    | Windrushers                   | E. H. Turner     | Empire Test Pilots' Sch.      | J. Tout          | Gutersloh                     |
| C. P. A. Jeffery | London                        | J. Mahoney       | Derbyshire & Lancashire       | D. A. Camies     | B.E.A.                        |
| J. A. Crandon    | Yorkshire                     | M. D. Baker      | Lancashire                    | L. J. Joliffe    | 621 G.S.                      |
| J. E. Baker      | Northampton                   | J. Bloore        | Midland                       | S. R. C. Green   | Oxford                        |
| J. R. Chandler   | Moornrakers                   | J. W. Rae Arnott | Scottish                      | H. A. A. Twiddy  | Gamecock                      |
| A. P. Bloomfield | Marham                        | F. S. Heelin     | Wessex                        | C. P. Crocker    | 621 G.S.                      |
| D. T. Chute      | Gamecock                      | G. A. Brown      | Windrushers                   | R. A. Kime       | East Midland                  |
| H. Duncombe      | 613 G.S.                      | W. W. Busby      | Northampton                   | A. M. Steel      | Gutersloh                     |
| N. B. Taylor     | Bramcote                      | K. Higgins       | 631 G.S.                      | D. E. Todd       | Surrey                        |
| S. M. Donald     | Perkins                       | G. Stace         | Midland                       | G. R. Kotzyba    | Red Dragon                    |
| K. Hamilton      | Surrey                        | J. E. Behrendt   | Midland                       | E. Vissena       | Newcastle                     |
| L. J. Marshall   | Moornrakers                   | K. C. Moore      | 613 G.S.                      | P. G. Davey      | Cambridge                     |
| W. N. Jones      | Gamecock                      | A. F. Seviour    | Avro                          | S. J. Whitfield  | Cambridge                     |
| S. Wawrowicz     | Perkins                       | B. J. Thorpe     | Midland                       | T. Z. Hood       | Midland                       |
| G. H. N. Mealing | Bristol                       | D. Ellis         | Derbyshire & Lancashire       | W. S. Stachowiak | London                        |
| P. D. Lanc       | Cleavelands                   | R. M. Onyett     | 613 G.S.                      | P. A. Cooper     | Moornrakers                   |
| M. E. C. Dore    | Taunton Vale                  |                  |                               | D. J. Harris     | Southdown                     |
| E. J. Trickey    | Cornish                       |                  |                               | M. V. Hayward    | Army                          |
| R. J. Campbell   | 621 G.S.                      |                  |                               | P. E. Dawson     | Nimbus                        |

Correction to August issue: M. Wilson, Silver C No. 722, is from Handley Page Gliding Club, not Coventry. This is the Handley Page Club's first Silver C.

## B.G.A. Personal Accident Scheme

**A** VERY good Personal Accident Scheme, devised by Messrs. Willis, Faber & Dumas, Ltd., has been accepted by the Council of the British Gliding Association. This insurance is strongly recommended to all glider pilots in the United Kingdom as it covers you for all accidents which occur in connection with gliding from the time of arrival at the site until departure therefrom. This includes cross-country flying, but excludes competition flying when special cover can be arranged.

The premium is fantastically low but can only be maintained if a large number of pilots take part in the scheme. For £1 per year you are covered for £1,000 in case of

death, total loss of sight or loss of one limb. Temporary total disablement will result in your being paid £10 per week for not more than two years and partial disablement £5 per week for two years.

All clubs have been sent proposal forms, and these can be obtained from your secretary or direct from Willis, Faber & Dumas, Ltd., 54 Leadenhall Street, London, E.C.3. Cover up to £3,000 can be taken out, and special arrangements can be made if you want higher cover.

This scheme cannot be recommended strongly enough. For your own good—join it and be insured.

W. A. H. KAHN

## Private Ownership is Such Fun

by *Wally Kahn*

(Private-Group Representative on the B.G.A. Council)

**A**T the last annual meeting of the Private-Group Owners, I was asked to prepare a draft agreement on which prospective syndicates can base their own. Most of the points will seem very obvious, but I feel that it is important to set them all down. Sharing a glider is akin to marriage, and it is as well to "love, honour and obey" your partners, but even more important to share (certain) worldly goods. I am very indebted to Geoffrey Benson, Ian Sproul and Roy Proctor for their help and guidance.

Many private owners do not have an agreement; some have legal documents which would do justice to the Law Society. You pay your money and you take your choice.

1. **BUYING THE MACHINE.**—Decide which machine to buy, what instruments and other equipment. Determine how much can be borrowed (K.F.T. or finance houses); and can all partners afford the initial and subsequent payments? If a Kemsley Flying Trust loan is granted, who will be the guarantors? Who will be B.G.A. Trustee member.

2. **SIZE OF SYNDICATE.**—How many members? Will they be full members (equal rights) or can there be restricted members who, say, work instead of paying

full amount? Can members sell half of their share?

3. **OTHER EQUIPMENT.**—If members already own certain items (i.e. instruments), will these be bought by the syndicate and at what price, or lent, in which case what action in case of damage?

4. **INSURANCE.**—Whether full or partial. Lay-up clauses and restrictions must be examined. What liability do members have in case of damage? (Possible pay excess and in case of one accident resulting in loss of no-claim bonus, pay that sum back to syndicate.)

5. **RUNNING COSTS.**—Who shall be accountant? How and when will costs be paid? Agreement to be reached on buying new equipment. Should members be grounded if in arrears?

6. **FLYING.**—System for ensuring fair share of flying for all. Eligibility to fly in competitions. Visits to other sites and holidays with machine. In case of two-seaters, who decides whether all are fit to fly solo, carry passengers, etc.? (Suggest club C.F.I. has final word, as this stops any possible argument.) Who outside syndicate may be allowed to fly? Necessary insurance cover for this. It is advisable to appoint one member as senior pilot.

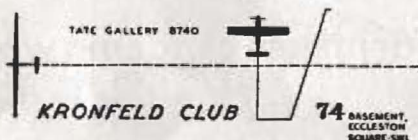
7. SELLING SHARES.—Determine period of notice. Terms on which share may be sold. It is best to give syndicate first option, otherwise new member must be approved by all members before sale is made. In case of death of partners, others buy shares at an agreed figure from estate and possibly resell later. If necessary an independent arbitrator may have to be appointed to fix share value.

8. COMPULSORY RESIGNATION.—Reasons for this to be stated. Incompatibility or failure to pay promptly. Must be unanimous vote of syndicate. Agreed price to be fixed.

10. C. OF A. AND DAMAGE.—Decide whether C. of A. and/or repairs will be carried out by syndicate or commercial firm. Who pays the cost of transport in case of damage?

11. AGREEMENT.—This can be changed at a full meeting of the syndicate.

Private Ownership is basically one of mutual trust and compatibility. It is vital that each member trusts the others and knows roughly their financial state. It is useless to persuade people to join a syndicate and then find that they cannot or will not pay for their share.



THE Annual General Meeting was held on 22nd October at the club's premises; some 50 members attended the meeting. For the first time the accounts showed a small surplus. During the year many improvements were made, such as ventilation fans, seats in the bar and floor covering. The club also introduced its own tie, which is available at the bar. The Secretary was happy to announce that we have been given a new lease until March 1962.

All members are invited to the Christmas Party on 17th December. Fancy Dress will be worn and the theme is aeronautical.

The Committee for the Year 1958-1959 will consist of:

- H. Trotter, *Hon. Sec.*  
 M. Imray, *Popular Flying Association*  
 Y. Bonham, *British Gliding Association*  
 R. Wilby, *Surrey Gliding Club*  
 D. Carrow, *Cambridge University G.C.*  
 D. Smith, *London Gliding Club*  
 D. Monckton, *Kent Gliding Club*

#### Diary of Lectures and Film Shows Wednesdays at 8 p.m.

- |           |  |
|-----------|--|
| Nov. 26th | T. W. Brooke-Smith, Chief Test Pilot of Shorts.            |
| 27th      | Weather Charts and Forecasts, C. E. Wallington.            |
| Dec. 3rd  | Talk by Basil Bell.  |
| 10th      | Film by Ken King of the Cambridge University Gliding Club. |
| 11th      | Mountain Waves and Soaring, C. E. Wallington.              |
| 17th      | CHRISTMAS PARTY.   |
| 24th      | Christmas Eve—No lecture.                                  |
| 31st      | NEW YEAR'S EVE.  |
| Jan. 7th  | Talk.  |
| 8th       | Thermals, Thunderstorms and Soaring, Dr. Scorer.           |
| 22nd      | Wind Structures Near the Ground.                           |
| 28th      | Man-powered flight by D. R. Wilkie.                        |

## ANNUAL BEST FLIGHTS

It seems likely that the gliding season has, as far as annual best flights is concerned, drawn to its clammy conclusion; however some sterling enthusiast may yet break a height record, so it is still too early to record

the final results for the year. Meanwhile, the months of September and October have produced no claims whatever and there is therefore nothing to report.

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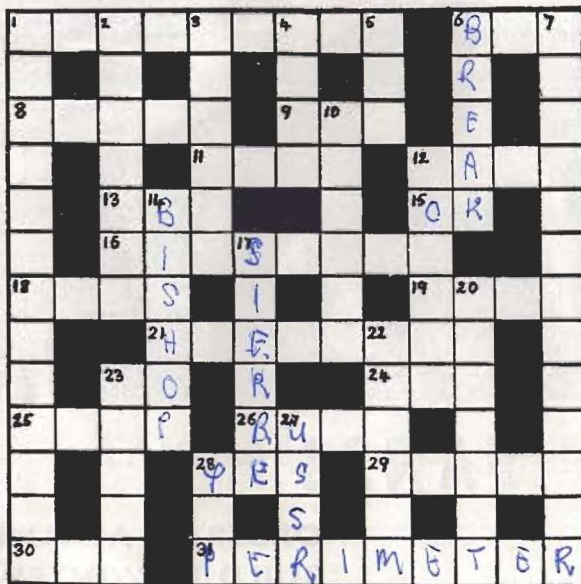
**S.A. des Ateliers d'Aviation Louis Breguet, 24 Rue Georges Bizet, Paris (France)**

# Gliding Crossword

**S**ENDERS of the first two correct solutions to this Crossword received from the United Kingdom, and of the first one received from overseas, will each be awarded one of the new B.G.A. gliding Car Badges. Send solutions to the B.G.A., Crossword, 19 Park Lane, London, W.1. The correct solutions will be published in our February issue.

## ACROSS

- The sort of flight glider pilots have despite bringing the car (9)
- In short, a mixed bag (3).
- One of the prizes given at National Gliding Week by Scottish Gliding Union, who are north of it (5).
- He's a little blue (3).
- Type of draught not up in Sussex gliding club (4).
- Mixed goal (4).
- Decoration found in Lasham besides Dunstable and Camphill (3).
- 23 and 12 down. All right to leave the two-seater (2, 2, 2, 4).
- The red and green ones? No (8).
- Night-flying wisdom (4).
- Loaf around in kingly fashion (4).
- A bit of a blow for any glider caught in it (4, 4).
- See 15 across.
- Unsanctimonious pilot (3).
- Prig loops the loop (4).
- Bird-like glider (4).
- "—, we have no bananas!" (popular song) (3).
- Opposite of 20 down. (This is really the end) (5).
- Hill top, part of 1 across (3).
- It's all round the aerodrome! (9).



## DOWN

- Go to Mister Leo (anag.)—for cu-nim, or clamp? (13).
- Lift going up (7).
- Unwise use of this bar may result in

- unsteady flight (6).
- Vale in Wales (4).
- Type of sailplane you can see all over the airfield (3).
- Cable this—nose down (5).
- Get a lack of tan (anag.)—by degrees? (13).
- Part of a Silver C bolsters up Mr. Stork (3, 3).
- See 15 across.
- Standing wave in the U.S. (6).
- Sprig of greenery used to flavour drinks (6).
- Begins aerobatics (literally) (6, 1).
- Shouted during winch-launch (3, 3).
- Fierce aircraft often used for aerotowing (5).
- 1958 saw them competing in the World Championships for the first time (4).
- Pay back (3).

# The Slingsby Swallow

by John Hickling

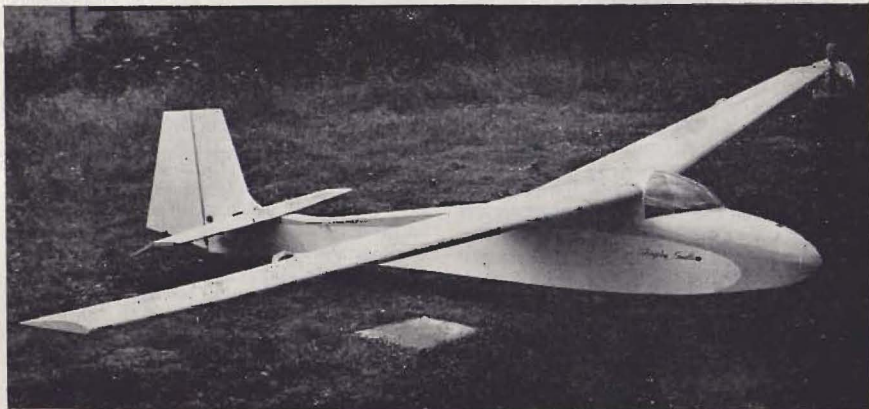
It is not often that one gets the opportunity of flying a completely new type of glider. We at the Midland Gliding Club had this pleasure when the Swallow was lent to us for a period of three weeks. I was told by Fred Slingsby that any ham-fisted C pilot would make a good job of flying it, and he proved to be right.

Performance-wise, we found it difficult to disprove the theoretical figures for best gliding angle of 1 in 26, and minimum sink of 2.5 ft./sec., having flown against other well-known and tested gliders. We were able, for instance, to make comparisons in marginal but steady hill-lift, and saw the size of circuit possible from an average winch launch—a good test of gliding angle. But machines of this performance class are quite common in the British gliding movement to-day, so what has this newcomer got to offer? Our opinion is that the general handling sets a new "high" for popular production gliders. The ailerons appear to give a rate of roll almost 100% better than that of most machines in use to-day; the elevator is nicely damped, while the rudder, although largely ornamental in normal flight, has a powerful feel. The controls are well harmonized, and light in operation. Stability is positive in all planes, and the designer is to be complimented on this achievement. So many gliders, particularly the survivors of a past age, require the

agility of a harmonium player to maintain straight flight, for instance, and considerable skill to keep the speed steady in circling flight. The Swallow equals a very popular glider of German design in its ability to fly itself in turbulent thermals, etc. Perhaps the elevator mass-balance, common to both, has something to do with it all? Try as we might, we were unable to find any vices. A spin could be induced, but it took the writer several attempts. Once in, opposite rudder brought her out immediately. Normal stalled flight, both straight and level, and in turns, would not precipitate a spin. The ailerons remain extremely powerful, even below the stall.

Ancillary controls are well up to standard. The air-brakes are powerful without being vicious, and therefore can be used to full effect on the approach and landing, without any qualms. Elevator trimmer works well. The Swallow's ability to soar in small thermals, or to get really into the core of big ones, is astoundingly good. This is due to the slow circling speed possible—30 knots indicated, for one of 150 lb., as I am—with a bank of upwards of 45 degrees, and to the rapid rate of roll.

Cockpit layout has obviously been based on the Eagle front pew. The canopy is considerably wider than normal. View out is again as with the Eagle in most directions, as the wing does not seriously get in the way.



Ground handling is quite delightful because of the position and size of the wheel fitted, and the attention to clearances around the front skid. The tail skid fitted is similar to the Eagle's, and must contribute greatly to a reduction in wear and tear generally; it also makes two-point landings more pleasant, and the inevitable "power" landings by aeroplane pilots less of a worry!

One is sure to spot a weakness if one looks hard enough, and I must fault the launching hook position on the prototype. Below-standard launches did occur, due to the limited angle of climb possible, and "Sling" has agreed to look into the problem.

One great advantage that the Swallow has is that it is being offered in kit form. The fuselage consists of a model aeroplane type box, with a glass-fibre fairing at the front. Building up from a kit or repairing such a structure must be child's play, and

the result is tough and rugged enough to stand up to the worst effort of the ham-fisted. Incidentally, the wings, etc., are also built on quite simple lines. Rigging is very similar to the famously simple Weihe type, i.e., four pins hold the wing to the fuselage (all inserted from the front, as the drag spar is at the leading edge), while the wing tips rest on the ground if necessary. The operation is completed by lifting the wing tips and inserting one pin! The tailplane is held on by four bolts, and is stressed for inverted flight.

We at the Midland Club hope to use a Swallow as a bridge between the Prefect and our high-performance aircraft (some of which will actually be slightly inferior to, but less rugged than, the Swallow). Smaller clubs, I feel sure, will use her as their high-performance machine, and I am confident that good service and high utilisation will result in either role.

## THE MAKING OF MIN

by John Simpson

IT all started one day in February 1957 when I was late for Assembly at Leighton Park School, Reading, where I "work". As I stood by myself, day-dreaming in the new thermostatically controlled workshops, I realized that the woodwork room measured 60 ft. x 30 ft.

*Question.*—What Useful Piece of Woodwork has these dimensions?

*Answer.*—A Motorless Flying Machine.

So I wrote the first of series of letters to Slingsby's, asking first what would be the cost of a kit to build a T-21, and also what would be the cost of just the basic raw materials. The answers were £650 for the kit, and about £250 for raw materials. The kit consisted of all the sub-assemblies made up of approved materials, with all fittings and control cables finished off. This seemed a possibility; to work from the raw materials appeared out of the question for us.

The next stage was to think out a future for the aircraft, and I found out at Lasham, which is only 20 miles from Reading, that the Centre would be interested in providing maintenance in exchange for some use of a new T-21.

After that I had a talk with Sling. He suggested the following progressive plan, in

four separate stages:

First the rudder.

Next the tailplane and elevator.

Then the fuselage.

Finally the wings.

He agreed that it would cost a lot, but pointed out that the finished product, if properly made, should be worth over £1,000. He also suggested that the woodwork instructor should visit his factory for a few days.

Time was now ripe to unload Project Excelsior on to the School Authorities and to investigate sources of finance.

I first applied for a grant of £20 12s. 10d. to buy the kit for a rudder. I proposed to build this first and show that we really meant business. If the scheme folded up after the rudder was made, then there would be a chance of flogging it to a gliding club somewhere. What with the careless habits of cows and other Sources of Error, sooner or later I should find a T-21 in need of a spare rudder and could sell it one.

The School, having heard a bit about gliders from me during the past ten years, was prepared to take a chance and the grant was approved. Woodwork instructor Ted Hogben was despatched to Slingsby



Sailplanes at Kirbymoorside to find out how gliders were made.

He returned on 16th March with slightly cold feet, but mercifully with a kit for the rudder. He also brought a time scale of the times taken in the factory to assemble the various parts:

|           |    |    |          |
|-----------|----|----|----------|
| Fuselage  | .. | .. | 120 hrs. |
| Wings     | .. | .. | 240 hrs. |
| Tailplane | .. | .. | 16 hrs.  |
| Elevator  | .. | .. | 10 hrs.  |
| Rudder    | .. | .. | 11 hrs.  |
| TOTAL     |    |    | 397 hrs. |

My subject is Physics, with Mathematics, Photography and Cookery (Chinese) as sidelines, so at the beginning the boys and I were entirely dependant on Ted Hogben for guidance.

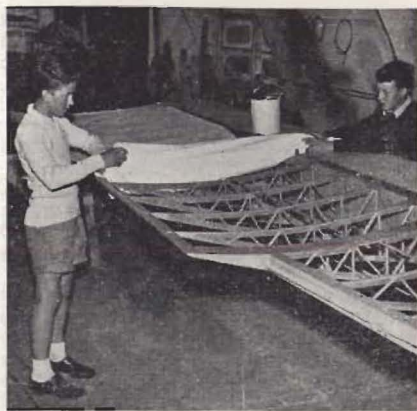
On 5th May, the beginning of the Summer Term, I enlisted four boys aged about 15 who had all been with me to Dunstable and Lasham, and seemed in favour of gliders. We had a small bench, a piece of 3-in. weyroc and the kit and drawings.

We made the jig on the weyroc, glued a couple of ribs on to the spar and took some photographs. One of these was reproduced in the local paper, raising morale and producing an offer of support from a generous friend of the school who builds aircraft not many miles from Reading.

On 15th June, the rudder was finished in time to show on the School Hobby Day. Four boys had worked a total of 43 hours, I had done about 15 hours—say, a total of 60 hours. We had begun to keep a careful record of each boy's work time, as we had promised the right to one minute's free flying for each hour's work completed.

It was now time for the Big Appeal, for by now the School Governors had given their blessing to the scheme. Mr. Michael Cadbury, one of the governors, was invited over to Lasham for the day. He liked what he saw of the place and agreed to organize the collection of the rest of the money we needed. With such a financial wizard in charge, I never had any more anxious moments about funds.

We started on the tailplane and elevator in September at the beginning of the Autumn Term. We built a large table for this, with a weyroc top. The jig on top was again fairly simple, and we made the two sections hinged together during construction. This was finished just before Christ-



*With the fabric in place, it begins to look like a real wing.*

mas and appeared to take about 95 hours' work, plus about 20 hours by me—total of 115 hours. It was necessary to have a B.G.A. Inspector to inspect the work in various stages and we were fortunate enough to get Warren Storey from Lasham to do this. He came over on several evenings, checked what we were doing and gave us considerable encouragement and advice.

The fuselage kit arrived about Christmas time, just taking up a little space on the floor of a trailer on its way to Lasham. The part the boys liked best was the wheel, already assembled and supplied with air from Yorkshire. The other obvious large parts were the two made-up girder sides and the main frames.

Slingsby's had sent us general notes on the job, giving the idea of a ladder-type jig for the first stage of the fuselage assembly. In this first stage the fuselage is upside down and the part below the top longeron is constructed. In the second stage the fuselage is held on two trestles, one at the nose and one at the tail, so that the fuselage datum is level.

Life had by now become very grim and earnest. The 51 items in the Slingsby Schedule were a useful foundation, but for beginners many other details had to be worked out. Sometimes this was done by careful and prolonged logical arguments among ourselves, sometimes by a hurried dash to Lasham and grubbing about under the back axles of the T-21's there, sometimes

by reference to the fountain head at Kirbymoorside. One night I actually had a vivid dream in which I was explaining one of our problems about the tail fin to Sling, but I woke up just as he was going to tell me the answer.

The jig was completed in February, and as the job became obviously more impressive, helpers became more enthusiastic, and I had by then about 14 boys working on the job. Usually we had about 4 or 5 at a time and it was possible to find jobs needing various different degrees of skill.

Term ended on 28th March, and on that day we had the ceremonial removal from the jig. The cracking noises turned out to be only bits of jig that had stuck, and we had at last something looking very like a fuselage, which we mounted on our special trestles. We were now able to sit in it, and take more photographs!

In the meantime our Fairy Godfather had offered to help us with the wings, so an order had been placed with Slingsby's for them to be assembled for us, and delivered in the Summer ready for covering.

The Summer Term was spent on stage

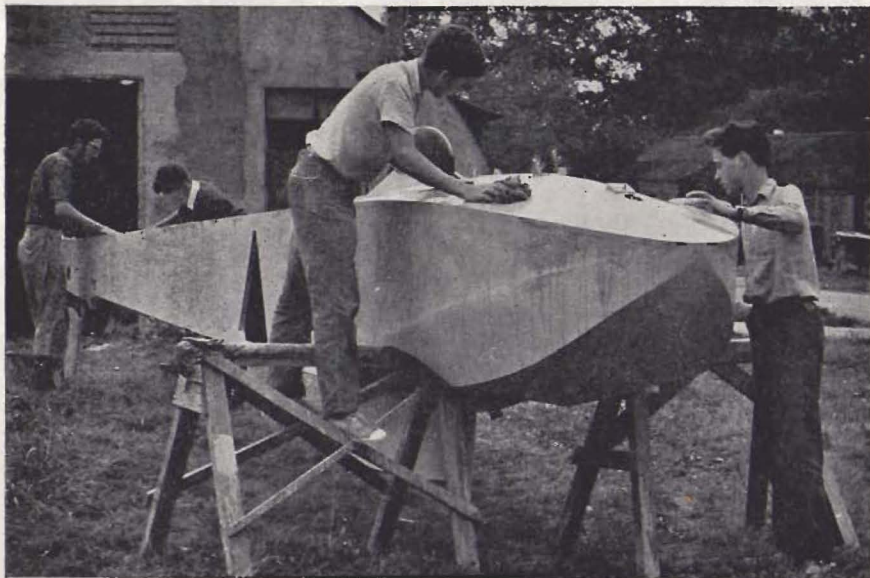
two of the fuselage. This consisted of rear formers, control box, neck and ply covering.

On 15th July the wings arrived and the fuselage was ready for them. On the following day we rigged the aircraft, her "vital measurements" turned out to be correct and everything fitted perfectly.

It seemed a shame to pack up for the whole of the long summer holidays so I arranged to move the parts to Lasham, where I expected to be most of the time, in the hope of getting some of the boys to come and work there on the finishing. The Club arranged for Warren Storey and Ken Paice to help us over the more critical parts of the doping and covering. The fabric, incidentally, was included in the kit, but not the dope, which cost us a total of about £45.

About a week was spent in August putting the fabric on to the plywood surfaces, and then the fuselage had a rest for a fortnight on the B.G.A. stand at the Model Aircraft Exhibition in London.

The first three weeks in September were spent in the covering and doping. In



*Arrived at Lasham, the fuselage is prepared for the final spraying by members of Leighton Park School. (Photos by John Simpson).*

general the latter consisted of three coats of clear dope brushed on, two coats of aluminium tautening dope sprayed, up to six coats of surfacer, and six coats of Flame cellulose enamel. We did over 100 hrs. of rubbing down with "wet-or-dry" on the wings alone, and are all now in the happy state of being unable to have our fingerprints taken. Warren Storey was responsible for the final coats, and after a week with rubbing compound we produced quite a Competition Finish.

This brought us to 7th October, when we rigged and weighed. The final checks were made, and the magic pink form was placed in the cockpit. We added up our work time:—

|                                     |          |
|-------------------------------------|----------|
| Fuselage .. .. .                    | 631 hrs. |
| Wings (cover and dope only) .. .. . | 243 hrs. |
| T.p. and elevator .. .. .           | 115 hrs. |
| Rudder .. .. .                      | 60 hrs.  |

Total .. .. . 1,049 hrs.  
(spread over 18 months).

So it looked as if we were not as quick as Slingsby's workers, but we probably got more fun out of the job! \*

October 8th was D-day and Charles Brown arrived to photograph the first flights. It was a very grey day, with clouds at about 300 ft., rapidly lowering. I was only able to make two straight hops before flying had to stop altogether. However, all seemed highly satisfactory, and Charles Brown's photographs proved that the aircraft flew and incidentally gave the impression of quite a fine afternoon.

On the following day Derek Piggott put her through her paces, and expressed approval. It is even whispered that owing to the unusually high finish he overshot slightly on the first circuit.

The aircraft had collected the name "Min" after a certain Goon character called Miss Minnie Bannister. She is now in the "Poo!" at Lasham Gliding Centre, where her fifteen constructors may come and claim their rights on Wednesday and Saturday afternoons.

The next thing is to build a trailer, which will enable us to get around a bit. We have already prepared a T-21 Glide-Chart for the height-engineer. So when the thermals are good, look out for the arrival of a laminar-flow T-21 on its final glide to a goal at your Club!

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# Operations at Leszno

by Ann Welch

**T**HE 1958 World Gliding Championships were very successful, and it was a great experience to go to a country whose gliding is in such a highly developed state. It is fully subsidised by the State, but no charge is made to those participating—in this way, similar to our A.T.C. The standard of flying is very high indeed, and soaring pilots are not only competent aerobatic pilots as well, but know a great deal about the theoretical side of their sport. The Polish gliders are straightforward, strong and well built. The maintenance is good, and flying discipline high.

The Organisation of the Championships was carried out by the Polish Aero Club in the best gliding spirit and tradition. Every effort was made to enable teams to have a happy and worthwhile visit.

The following are brief comments on various aspects of the organisation. I have made some criticism, not in a complaining spirit, but so that the lessons we learn can be covered in future events. I enjoyed every minute of my stay in Poland and would like to take this opportunity of thanking those members of the Polish Aero Club who worked so hard to make the championships a success.

## BRIEFING OF THE COMPETITORS

This took place at 9.15 each day and was originally conducted in Polish and French, until requests were made by a considerable number of competitors, but not including the British (one up-manship), for English to be added. This made briefing easier but not shorter. A great deal could have been done to improve briefing by displaying more on a blackboard. Even when only one language is used, as in National Championships, there is no need to read out met. winds or describe starting positions when these can be written up or displayed pictorially.

Apart from these shortcomings, briefing and for that matter all meetings of the International Jury were conducted in an efficient, friendly and co-operative spirit. It decisions were asked for, they were quite fairly given and without delay.

In most World Championships briefing has been made more complicated than

necessary by the lack of really first-class interpreters, who are vital when the finer points of the rules are under discussion. The two exceptions were Pirat Gehriger at Samedan and Alex Mikolski in France.

## TASK SETTING

This started off brilliantly with the out-and-return of 308 km. to Jelenia Gora and back. A first class World Champs. task. But it was followed by a superb day with only a 100 km. triangle to complete. The weather had clearly turned out better than forecast, and one got the impression then and later, that the weather information on which the task-setter had to act, while substantially correct, was perhaps not presented to them with enough local emphasis. In England we are extremely lucky in having C. E. Wallington who is able to interpret brilliantly the general weather data in terms of the contest flying area. Because the 100 km. triangle was too small, the inevitable happened, and the next day's 300 km. race to Warsaw was too big for the weather.

## STARTING ARRANGEMENTS

Lots were drawn for the starting order for each day's flying. This gave the appearance of great fairness but in fact was not so satisfactory as the initial drawing of a starting order and then advancing this pattern so that all pilots in turn take the very early and last take-off times. An example of the coincidences possible with the continued drawing of lots appeared when for Glider 13 (Nick) I drew out of four different bags three No. 13's. It is hoped that in future World Championships the start time will be according to the pilot's choice, as this not only obviates the lot system but eases the task-setters' difficult job.

On the field the gliders were lined up in rows of seven and were then taken off as fast as possible by a stream of Junak tugs. This aspect of the competitions was really excellent, the 61 gliders being launched regularly in two or three minutes over the half hour. On one day the entire fleet was airborne in 28 minutes. Sixty-five tow ropes were used and the tugs flew an identical

pattern, reaching release height over the upwind boundary of the airfield. The take-off system was both safe and remarkably effective.

### RETRIEVING ARRANGEMENTS

This was not successful on two counts. Firstly the National telephone system was neither quick nor clear enough for the job. Secondly the widely used system of a central control point (as in our Nationals, at Lasham, run by Malcolm and Kitty Laurie) was not used, although it was being forced into some sort of existence by the end of the Championships. The intention was that Team Managers would be given the pilots' landing position and would be summoned to another set of telephones when the crew called. As a result the aerodrome exchange was overloaded and the calls took longer than necessary owing to delay in getting people to the telephone. Further, the incoming calls from pilots were often taken by people unfamiliar with the particular language and apart from occasional delay in getting information out, it was sometimes in Polish and had to be interpreted before it was of value.

The system was not wholly bad, as the sprinting necessitated was invaluable in enabling the Team Managers to cope with the 9,000 calories per day intake of food which was so excellently provided!

### GETTING OUT THE MARKS

This was done accurately and quickly—such delays as there were being caused by pilots not turning in their landing information promptly. No one reached the goal, but this is not to say that the task was unsuccessful as far as the pilots were concerned; it provided interesting and difficult flying, but as a task it did not succeed. Because it was thought that it would, the next day was pre-declared a rest day and the last opportunity for flying in the wonderful continental conditions faded, for after this the weather became steadily more English.

There were only three more tasks, interspersed with days of rain. On one of these days a task should have been given in the afternoon, as at least four hours of interesting but variable soaring conditions existed; but on the last day of all, I was in entire agreement with the organisers in declaring no flying, because although cumulus did appear for about an hour, the



*Tony Goodhart is given a private forecast by "Wally" Wallington.*

element of luck would have been catastrophically large.

The fourth task was a 98 km. race to Ostrow. The day was one of patchy cumulus development with a tendency towards vertical build-up and here the luck element was given too great a prominence. It seemed that, living in a country which has, on the whole, excellent summer soaring weather, the task-setters were not used to deciding the best thing to do in poor conditions. Instead of adopting the principle that the worse the weather the greater the freedom that should be given to pilots to make what they could of it, the tasks on such days tended to be small and restricted. In poor weather a short race gives a premium to the pilot who goes off in, perhaps, the one good cloud, which may take him all the way there, and a small triangle becomes a series of final glides to turning points which are difficult to get away from again.

Everyone was delighted when Free Distance was declared. It was obviously the right choice and gave great opportunities for 500 kilometres. It was successful in that ten pilots flew over this distance but unfortunately the only member of the British Team who crossed the magic circle was the one who had already got his Diamond. The others missed it by only a very few miles.

What turned out to be the last Contest day showed the very quick response of the



*Ann Welch leaves a message for the following teams on the way to Leszno.*

organisation to the previous lessons, and the right task of Distance along a Set Line was given. The pilots were able to use every scrap of the weak conditions. The British Team came 1st and 2nd in the Open Class and 2nd and 3rd in the Standard Class. Apart from the excellent flying of the British pilots on this day, they were assisted in their results by being among the very few to be ready to launch at the declared start time!

The staff responsible for marks and interpretation of the rules were always extremely helpful and willing to go to endless trouble to clear up any doubts and

to answer questions. They were most efficient too in the production of the necessary documentation of national record claims.

#### GENERAL INFORMATION

As in common with previous World Championships, the public address system was the main source of general information. It is not enough, because it is quite easy to miss an announcement if one is near another source of noise, such as an aeroplane engine; further it is not appreciated how selectively deaf people become when hearing a constant burble of sound, much of which is not in their own language. What is needed in future Championships are two prominent notice boards: one for flying—time of next briefing, etc., and one for other arrangements—"there will be a party tonight with food provided". This overcomes the problem of appearing ungrateful at the party because one has already had a large meal because it was impossible to find out anything reliable about the party. These notice boards want to be divided into areas, or colours, for different languages.

#### ENTERTAINMENT

Within the very limited free time of any World Championships, we were looked after very well. There were occasional parties, an excellent final celebration, Polish folk dancing and, above all, flying provided for the crews in Polish gliders. On the last days exchange flying was arranged and nearly everyone had the opportunity to get into the air.

## O.S.T.I.V. New Address

**W**ITH the return of Betsy Woodward to the United States, affairs concerning O.S.T.I.V. membership will no longer be looked after by her at Imperial College.

Enquiries from all parts of the world concerning membership, including individual membership, should in future be addressed to O.S.T.I.V., c/o London Gliding Club, 22 Half Moon Street, London, W.1, and will be answered by Mrs. B. Benton, who has kindly taken over this work. Individual membership costs 4 dollars a year or its equivalent, and cheques should be made

payable to O.S.T.I.V.

Subscribers to this organization, whose full name in English is International Scientific and Technical Organization for Soaring Flight, get (a) the *Swiss Aero Revue* with its *Ostriv* section every month, containing papers given at congresses; (b) reprints of papers from other journals; (c) free attendance at congresses, and (d) 10% discount on recent publications such as Betsy Woodward's *The World's Sailplanes*.

# Flying The Olympia 419

by A. J. Deane-Drummond

**T**HIS is a personal story of the 1958 World Championships in Poland. It is also an account of flying a new and very interesting glider, which explains the heading of this article.

It is only when I flew three other foreign gliders at the end of the competitions that I began to appreciate how far ahead British manufacturers were in handling and general pilot comfort. The first thing that strikes one when flying the 419 is the almost complete absence of noise below about 60 knots. A very slight whisper comes from the ventilator, but otherwise there is no audible indication of flight. I found this very restful and it would take a lot to get me back into a noisy glider again.

The next remarkable thing about the 419 is the ailerons. They are nicely light and effective, and can roll the 62-ft. wings from 45° to 45° in about 3 seconds with but two fingers and a thumb on the stick. Fore-and-aft stability is taken care of with an all-flying tail, whose stabilising tabs appear to be just right and give plenty of confidence when flying on turn-and-slip alone. Sometimes I did not bother to switch on the horizon in Poland when in small clouds—it was not really worth it. If I was trying to be over-critical, the only thing slightly wrong is the rudder; it appears to be about 10% too small to harmonise with the rate of roll and for me is a little heavy in comparison with the light stick forces required. This is being corrected on the production version. The 419 is already a dream to fly—the modified one will put the pilot in heaven.

We arrived at Leszno on Monday afternoon, 9th June, after quite a few adventures on the way—including an unexplained burst trailer tyre in Czechoslovakia. The retrieving crew's story certainly deserves to be chronicled elsewhere and I hope somebody will make the effort.

Tuesday was devoted to local soaring and experience of the 20-metre tow ropes used. I found these fascinating, but they required much too much concentration. I hope we do not adopt them in England.

On Wednesday a task was set to fly to Sroda airfield and back, a total distance of only about 90 miles. Soon after take-off, cumulus spread out to practically 8/8 at

about 3,000 feet. In spite of this nearly complete cover, there were a few thermalst and after 2½ hours' flying it was possible to reach a point just short of the turning-point, which was the furthest done that day. Evie and John Archer picked me up within 10 minutes of landing—thanks to the radio—and we decided to try out the telephone system. After a screaming match lasting 45 minutes, contact was made and honour satisfied.

In the next three practice days, 100-km., 200-km. and 300-km. triangles were set as tasks in the most wonderful gliding weather. Really strong thermals were to be had and cloud base was up to 6 and 7,000 feet by mid afternoon. On all these days I used the X2 scale (0-2,000 feet/min.) on the superb Cook variometer. A good thermal was giving at least 600-1,000 feet per minute rate of climb. On each of these days the 419 went round the triangles successfully, but not quite well enough to beat some of the fancy continental jobs which were designed for speed and strong thermals. The 100-km. triangle was clocked up at 42 m.p.h., the 200-km. at 48 m.p.h. and the 300-km. at a mere 45 m.p.h. All quite good times by English standards, but, my dear—the thermalst!

The first competition day, 16th June, was an out-and-return to Jelenia Gora, about



65 miles to the south, towards the Czech border. The first part of the flight was plain sailing, but about half-way to the turning point there was a large dead area, due perhaps to the marshy ground or different soil. Nick started about three-quarters of an hour before me, but we both wasted the best part of an hour getting very low in this area, and I for my part only just kept airborne. Coming back, I diverted about 10 miles off course and no difficulty was experienced. The Polish pilots won each class that day—they knew about the dud area but "C'est la guerre." Nick and myself were both equal ninth that day with the same number of points.

The next day the task-setters set a 100-km. triangle. The wind was very strong and was blowing at about 25 knots or more. Thermals were also incredibly strong and soon after taking off at 11 a.m. it became obvious that some fast times would be possible that day. Cloud base was over 6,000 feet. The time of start was going to be important but clearly there was no need to cross the starting line before about 1.30 or 2 p.m. It is the usual practice to fly the final leg of the triangle as much into wind as possible and so get the most advantage from

the height at the last turning point. This tactic meant flying the first leg directly into wind for this particular triangle. I soon discovered that, by 12.30, thermals were "streeting" nicely up and down the wind direction. I discovered this when I flew very nearly up to the first turning point before going back to cross the starting line. The triangle took just under 1 hour 20 mins. to fly round, giving a speed of nearly 50 m.p.h. If there had been no wind, this would represent a speed of 68 m.p.h. The 419 was third that day.

The next day was a goal race to a civilian airfield near Warsaw, a distance of about 200 miles. Unfortunately the weather was not as good as forecast, due to an approaching front from the west which was tending to damp down thermal conditions. "Wally" Wallington, our met. expert, promised better conditions 20 miles to the east, provided we could get there. The snag was that thermals were only going up to about 2,200 feet over Leszno and there appeared to be no hope of improvement. Even usually I decided to start off at 12.15 and went very slowly east, using thermals which kept me between 800 and 2,000 feet. Evie kept me in sight most of the time and I think the

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crew were in more of a state of suspense than I was. Unfortunately, when 20 miles out, I was down to only 500 feet, so I quickly radioed to the crew to turn north along a road which was underneath me. There was a thermal somewhere about which gave reduced sink and the altimeter slowly sank to only 350 feet. Very gradually, however, the thermal started to give more rise than sink, and after five minutes' circling I was back up to 500 feet. I then told the trailer to turn round and press on east—rather to their surprise. Evie reckons it was the methylated stove that did it, but I am not so sure!

Soon conditions improved, and at 30 miles out the first cumulus was reached. For the next 120 miles conditions were extraordinarily easy and only took two hours 10 minutes, but suddenly at five p.m. the easy thermals stopped when 150 miles out. All the clouds appeared to be dissolving and I was back on to the occasional shoe-string thermal. In this way a further 40 miles was flown to a landing with no wasted height and within sight of the 20-storey Russian-built Palace of Culture in Warsaw.

The 419 had gone the furthest that day. The patchwork nature of Polish agriculture makes it possible to use every foot of a thermal and rarely was it necessary to waste more than 10-20 feet on the approach. I was now lying a close second to Haase of West Germany, who also, I fancy, had one of his difficulties removed in the HKS, by always being able to find a suitable field underneath him.

The next day was my undoing. It was a race to an airfield about 60 miles away downwind, which it should be possible to reach in an hour or less if the promised large cumulus turned up. It needed only one climb to 10,000 ft. to get there in one glide. A short downwind race of this description is always a tricky task because it leaves so much to luck. After an hour's flying I went up nicely to over 8,000 feet to one side of the airfield and it seemed that the moment to start had come. With brakes wide out I went across the line and soon after reached 5,000 feet in a medium-sized cumulus, downwind of Leszno. Coming out on the far side, there appeared to be a very wide gap with no clouds at all, and rather unwisely I decided to go back and have another start. This time, I thought, I might get a big cu and do it in one.

Unfortunately all large cumulus had now

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disappeared, when some advancing cirrus started me off again for the second time. The task was now to make the best of it, and soon it became obvious that I was going to take about one hour 15 minutes. After starting the final glide, which should give me 500 feet to spare at the airfield, I ran into a most impressive dawndraught which dropped me at 1,500 feet per minute. Dawndraughts of this order were not uncommon, but rarely extended over a large area. Unfortunately this one did, and I did not have enough height to reach another obvious cloud and I landed two miles short. I kicked myself that day. As it turned out, I could have taken three hours or more (and got there) to achieve a final placing for the Championships of second.

The next day I was feeling rather sorry for myself when free distance was announced as the task. Also, rather unfortunately, I was the last to start in the open class and I heard Nick say he was 25 kms. on the way when I reached cloudbase over the airfield. Thermals were not particularly strong, but there were plenty of them, and there followed a normal soaring flight with track about 20° off the wind direction, because the maximum distance in Poland could only be reached in that way. Due to the

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weakish thermals I should have made an early decision to go north of Warsaw rather than south, but we had all been put off by the met. Briefing which forecast all sorts of nasty cu-nims in the north. Eventually I ground to a halt in the village of Chelm, about eight miles short of 500 kms. and 10 miles from Russia, at 7.15 p.m.

The last day's task was the maximum distance along a line through an aerodrome to the N.E. of Leszno. Nick and myself were launched quite close together, and I heard him say he was getting quite good lift and went over to join him. For the first hour or so we stayed fairly close together, never getting above 2,500 feet or below about 1,200 feet. At last the clouds seemed to be building up, and about 60 miles out we both started using cloud lift. One took me to 7,000 feet and I think another did the same for Nick a few miles further along the route. Unfortunately these were the last and final clouds of the day, and by 4 p.m. we were both gliding into a landing within three kms. of each other. We were first and second that day and the majority had come into land 30 kms. or so to the rear.

So ended a wonderful Championships.

Possibly a little disappointing from a personal point of view, but none the less a great and momentous experience to have had the honour to take part. Great thanks are due to Evie, my wife, to John Archer, who kept our ribs aching with his dry humour, and to Wally Wallington, who accompanied us occasionally and who certainly kept his end up.

Finally I must thank our Polish friends who organised and ran a most memorable Championships and did everything possible to smooth our passage. Last, but by no means least, the greatest thanks are due to the British Gliding Association and the Society of British Aircraft Constructors, the glider manufacturers (Messrs. Elliotts of Newbury Ltd.), the car makers (Standards), and firms like the Sperry Gyroscope Company, Venner Accumulators Ltd. and British Oxygen who loaned essential instruments and equipment, without which nothing would have been possible.

#### NOTES.

1.—The starting line for races and the turning-points had to be crossed at a height not exceeding 3,300 feet (1,000 metres).

2.—The HKS (winning) glider had only a tail parachute as an aid for landing.

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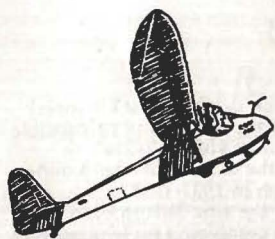
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# ITS - ALL - YOURS

## For and About Instructors



by Ann Welch

ON 13th December at 11 a.m. the British Gliding Association is holding a Safety Conference at the Kronfeld Club. The agenda can be guessed: "Accidents and How to Avoid Them". It is not intended that this meeting shall merely be a post-mortem on past accidents, so much as a combined effort to discuss the technique of teaching pupils to become safe and competent cross-country soaring pilots on to-day's shiny and expensive gliders. The stronger your ideas (constructive) on the subject, the more we hope you will come. [We understand the Conference is open to Instructors, within the limits of accommodation.—Ed.]

### THE CORNISH OR WHATNOT

The Cornish Gliding Club are using a knot to repair their auto-towing wire which does not wear so quickly as the more usual reef. Its advantage is that where the wire is tightly bent round a small radius, it is protected by the wire itself and the two ends. They have been getting over 60 launches from such knots, in spite of towing and retrieving entirely on runways.

Here is a drawing of the knot as they use it and which does the job excellently, as I saw on a recent visit.

On my return I looked up the bend in the Ashley Book of Knots, and was startled to find that first of all the knot was called the "Whatnot". Secondly, there were two Whatnots, and thirdly, it appeared to have some extraordinary properties.

I give the details here in case anyone feels like experimenting with the string from their Christmas presents. From the Ashley Book of Knots, No. 1406, page 258:—

Whatnot (1): "There is little danger of anyone ever tying this knot by mistake: the

method is too unhandy. . . . With the ends arranged as shown, it is a more secure bend than many far more trustworthy knots."

Whatnot (2), No. 1407: "With the ends twisted (arranged) as given here, the Whatnot is the most insecure bend there is. At all times it is quite unpredictable."

However, a careful study of the whatnot that I brought back from my visit shows that it is yet a third variation. It is nearer than either 1 or 2 and it certainly holds firm.

But this was not all. On page 415 (2,579) it states: "The Whatnot provides one of the prettiest of rope tricks." It then goes on to describe how you can get the Whatnot rolling along the rope at will, but when you hand it to your friends, they will be unable to move it at all.

For the curious, there are no less than 80 different ways of tying two bits of wire or rope together in this section of the book alone, quite apart from splices. The whole volume contains 3,854 knots, and appals one with the number of different ways the simplest knots can be tied wrong.



1406



1407



THE CORNISH  
OR 'WHATNOT 3'



THE CORNISH KNOT

# Christmas Quiz

## 1.

### HOW GOOD AN INSTRUCTOR ARE YOU?

- When faced with an over-confident pupil, do you
  - deliberately frighten him?
  - inadvertently frighten yourself?
  - fail to recognize the symptoms?
- If the pupil asks why the controls change places on a steep turn, do you
  - groan silently?
  - roar audibly?
  - make him an assistant instructor?
- When asked to do a C Oral, do you
  - ask 25 questions by heart, and know the answers?
  - use the blue pamphlet?
  - pass the job to another instructor?
- When one of your demonstrations in the air does not come off, do you
  - blame the pupil?
  - sulk?
  - pretend you weren't trying to do it anyway?
- When you send someone on a first solo, do you
  - watch, chewing your fingernails?
  - turn your back, and chat to someone else?
  - start explaining to the C.F.I. that you took every precaution?
- Having found a magnificent thermal while giving an "effect of controls" lesson, do you
  - ignore it?
  - gain a little height to prolong the lesson, and then leave it?
  - spend the next hour at 5,000 ft. convincing yourself it is all jolly good experience for the pupil?

## 2.

Now that you've discovered what an excellent instructor you are, answer these:

- What is the definition of night in the U.K.?
- What main pin do you put in first when rigging an Olympia?

- Anyway, who designed the Olympia?
- What is the minimum permissible cockpit load in your/a T-21B?
- Who was the C.F.I. of the London Gliding Club in 1937-1938?
- Which was the first British club post-war to train completely on two-seaters?
- What is the dry adiabatic lapse rate?
- What does a landing "T" with a disc at its head mean?
- How many wing spars has a Tutor?
- What amount is required for compulsory third party glider insurance?
- What is the height A.S.L. of the top of the Long Mynd?
- Do you have to declare turning points for a dog-leg Gold C?
- What does 2Vs mean?
- Who gained the first complete Silver C in England?
- What British club used to own a Hols der Teufel?
- Who has the right of way when two aircraft are on converging courses?
- Why must oil not be used on oxygen cylinder fittings?
- Of what are alto-cumulus clouds composed?
- What glue is used in the manufacture of T-42s?
- With what mountain range is Bishop associated?
- What is the minimum horizontal distance you must keep from cloud in airways?
- What is the wing span of a T-21B?
- What is the full name of the famous author who designed the Tern?
- What is the minimum age at which a glider pilot may fly solo in the U.K.?
- What was the "Pons"?
- In what county is Portmoak?
- Who won the 1952 World Championships in Madrid?
- What should the weak link strength of a winch wire be?
- Where would you expect to find a rotor cloud?
- What are the telephone numbers of (a) the B.G.A., (b) the A.R.B., (c) the L.G.C.?

Answers on page 359.

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*The C.F.I. takes his place in the back seat of the Royal Navy's Kranich.*

**A** RADAR boffin at the Royal Radar Research Establishment in wartime, power pilot, prominent radio amateur, keen off-shore yachtsman, signal officer and navigator of the British North Greenland Expedition, Dartmouth College physics lecturer and now a meteorological officer. As if all this was not enough, B-K has over 1,000 hours' gliding and flying to his credit since starting with the A.T.C. in 1946.

From Detling he went to Portsmouth to found what is now the Portsmouth Naval Gliding Club with one Primary. His next four years were spent in the gliding wilderness of "Sea Time" and Greenland, with a few months' instructing with the A.T.C. at St. Merryn under "Jim" Williams in between.

Since 1954 his professional Naval duties have enabled him to keep in touch with gliding more consistently, culminating in his most successful connection with the Britannia Royal Naval College at Dartmouth.

His first contact with College gliding was

immediately on his return from Greenland, when he was an instructor at the Summer Gliding Camp at R.N. Air Station, Bramcote, in 1954. He then joined the College staff and has since acted as the C.F.I., apart from one week when he was flying the Kranich I in the Nationals last year. He has imparted some of his tremendous enthusiasm to the Cadets while serving at the College.

The Kranich, incidentally, is a very apt mount for B-K. He can almost fit his 6 ft. 7 in. in with comfort. Also he is at his best with "last year's model," it seems, whether it be a glider, radio or yacht. (Have you seen the car he drives?) In each case he is a past master at experiment, improvisation and improvement.

Those who know him as a practical man may be surprised to know that he is a most lucid exponent of scientific theory. In the air he is equally direct. The pupil who queried whether he had really done it all himself when congratulated on making his first "normal" landing in a T-31, found his instructor's hands on his shoulders the next time round. Those who doubt if this is physically possible should feel what happens to their necks if they freeze on the stick.

The pupil who brought a camera along with him so that a friend could snap him from the deck when his turn to fly came, did not know what to expect when his instructor offered to take it himself. He had the fright of his life when told to smile just after the release. He found B-K taking his profile from a position which for any other man would have needed the services of a sky hook. Then again the pupil on his first soaring flight with B-K who found himself at 10,000 ft., with what he thought was music on the radio, must have been greatly comforted to be told that he had not reached heaven yet.

Gliding will not lose its grip on the Public's imagination as long as there are characters like B-K at liberty.

M.-S.

## Model Aircraft Exhibition

**T**HIS was held from 20-30th August in the New Horticultural Hall, Westminster, in association with the 33rd Model Engineer Exhibition.

Rather in the nature of an experiment, the British Gliding Association decided to take a stand at the Exhibition which would be manned entirely by volunteers. The main organisation was left in the hands of Yvonne Bonham, Kitty Wills, Wally Kahn and Rika Harwood.

The stand, a long, rather narrow one, was furnished with the uncovered fuselage of the Leighton Park School home-built T-21B, an Olympia Mk. 2 wing and a complete, rigged H-17. Kent, and Derby and Lancs, together with Charles Brown and the Boy Scouts Association loaned display photographs. Working models of an Otfur Release and a Walter Kidde Lightweight Oxygen Unit were also shown.

The focal point of the stand was the bookstall which dispensed books, B.G.A. publications and general information. During the week various gliding personalities made themselves available for autographs or to "talk gliding". Peter Scott came along one afternoon and his autograph was most enthusiastically sought by small boys who were encouraged to buy a B.G.A. post card for his signature. Philip Wills, Ann Welch and Nick Goodhart were all on V.I.P. duty at various times.

The stand had its spot on Independent Television when Valerie Martin, a 17-year-old Olympia pilot from Lasham, was interviewed. Wally Kahn also contributed a piece on Courses.

This Exhibition, which was visited by 56,000 people, apart from the amount of literature sold, was most valuable publicity. A.I.





# First National Aerobatic Contest

**L**AST year the London Gliding Club held its First Annual Aerobatic Contest. It was so successful that all future contests are to be recognised as "National".

As the day, Sunday, 21st September, started with a low cloud base, the height of release was necessarily lowered from 3,000 to 2,000 ft. Though this may have reduced the number of evolutions some competitors intended to perform, it did not appear to incommode them.

The Judges' report on the individual performances is given below. After the contest was over, Sir Frederick Handley-

Page distributed the prizes, having first made an amusing speech containing some uncomplimentary remarks about modern giant aeroplanes, and saying that to him this competition had brought back the atmosphere of real flying, which he remembered so well from the early days of aviation.

David Ince, who won the Jack Hanks Trophy, was up in the air again when the time came to receive it, so his wife Anne accepted it on his behalf. Second prize was awarded to Flt. Lt. J. R. Ayers of the Army Gliding Club, and third prize to Dan Smith, of the London Club.

## Report of the Judges

**T**HE judges have the honour to make the following report to the Chairman, The London Gliding Club.

**THE WEATHER.**—There was some change in the weather between the morning and the afternoon sections so that the conditions encountered by competitors 1 to 11 differed from those encountered by competitors 12 to 17. In the afternoon the wind speed increased and for much of the time there was 8/8 cloud cover. In the opinion of the judges, no competitor was seriously hampered by bad weather.

**THE ORGANISATION.**—The contest was run smoothly and the competitors were sent into action expeditiously. It is advisable that the tug aircraft should clear the aerobatic area immediately after the sailplane has cast off and should not indulge in aerobatics before doing so.

**THE RULES.**—These followed the pattern laid down in the first contest in 1957. The compulsory manoeuvres were again reduced to two, a chandelle and a loop.

**THE STANDARDS.**—The judges had hoped to see a more noticeable general advance in the scope of the performances but, although some competitors did offer rather more extended programmes than last year, there was no marked improvement. It must be made clear, however, that the standards of the best performers were high.

**GENERAL COMMENTS.**—Some competitors did not appear to appreciate that the correct positioning of every manoeuvre must be

related to the position of the judges' stand and to the direction in which it is facing. The judges' stand is so set out by the organising committee as to be appropriate to the prevailing conditions, and the inference must be drawn by competitors that they must so place their aerobatic figures that those seated at the stand can watch them easily and in comfort. It follows that figures placed directly overhead or behind the judges' stand, however well executed, must tend to lose marks on that account. In future the judges propose to give competitors at the briefing an indication of optimum positioning in relation to the judges' stand.

In their striving for originality some competitors introduced figures which tended to become "messy". A clearly executed classic manoeuvre, done in each sense, is more appreciated by the judges than a highly elaborated figure without clearly displayed and significant pattern.

### Individual Displays

**J. MESSERVY (Skylark II).**—This competitor seemed to be disturbed by the scattered low cloud which was drifting over the site; but in fact there were clear spaces where he should have given his display. As it was, he was badly positioned for much of the time and—perhaps for the reason already given—at one period placed his aircraft between the sun and the judges' stand. This performance lacked continuity. Landing range 5.4 m. (17 ft. 8 in.).

**B. B. SHARMAN** (Olympia 419).—After starting well positioned, this competitor came too much overhead. This occurred during his four-leaf clover manoeuvre. On the final loop he was running close to the prescribed minimum height limit but it was decided that he had not transgressed that limit. Landing range 29.9 m. (98 ft. 2 in.).

**P. C. H. BERTHELSON** (Prefect).—Good definition of the figures was a feature of this performance, and there was, within the limitations of the aircraft, a clear effort to introduce originality into the display. Three complete turns were introduced of a perhaps not fully developed spin. But once again the aircraft was brought too much overhead and into the sun. Landing range 17.2 m. (56 ft. 6 in.).

**A. T. MORGAN** (Skylark II).—This competitor was well positioned and gave a varied performance which included, besides the compulsory manoeuvres, partial aileron turns, a spin (which was not, however, fully developed) and a half roll from the top of a loop. A generally sound and interesting but somewhat untidy routine. Landing range 22.6 m. (74 ft. 4 in.).

**J. R. AYERS** (Skylark II). **SECOND IN THE FINAL CLASSIFICATION.**—This performance was much appreciated by the judges. It was vigorous, original and well knit. It included the first fully developed spin of the day, with an accurate recovery, and, except for one brief period, the positioning was good. A pleasing display. Landing range 14.7 m. (48 ft. 4 in.).

**A. DOUGHTY** (Kite II).—This competitor's landing range, after a steep sideslip approach, was the best of all at 1.2 m. (3 ft. 10 in.). This result was especially creditable because of the aircraft's small air brakes. He positioned his aircraft well until near the end of his display when he came a little too much overhead. He showed two fully developed, one-turn spins. He used the capabilities of his aircraft well, but scope was restricted.

**D. A. SMITH** (Swallow). **THIRD IN THE FINAL CLASSIFICATION.**—A well presented and lively display which included some brief inverted passages and an upward aileron turn and what might be described as an "elongated loop" with the inverted position held. A large number of manoeuvres was packed into the available time. The placing was good and the accuracy was highly marked by all the judges. The spin, how-

ever, was not fully developed. Landing range 23.5 m. (77 ft.).

**D. W. STOWE** (Skylark II).—This competitor was highly marked for positioning and artistry; but his performance lacked scope and some of the figures were ragged and rough. He gave good emphasis to a stall, and a half roll and dive out. Landing range is not marked in this contest and is only taken into account in the final assessments. This competitor's figure, after a fast approach, was 34.2 m. (112 ft. 3 in.).

**D. B. JAMES** (Skylark II).—This competitor seemed to be aware of the need to be placed well out in front of the judges' stand, for he did not cast off until the tug aircraft gave the signal to disengage. Unfortunately he then kept too far away. In general he was marked more highly for scope and for artistry than for accuracy and originality. Landing range 6.4 m. (21 ft.).

**D. H. G. INCE** (Olympia 415). **FIRST IN THE FINAL CLASSIFICATION.**—A fully charged routine with slow roll, loop, stall turn, half loop and roll out, spin, spin off a loop and a long inverted run, all performed with accuracy. The positioning was good throughout except that the aircraft was too distant at one period. This fault was mitigated by the fact that it was still held clearly in the visual "frame" as seen from the judges' stand. He made good use of his aircraft's performance capabilities and returned the longest time of all the competitors. Landing range 8.3 m. (27 ft. 5 in.).

**D. J. CUNNINGHAM** (Prefect).—This competitor contrived to extract a commendably large number of figures from this particular aircraft, but he came too far overhead and in fact his spin was done almost directly above the judges' stand. This competitor, who was the last of the morning group, showed much promise but lost marks because of his bad positioning. Landing range 5.8 m. (19 ft. 1 in.).

**D. BRIDSON** (Skylark II).—As has been observed in the opening remarks, the afternoon section of the contest was attended by different weather from the morning, with a high wind. This competitor was the first of the afternoon performers. His artistry and positioning were highly marked by all the judges and particular commendation was given to the manner in which he linked the figures so that there was the best impression of

continuity of all the competitors. No spin was included and at one stage he was positioned rather near the sun. This was an excellent performance, only failing for the highest markings on the ground of repetitiveness. Landing range 15.7 m. (51 ft. 7 in.).

L. PIKE (Skylark II).—At the moment of cast-off this competitor was too far to the south-west and he afterwards came behind the judges' stand. His "twisted loop" was a commendable attempt to introduce originality into the display, but it did not appear to create a coherent pattern and it lacked accuracy. On landing he slewed left and achieved the range figure of 8.8 m. (28 ft. 10 in.).

A. GOUGH (Olympia 419).—During this performance the sky was clearing and the sun came out. The competitor made the most of the improved conditions by the best positioning of the day. He also showed originality in many of the figures but he was marked low for accuracy, and some judges felt that he did not fully exploit the capabilities of his machine. He did not, in the judges' view, fully realise the promise he had shown in 1957. Landing range 6.8 m. (22 ft. 4 in.).

J. RYMILL (Rhönbussard).—A number of small radius loops was a feature of this display, but although the accuracy was good, there was too much brusqueness in the execution. In addition this competitor came too much overhead during his per-

mance. Landing range 19.6 m. (64 ft. 6 in.).

F. FOSTER (Skylark II).—A first rate performance which was highly marked for artistry and for originality with good marks on both other counts, but which was marred by an infraction of the height rule. Marks had to be subtracted for this. The judges regret that a good performance should have been spoiled by this error. Landing range was the second best of the day at 1.8 m. (6 ft.).

H. R. DIMMOCK (Skylark II).—This competitor made sure that he was well positioned, only tending to go rather too far away at one brief period. His "butterfly wings", a repeat combination of climb and incipient spin, in common with original figures introduced by other competitors, failed because it was inadequately defined. It traced out no significant visual pattern. But this competitor did strive to offer something novel, and some of the judges were well impressed by his flick off the loop. Landing range 18.3 m. (60 ft. 2 in.).

Major OLIVER STEWART, M.C., A.F.C.  
(Chairman).

A. W. BEDFORD, A.F.C.

Sq. Ldr. CHARLES TURNER-HUGHES.

Air Cdr. A. H. WHEELER, C.B.E.

Capt. HUBERT BROAD, M.B.E., A.F.C.

Geoffrey A. V. TYSON, O.B.E.

Wing Cdr. H. P. POWELL, A.F.C.

(Secretary to the judges.)



*The Judges wish some of the competitors would pay more attention to "positioning."*

# "Weather and Flight"

by Dr. John Elliott

*The residential Field Study Course here described, which we announced last June (p. 126), was arranged by the Department of Extra-Mural Studies of the University of Birmingham, as a successor to the experimental course held in 1957. A similar course will be held from 19th to 26th September, 1959.*

THIS seven-day course, which one hopes is now to be an annual event, was again held at the well-appointed Preston Montford Field Centre, near Shrewsbury, under the direction of Dr. Dick Scorer, assisted by a team of expert tutors. Of these, John Stollery of Imperial College dealt mainly with Flight, Jock Findlater of the Met. Office Training School with Weather, and Gerry Stollery of the Royal Photographic Society with Coloured Photography.

The scope was generous and varied, and the standard of study such that the initiated were never bored, neither were the un-initiated overwhelmed. The fact that both the teachers and the taught were living under the same roof gave ample opportunity for informal discussion, and many a personal problem was sorted out over the breakfast table.

Though the first scheduled lecture was not until the gentlemanly hour of 9.15 daily, the more strong-minded among us would accompany Dick and Gerry on their routine dawn reconnaissance and appreciation of the morning sky. Then at 7.45 one could sit in with Jock on the B.B.C. report from weather stations. By the end of the week we could, believe it or not, produce not only a passable weather map but also a personal forecast with a prediction ratio of at least 6 to 4 on. Bell Rock and Outer Dowsing had become household words.

In the course of the weather lectures, Dick led us gently but firmly up through Air Motion, Cloud Forms, Fronts, Jet Streams and finally Condensation Trails, and Jock for good measure showed us the mysteries of the Tephigram. To those meeting it for the first time, it appeared to be a highly complex variety of Snakes and Ladders; to one or two it stayed that way.

The study of flight was John's department, and he expounded it with great clarity and patience right from Leonardo da Vinci up to the present time and on through the Mach numbers into the realms of Colonel Dare. He showed even the dullest of us just

why a sailplane aerofoil would wince at the sound barrier. For those with a flair for higher maths he produced smooth-looking equations, and the Shell colour and sound films were extremely helpful and informative.

The finer points of colour photography were demonstrated by Gerry with many superb examples of cloud formations from his own collection, and two fascinating aspects of flight in nature were provided by the two guest lecturers, Dr. G. T. V. Matthews of the Wildfowl Trust and Dr. R. C. Rainey of the Anti-Locust Research, who told us something of their own specialities—"Bird Navigation" and "Flight of Locust Swarms" respectively.

It might well be assumed that with all this to digest we were confined for hours at a time in a stuffy lecture room. Far from it! Our physical condition was well catered for, and every afternoon, rain or shine, we were busily engaged in field work of one kind or another. Once we scrambled up the Wrekin fully armed with theodolites, anemometers, airflow meters, smoke generators and an assortment of gaily-coloured balloons to investigate the behaviour of a 30-knot wind up over the summit and down the other side. The findings were terrifying.

On two occasions parties visited the Long Mynd, where the Midland Gliding Club extended their usual warmth of hospitality. This included some 12 hours' hill soaring in their T-42, nobly piloted on successive days by Bob Neill and Jack Minshall. Towards the end of the second afternoon a wave was kind enough to phase in with the hill lift and we were able to put Dick's theories delightfully into practice—not, however, without apprehensive glances at Jock's smoke which was producing some very evil-looking reverse eddies in the gully over which we had to approach. Eventually the wave overdid it a bit and all our nice hill lift drained away all at once like water out of a sieve, but not before we had each experienced our flight inoculation.



Dick Scorer (right) and Jock Findlater opening smoke bombs for a wind flow experiment.

(Photo: Gerald L. Stollery)

So ended a most enjoyable week, remarkable for the wealth of useful information and matter for study presented in a highly acceptable form. I regard the modest inclusive fee of 8 guineas as a first-class investment for all who want to soar to better effect. And who doesn't?

## UP and DOWN

### World Feminine Record

From Vrsac in Yugoslavia, Cvetka Klančnik-Belin, with Silva Trauner as passenger, has flown the prototype Kosava round a 100-km. triangle at an average speed of 84.66 km./h. (52.61 m.p.h.), beating the previous two-seater feminine record of 64.28 km./h. (39.94 m.p.h.) set up by Ana Samsadova, of Russia, in 1952. In the second Kosava, Z. Rain and V. Stepanovic set up a 300-km. record of 48 m.p.h. in 1956. It was recently badly damaged by a pupil.—*Thermik*.

### Youngest Gold C Pilot?

On 2nd August, while the U.S. National Contest was being held at Bishop, California, Hugh Bikle arrived by sailplane (1-23E) from El Mirage, 193½ miles away, completing his Gold C and gaining a Diamond for goal flight. As he was just 16 years old, he is believed to be the World's youngest Gold C pilot.

### Distinction for Haase

The highest distinction in the German Federal Republic in the world of sport, the

Silver Laurel Leaf, has been awarded to Ernst-Günther Haase, who received it from President Heuss at the Villa Hammer-schmidt. It was awarded not only for his becoming World Gliding Champion at Leszno this year, but for a two-seater world record for speed round a 100-km. triangle in 1952, four national records, and for his part in designing the HKS sailplane.—*M. DESKAU*.

### Father and Son

Dr. August Raspel, of Mississippi State College, who is well known for his aerodynamic improvements to the RJ-5 and Tiny Mite, and still wants his duration leg for the Silver C, has been overtaken by his son. David Raspel, who is still at school, has gained the distance leg of his Gold C with a flight of 220 miles from Denton, Texas, to Kremlin, Oklahoma, starting by auto-tow.—*Flugwelt*.

### Triangular Speed Records

The F.A.I. Gliding Commission has recommended that for speed records round triangular courses each side of the triangle should not be less than 28 per cent of the whole course.

## Christmas 1958

Xmas cards photograph of  
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# U.S. National Contest at Bishop

**T**HE 1958 National Soaring Competitions in the United States were held at Bishop, in California—a site which is best known for its waves but which can produce good thermals in summer. The contest period overlapped our own, being from 29th July to 9th August. This was the 25th contest, the first having been held in 1930, and the rest annually except for a few missed years during the war.

We are indebted to Mr. Lloyd Licher, executive secretary of the Soaring Society of America, for a set of the daily bulletins, from which this account has mainly been compiled.

On the day before the opening, Harald Jensen (formerly of Denmark, where he was known as "Cowboy") arrived by air, having soared his Lo-150 from El Mirage, 194 miles away; Sven Anderson had kept him company as far as Lone Pine.

**Tuesday, 29th July.**—Forecast cloud base was 15,000 ft., but the best thermals were expected to arise only from mountainsides and screes, as melting snows had made the valley abnormally green. Competitors were towed to the biggest of the screes for release at 2,000 ft.

Task was Goal and Return: 56 miles southwards against the wind to Lone Pine, and back. Soon excessive cloud formation put part of the route in shadow, and only four succeeded in getting back: Graham Thomson made best time with 3 hrs. 19½ mins. in the RJ-5, averaging 33.7 m.p.h.; Harold Hutchinson averaged 33.0 m.p.h. in his Prue 215, Robert Moore 30.3 m.p.h. in a Schweizer 1-21, and Jensen 26.7 m.p.h. in his Lo-150, on whose nose he had painted "THE JENSEN FLYING SINK".

In addition to the Open Class, there was a separate contest for 15-metre sailplanes, whose entrants were also marked in the Open Class; and as the Prue came into it, Hutchinson took the lead in the 15-metre class.

Competitors had to fly as close as possible to the west face of the White Mountains range to get the best lift.

**Wednesday, 30th July.**—With light, variable winds, a 116-mile course was set—technically a triangle, but actually the

turning-points were north and south of Bishop respectively. Of 30 who attempted it, 19 finished the course. Dick Shreder, in an HP-8, went "round" it twice; the first time cautiously, and the second time at 53.4 m.p.h., the best speed of the day.

**Thursday, 31st July.**—Anyone completing this day's task had a chance to beat the world's goal-and-return record by 47 miles, since a flight of 387 miles, to El Mirage and back, was set. But although Shreder finished the course in 7 hrs. 29 mins. and Jensen did so in 8 hrs. 2 mins., some "technicalities" prevented either of them being allowed a new record. "Working altitude" this day was 14-16,000 ft., where the wind was slight, and the day's flying totalled 4,966 miles.

**Friday, 1st August.**—Another but much shorter goal-and-return was set, the goal being Coaldale to the N.E. This was 53 miles away in a direct line over the 12,000 ft. White Mountains, the route taken by Shreder, who averaged 48.4 m.p.h., the best speed of the ten who finished. Jensen took a more devious route through Montgomery pass, but did well enough to rise to top place in the total scores.

**Saturday, 2nd August** was an Open Day, when competitors could choose their own tasks. The wind blew towards Salt Lake City, which had offered a prize of 250 dollars for anyone who got there, but no one did. Its distance was over 400 miles.

The day's best score was by Bill Ivans (holder of the world's height record), who flew a triangular course of 393½ miles in a Ka-6B which he shared with two other pilots. But next day it was decided that, in future, triangular flights would not be allowed on an Open Day.

**Monday, 4th August.**—After a day of rest, a triangular race of 125 miles was set, with turning points to the north and north-west, in a light south-westerly wind. There was such good cumulus development along the second leg that several pilots nearly got up to cloud base at 18,000 ft. Dick Shreder made the fastest time at 57.1 m.p.h. and displaced Jensen from leading position.

**Tuesday, 5th August** was marred by a fatal accident. While making a turn, Dr. John B.

Sawyer was lifted in his Nimbus II by a strong thermal up to the same level as Dr. Hamer Selvidge, flying a 1-26. Both banked steeply but their wing-tips touched, and the Nimbus was thrown over partly on its back. The resulting dive brought it so near the ground that Dr. Sawyer pulled hard back and the right wing, which had already been hit, came off at the centre-line of the fuselage.

The task, a goal-and-return, was called off.

**Wednesday, 6th August.**—In view of what happened the previous day, release altitude was increased to 3,000 ft. and pilots were released further from each other. An Open Day was announced, and Bill Ivans scored highest in an attempted 400-mile out-and-return flight; his return was blocked by a huge thunderstorm just north of Bishop, so the flight counted as a 360-mile dog-leg. For the three days on which Ivans flew, he amassed 2,915 points in the Open Class, in which he finished 12th, and 2,988 points in

the 15-Metre Class, in which he finished 6th. His daily average was therefore the highest of the contest, and the only pilots to exceed his total flew on all seven days. He and his team mates Christopher Drew and Rudolph Mozer finished first among five entrants in the "Club/Team Class" with a total of 5,493 points.

Leading scores in the Open and 15-Metre Classes are given below. Total mileage during the contest was 23,318, from 326 tows; 44 pilots took part with 32 sailplanes. Sailplane types in use were:—

Open Class only: 6 Laister-Kaufmann, 3 TG-3A, 2 TG-2, 2 Pratt-Read, and one each of HP-8, Lo-150, RJ-5, 1-21, 1-23, Nimbus II, T-3 and Hummingbird.

Open and 15-Metre Classes: nine Schweizer 1-26, and one each of Prue-215, 1-23, Nimbus III, Ka-6B, Briegleb 12A and Fauvel AV-36.

## LEADING FINAL SCORES

### Open Class

| Pilot                  | Sailplane   | Points |
|------------------------|-------------|--------|
| 1. Richard E. Schreder | HP-8        | 5,905  |
| 2. Harold Hutchinson   | Prue 215    | 5,797  |
| 3. H. Wermuth Jensen   | LO-150      | 5,417  |
| 4. Graham Thomson      | RJ-5        | 5,229  |
| 5. Robert Lee Moore    | 1-21        | 5,168  |
| 6. Dewey J. Mancuso    | 1-23        | 4,751  |
| 7. Sterling V. Starr   | 1-26        | 4,591  |
| 8. Victor Swierkowski  | Nimbus 3    | 4,047  |
| 9. John Sawyer         | Nimbus 2    | 3,831  |
| 10. Leslie Arnold      | Hummingbird | 3,743  |

### 15-Metre Class

|                       |          |       |
|-----------------------|----------|-------|
| 1. Harold Hutchinson  | Prue 215 | 6,340 |
| 2. Dewey J. Mancuso   | 1-23     | 5,179 |
| 3. Sterling V. Starr  | 1-26     | 5,086 |
| 4. Victor Swierkowski | Nimbus 3 | 4,448 |
| 5. Robert Gomes       | 1-26     | 3,094 |



## OBITUARY

### FRANK FOSTER

WHEN news came through of the disaster to a B.E.A. Viscount, due to a collision with an Italian jet fighter over Anzio, as a result of which all on board lost their lives, it was an additional shock to learn shortly afterwards that the Viscount's pilot was Frank Foster, one of Britain's leading sailplane pilots, who, in addition to his flying, has put in much useful work in the service of British Gliding. The sympathies of all our readers will go out to his widow, Pat, who is also a glider pilot, and their daughter, Carol.

Frank Foster, who was aged 39 and had been flying for British European Airways for 11 years, first came into gliding through the A.T.C., getting his A and B certificates at Shoreham in 1945. In May, 1946, he obtained his C with the London Gliding Club, from which he made his first cross-country of 52 miles in April, 1947, though without a barograph; however, he completed his Silver C (British No. 125) later that year.



Frank Foster, his wife Pat, and his Skylark  
(Courtesy of "Flight")

During 1947 he became C.F.I. of the Southdown Gliding Club, near which he was living, and in that capacity taught his wife to fly. He took part in that year's National Championships, sharing the use of a Gull. In subsequent national championships he was highly placed, finishing 4th in 1950 and 5th in 1951 with his own Rhönbussard, 4th in 1953 with his Meise, and 5th in 1955, by which time he owned a Skylark II.

In 1952 Frank Foster was one of five British pilots chosen to fly Sky sailplanes in the World Championships in Spain. He did well in the practice period, making a climb of 17,000 ft. (Diamond height) in a thunderstorm; but on the first day of the actual contest he had the misfortune, with two other pilots, to get caught out by a violent wind shear at only 150 ft. when approaching to land, and his Sky, through hitting a telegraph pole, was put out of action for the rest of the meeting. This piece of bad luck was, naturally, a severe disappointment to him; but he had his revenge on Fate four years later at the World Championships in France, when he and Nicholas Goodhart became World Champions in the Two-seater Class, reaching top place on the third contest day and regaining it for the last three contest days. Their total score was 3,828 points, against 3,187 by the Yugoslav runners-up.

Frank Foster completed his Gold C (British No. 9) and earned a second Diamond with a goal flight from Dunstable to Tideford in Cornwall on 12th August 1955; this was the first 300 km. flight ever made from the London Gliding Club. On 23rd June 1957, he set up a United Kingdom speed record round a 100 km. triangle from Dunstable, averaging 48 m.p.h. Several other notable flights by him have been reported in this journal.

His valuable work as Accidents Analysis Officer for the B.G.A. will be well known to readers from his published reports in our April issues of 1956 and 1957.

To quote Nick Goodhart from *The Aeroplane*:—

"The tragic death of Frank Foster, in the recent air disaster in Italy, takes from us all a well-loved personality who will be sadly missed by many.

"Flying was in his blood, for apart from



his deep interest in his work as a senior B.E.A. captain, he devoted much of his spare time to gliding. He owned his own Skylark 2 sailplane in which he had put up many outstanding flights, beating in many cases the achievements of other pilots in the more sophisticated 18-m.span machines.

"It is perhaps fitting to remember that he died as he lived—in the air."

A Frank Foster memorial fund has been established and those wishing to contribute may send their donations to the London Gliding Club or British Gliding Association.

The exact nature of the memorial has not been finally decided but it is likely it will take the form of a National Gliding Trophy.

### THE HON. ALAN BOYLE

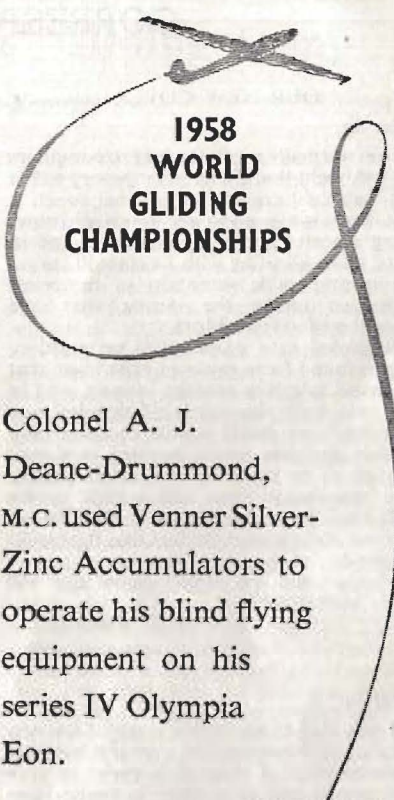
WE regret to record the death on 15th October of the Hon. Alan R. Boyle, A.F.C., at the age of 72. He not only played a prominent part in getting gliding started in Scotland a quarter of a century ago, but was one of the earliest pioneers of aviation, obtaining No. 13 British Aviator's Certificate in 1910. In July of that year he was badly concussed when he crashed at Bournemouth in an Avis monoplane designed by W. O. Manning.

During the first world war he was associated with Sebert Humphries (4th British Silver C pilot) in an attempt to be towed in a kite balloon behind a ship, and both were pitched into the sea. He was awarded the A.F.C. in this period. In the second world war, after raising a Home Guard battalion, he went to sea as an ordinary seaman.

When the Scottish Gliding Union was formed in July 1934, by the amalgamation of several Scottish gliding clubs, Alan Boyle became its first president, having already been president of the Glasgow Gliding Club, which began flying in November 1930. It is related that, when he turned up at the S.G.U. in its early days, he often brought a welcome cheque from his brother, the Earl of Glasgow.

In recent years he was living in Kent, where the writer used to meet him and his wife once a year at a friend's house; he had lost touch with gliding affairs, but was surprised and pleased to hear that his old club was still going strong and flourishing as never before.

A.E.S.



## 1958 WORLD GLIDING CHAMPIONSHIPS

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# CORRESPONDENCE

## OUR NEW COVER

Dear Sir,

I am normally much too lazy to complain, but I thought that if I added my word to the rest we might regain our original cover.

It has always given me much pleasure, being graceful and finely balanced, and in some way indicating with its smooth curves the incomparable sensation of motorless flight, so unlike the jarring roar and vibration of a Tiger Moth.

Regarded as a commercial proposition, I have found from my own experience that the word sailplane arouses interest, and in any case both the words "Sailplane" and "Gliding" are easily legible at more than 10 feet and the whole heading is simple enough to be taken in at a single glance. The new design does add a little to the legibility, but has otherwise nothing to recommend it except the fact that the blocks are made.

Please, may we simply have our old cover back again?

S. J. WHITFIELD,  
*Malvern Wells.*

Dear Sir,

I was glad to see notice taken of the new heading of this magazine, even if it has been unfavourable. I think it is easier to rush indignantly into print than to praise—one is so inclined to sit back, think: "That's good", and do nothing; and this gives a false impression. So I should like to write in defence of the new heading.

It stands out clearly and strongly, which is a good selling point. As a design I think it is interesting, mature and educated, and in a class way up above the last one.

I think, on the other hand, the designer has not quite caught the spirit of the gliding movement; it is a bit too severe and staid.

The coloured side-line—which I am told had to be added—I think, as a heading, is all right; but, as a whole, separates the top too much from the photo, which is a pity. But I say to myself: go on, don't sit there complaining, do a better one—and that's what I think all complainers *should* say to themselves; and after this one has had a long run—which I hope it will have, because I

think familiarity will bring out its good points—let's have another contest, if the judges can bear it. I personally feel very grateful to them.

KITTY WILLS,  
*Henley-on-Thames*

Dear Sir,

May I say how much I dislike the new cover of our Magazine; whilst I do not say that the old design was the best possible, I consider the latest design a retrograde step.

I realize that the general public know of our sport as "Gliding", but I feel that the word "Sailplane" should have equal prominence on the cover, and, who knows, perhaps the general public will be re-educated to the more refined details of our flying.

I further dislike the pre-eminence given to the price, for although the magazine is undoubtedly worth the price asked, there is no need to make it the first thing recognizable to the eye. Please do not imagine that I am against a change; I would welcome any outstanding new cover, but I consider that until this is designed the old cover should be retained.

G. R. BARRELL.

### EXTRACTS FROM FURTHER LETTERS:

"... Please do something about that dreadful new cover."

GRAHAM THOMSON.  
*U.S.A.*

"... The new heading looks very cheap and without imagination to me, and if gliding people have no imagination, who has?"

ALEX ALDOTT.

\* \* \* \*

### The[Fauvel AV-36

In a letter to our advertising agents, M. Charles Fauvel states that the AV-36 is not only authorized for cloud flying but is, in addition, the only French single-seater sailplane to have an effective aerobatic load factor of 12 among all the French sailplanes constructed during the past 10 years.

# Dartmouth Cadets' Gliding Camp

by R. Brett-Knowles

THIS annual camp for Cadets from the Royal Naval College at Dartmouth was held at Bramcote in 1958 for the last time, as the station will have closed next year. This completes a run of five years' annual gliding camps at this station.

The Camp was divided into two courses, from 29th July to 6th August and 6th August to 16th August, with 12 midshipmen and cadets on the first and 11 on the second. Some of the pupils had attended previous Dartmouth Gliding Camps and one had been gliding with the Air Training Corps.

The instructors were drawn from various branches of the Navy and included both officers and ratings, all with over 100 hours' gliding to their credit and experience of many previous camps both at Bramcote and at Culham, where the camps were previously held.

Gliders used were: Kranich, Prefect, two T-31s, two Cadets Mk. 1, and two SG-38 Primaries. Launching was by winch, auto-tow, aero-tow and bungee to give experience in all methods.

Of the 18 *ab initio* pupils, 10 gained their A and B certificates, but the remainder, although perhaps they might have been sent solo without danger, were not considered to have reached the standard accepted by the instructors on the course. Two pupils gained C certificates, one of them being *ab initio* and flying an uninstrumented Cadet Mk. 1. An instructor completed his Silver C by getting the gain of height in a Grunau of the Gamecock Gliding Club (R.N.A.S.

Bramcote is H.M.S. Gamecock.

There were several cross-country flights of the order of 20 miles in the Prefect and club Grunau, but no Silver C distances were flown by people needing it.

The Kranich explored cumulo-nimbus lift on two occasions with the C.F.I. taking pupils up for soaring experience, reaching heights of 10,000 and 9,000 feet before breaking off. On each occasion lift of 20 ft./sec. was experienced with full spoiler and maximum safe speed, break-off being accomplished by ceasing circling. The Kranich also flew to 6,000 feet with another instructor and went for a 40-mile cross-country.

One SG-38 was totally destroyed by a pupil holding the stick forward after releasing auto-tow at 40 feet, and the Prefect was slightly damaged as a result of the pilot being struck by a hitherto invisible electric power line on his approach to land at the end of a cross-country flight.

Weather was particularly co-operative during the first camp; soaring was possible each day, and given a little more skill, Silver C should have been possible even in the intermediate performance machines available for the pupils to fly. As it was, only the instructors had the opportunity, and the ones needing distance could not make it.

During the second camp weather and serviceability both conspired to do their worst on separate occasions, and rather less flying than usual was done.

## Be prepared for 1959!

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## MISCELLANEOUS

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**CLUB, COMPANY and SCHOOL NECK-TIES** at reasonable price, in either Acetate or Terylene. **MACASETA LTD.**, Goodall St., Macclesfield.

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**TUTOR Canopy Mod.** (B.G.A. approved). Drawings and instructions—25/- post free. Write to the Secretary, A. V. Roe Gliding Club, Greengate, Middleton, Lancs.

**TWO Slingsby Tutor aircraft** for sale. In good condition. May be seen at Coventry Municipal Airport, Nr. Coventry. Price, £150 and £120. Or apply E. M. Woodhams, 59 Eden Croft, Kenilworth, Warwickshire.

## WANTED

**INSTRUMENTS** wanted. Artificial horizon, turn-and-bank, A.S.I. (sensitive), barograph (high range). Box 41.

**SECONDHAND** Trailer suitable for Sky-lark 2B. Please state price and fullest details to Box 42.

**SEDBERGH** wanted OR part exchange for T.31. Taunton Vale G.C. 33 High Street, Wellington, Somerset.

**WANTED:**—"Futor" (preferably with spoilers) or Prefect. In first-class order. Full details by Air mail to: Secretary, Otago Gliding Club Inc., 262 Kaikorai Valley Road, Dunedin, N. Zealand.

## SITUATIONS VACANT

**DERBYSHIRE & LANCASHIRE** Gliding Club is in need of an instructor to take charge of training courses in 1959. Reasonable remuneration and all found. Will those interested please write to the Secretary at Camphill.

**GLIDING** Instructors required 1959, Feb. to Oct. inclusive, with possibility of permanent position. Apply to General Manager, Lasham Gliding Centre, Alton, Hants.

## Answers to Quiz 2

(There are no answers to Quiz 1: you are obviously a wonderful instructor.)

- 1.—Night in the U.K. means . . . between one hour after sunset and one hour before sunrise . . . in Summer Time, and for the remainder of the year . . . (between) half-an-hour after sunset and half-an-hour before sunrise; provided that it shall be deemed to be night when, between the hours of sunset and sunrise, any unlighted aircraft or unlighted prominent object cannot be clearly seen at a distance of at least 5,000 yds.
- 2.—Top.
- 3.—Hans Jakobs.
- 4.—280 lbs. approximately.
- 5.—"Tim" Hervey.
- 6.—Surrey.
- 7.—5.5° F. per 1,000 ft.
- 8.—Some landings and take-offs may not be according to the "T" for special reasons.
- 9.—Two in each wing.
- 10.—£3,000.
- 11.—1,500 ft.
- 12.—Yes.
- 13.—Twice times stalling speed.
- 14.—G. Eric Collins.
- 15.—Yorkshire.
- 16.—The one which has the other aircraft on his left.
- 17.—Because of the risk of an explosion.
- 18.—Water droplets.
- 19.—Acrolite.
- 20.—The Sierra Nevadas (Calif.).
- 21.—One nautical mile.
- 22.—54 ft.
- 23.—Neville Shute Norway.
- 24.—16.
- 25.—The notorious and famous Cambridge I glider owned by the Cambridge University Gliding Club.
- 26.—Kinross.
- 27.—Philip Wills, Great Britain.
- 28.—1,000 lbs. (9 cwt. accepted).
- 29.—To the lee of a plateau or mountain during wave conditions.
- 30 —(a) Hyde Park 3341; (b) Mayfair 9494; (c) Dunstable 419.

A.W.



# The Royal Air Force

## PILOTS, NAVIGATORS AND AIR ELECTRONICS OFFICERS COMMISSIONS IN THE GENERAL DUTIES BRANCH

Vacancies now exist for fit young men of character and good education and who are capable of taking responsibility, to train as pilots, navigators or air electronics officers in the general duties branch of the Royal Air Force.

### METHODS OF ENTRY

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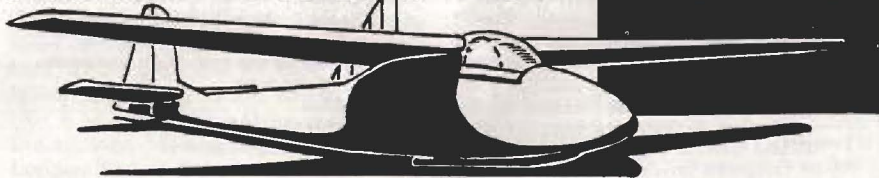
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for transfer to either form of direct commission. Age limits—17½ to 21.

**Pay and Gratuities.** Pay is high and terminal gratuities are generous. For example a Flight Lieutenant of 25 can earn, with full allowances nearly £1,700 a year. The tax-free gratuity paid at the end of a twelve-year commission is £4,000.

Write for further details, stating age and education, and the method of entry in which you are interested, to the Air Ministry, Dept. SAA 30, Adastral House, London, W.C.1.

# CLUB AND ASSOCIATION NEWS



**E**ACH month as Club News reports arrive I read them through and Press Secretaries must view with dismay the cuts which are made. I know it may be disheartening, but I ask you to bear with me. Some items are only of interest locally and with the increasing number of clubs space is rather limited for each one's news.

Photographs are always welcomed, but must be of general interest and essentially of good quality to ensure the best reproduction.

At this time of the year when the Festive Season is with us reports of forthcoming social events are also mentioned.

I hope they will be most enjoyable and successful and take this opportunity to wish you all the best for Christmas and the New Year.

A reminder to Press Secretaries: the last date for copy for the February issue is Monday, 15th December. Reports should be sent to S.E. Ambulance Station, New Cross Road, London, S.E.14, typed double spaced on foolscap.

COLIN MOORE,  
*Club and Association News Editor.*

## ACCRA

**Q**UITE a lot of progress to report from Ghana during the past two months. The club Tutor and the syndicate Spatz are now housed in the new hangar and rigging and de-rigging each flying day is no longer necessary. Also, very largely as a result of the efforts of John Braithwaite, a clubhouse-cum-shelter is nearing completion near the launching point. With this capital expenditure out of the way, income is now being devoted to the purchase of a club single-seater which should be here in time for the Christmas holidays. We also have on the

site at the moment a "Super Ace" powered aircraft which is being test-flown after lying idle for some years.

The August-September period of overcast skies and drizzle did not materialize this year and instead there has been plenty of soarable weather. The longest flight (3 hours 18 minutes) during the period relied, however, for its first 2 hours and 10 minutes, on a series of thermals from one grass fire (which unfortunately burned itself out when five hours were beginning to appear vaguely possible).

P.G.B.

## BRISTOL

"RAIN, rain, go away, come again another day" is the old saying. Unfortunately the rain seems to come again the next day, and the next, *ad infinitum*, and parts of the site have been reduced to the consistency of a mud bath.

The highlight of the period under review was the live T.V. broadcast which took place at the end of August. The broadcast was well received and everyone thoroughly enjoyed taking part in the enterprise.

The B.B.C. team made themselves quite at home and cordial relations were established all round.

On the flying side, the only flights of note in the last few weeks were two successful five-hour attempts on the ridge in a brief spell of N.W. wind. Otherwise the wind has maintained its direction consistently between S.E. and S.W.

Further improvements to club facilities are planned over the winter, together with general maintenance and renovation. Plans are afoot for the purchase of a Tiger Moth and this is eagerly awaited by those who aspire to soar to great heights in the local waves.

The usual Christmas party will be held at Nympsfield, but by universal request, the skiffle group will not be invited this time! The Club's annual dance will be held in Bristol on 21st February.

In all, a little accomplished in the air, much on the ground, and tremendous enthusiasm and plans for the future.

We wish all our many friends in the clubs throughout the country "a Merry Christmas and good flying in the New Year".

A.L.S.

## CAMBRIDGE

ON 15th June, the four Club aircraft were at the Long Mynd and logged a total of 23½ hours' thermal soaring. The June Camp saw very little hill soaring indeed, but nevertheless, 94 hours' flying were enjoyed during this fortnight.

In July we had two remarkable cross-country flights. On the 17th, John Deas did his Silver C distance in the Tutor, and on the 29th, Peter Nielson managed 65 miles in the Skylark from Nympsfield on a difficult day and thereby earned 100 marks in the Regional Championships.

In August Stewart Johnstone's Eagle arrived and, through Stewart's wisdom and generosity, joined the fleet of Club-operated

aircraft. In less than seven weeks, over 20 pilots qualified as P.1 on this delightful two-seater. For a good many others, the Eagle will be a medium for a quicker conversion from the Prefect to the Skylark II. On the 27th another Silver C distance flight:—Bill Menkevich took the Skylark 65 miles to East Kirkby. Three days later he scraped his height from a low winch-launch and thereby completed the task.

Also in August, we find a revealing change of names in the column "Pilot". Margaret Thornley who joined us some years ago from the Surrey Club now appears as Mrs. Pleasance, and Catharina Edlund has joined the Edwards family. Best wishes to Margaret and Maurice, and to Catharina and Anthony.

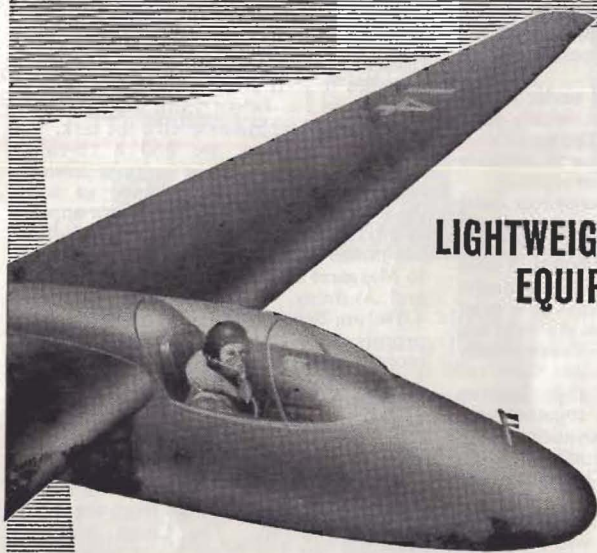
During September Paul Bethell-Fox was promoted to the Skylark after only 12 months from scratch, and he completed 5 hrs. on the hill. This brings us to another successful September Camp at the Long Mynd. The eight 5-hour flights include John Deas's who thereby completed his Silver C entirely on the Tutor. Another Silver C was completed by Ernie Clarke who took the Skylark 135 miles from the Mynd to King's Lynn. The Camp was well attended; the 130 flying hours were shared by 51 pilots.

The "Club year" ends in September; this operation yields the result of 4,600 launches, 1,400 more than in the previous year. And just under 700 hrs. is not too bad with 5 aircraft either. Now let us quickly shut the flying book before anyone sees the total cross-country mileage. We certainly did not strain the trailers this year. Let's blame the weather.

Ken Machin, our C.F.I. and Elisabeth Machin paid a visit to the Dublin Gliding Club where they met splendid hospitality. They found the Dublin Kranich, which was at one time operated by the Cambridge Club, in good fettle and were very pleased to have a flight or two. G.S.N.

## CORNISH

IN spite of the continuing bad weather we can report a continued rise in our number of soloists and also that Jane Pollard has become our first Lady Member to gain a C. One of our visiting Instructors, Alan McLellan-Brown, took time out during a Course and did his five hours in the Olympia, but on other occasions we have



## LIGHTWEIGHT OXYGEN EQUIPMENT

NORMALAIR lightweight oxygen equipment was fitted in the sailplane flown by the runner-up in the Open Class at the 1958 World Gliding Championships - Commander N. Goodhart of Great Britain. This pilot also achieved the greatest distance flown along a set line, with a flight of 209 kilometres.

The equipment used is part of a range of items being produced by NORMALAIR for use in light aircraft, small transport aircraft and sailplanes. Both portable sets and fixed installations are in production, component design allowing wide variation of layout to suit individual requirements.

A feature common to all the equipment in this range is very low weight. For example, a fixed installation of 750 litres capacity weighs as little as 12½ lbs. complete. Provision is made in all cases for the selection of different flow rates, the actual rates being variable by adjustment during manufacture. An illustrated catalogue of this equipment is available on request.

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been hard put to it to reach our guaranteed minimum number of flights.

At present the most tremendous activity goes on in arranging support for what we call our "Airfield Project". Perranporth Aerodrome has been put up for sale by tender by the Air Ministry and an anonymous buyer, with most benevolent intentions towards the Club and the National Trust, brought a ray of hope to what could have been a fatal situation. Members are busy canvassing signatures on a thousand petition forms, and all the prominent personalities and organisations in the Duchy are being approached to give us their support in writing.

Two Members of Parliament have already written directly to the Minister on our behalf, the signature of the Lord Lieutenant for Cornwall now heads the very distinguished list of supporters on our public petitions, and letters from Corporations, Councils, Chambers of Commerce, Companies and Clubs, arrive by every post.

Until the campaign closes in November, none of us look like having much spare time—nor the people of Cornwall much peace. And it will hardly be safe to speak to any of us between the close of the campaign in November until the final result is known in December. C.M.-H.

## COVENTRY

SINCE our last report, the Club has learnt with regret of Vic Carr's decision to resign from the office of C.F.I.; we are glad to know that the Club will not be denied his help and advice in the future. The job of C.F.I. is now being undertaken by Michael Hunt, with Lou Glover and John Greenway as deputies at Baginton and Edgehill respectively. The office of Secretary relinquished by Michael is now being shared by Bill Woodhams and Laurie Watts.

On the flying side, the most noteworthy efforts have been by Mike Thompson and David O'Clarey. Mike completed his Silver C by taking the Viking 72 miles to the Wash on 20th September, and on 24th September, David logged a commendable 5 hrs. in the Prefect on the ridge at Edgehill—which, according to him, was more than the wind did!

On the training side, first solos have been completed by Virginia and Roger Kent, John Walsh and Reg. Ludgate, and Tony Jackson has gained his C. It has been decided to sell the two Tutors (tested to

6,400 ft. and barograph charts to prove it!) and give pupils their first solos on Prefects, converting later to Olympias. A new Olympia has been ordered and should be delivered early next year.

We were pleased to welcome Ann Welch early in October, when she visited us to examine Messrs. Cunningham, Glover, Greenway and Tarver for the categorisation tests.

Finally, we must record the graduation from solo status of Bob Preston and Jennifer Cartwright, who were married on 27th September. P.M.

## CRANWELL

HAVING access to a Chipmunk for aerotowing has made a great difference to our soaring prospects and almost all significant flights during the term and at Summer camp have been from aero-tows.

In late June our C.F.I., Flt. Lt. Douglas Bridson, flew 169 km. from Cranwell to Catterick in his Skylark II, reaching 11,000 ft. on the way. Later in the term the Kite 2B improved upon its 33 minute average when Ian Strachan had two afternoon flights of 2½ hrs., the second being an attempt upon the club goal record. Other flights worthy of mention were made by Sqd. Ldr. Sandford who obtained his C with a flight in the Prefect off an aero-tow, and by Roy Holmes, who missed his Silver C gain of height by only 100 ft. again in the Prefect.

The Club held its Summer Camp at R.A.F. Andover, instead of at a ridge site, this change being to utilise the Chipmunk to the full. On the first day Dick Howard and Bob Prothero obtained their C's from aero-tows. On the same day John Delafield had nearly two hours in the Kite and the T-21 soared for several hours also. Weather on the remaining days was disappointing, although Flt. Lt. Bridson stayed up regularly in the Skylark, and Plt. Off. Manning in the Prefect gained Silver C height; Bob Manning also tried for his Silver C cross-country but landed at the U.S.A.F. base at Greenham Common. The retrieving party had quite a job in assuring the security authorities that their intention was to collect a glider and not to sabotage a B.47!

One day when conditions looked good Flt. Lt. Bridson in the Skylark by-passed the bad conditions and was soon on his way north at 10,000 ft. He reached Driffield

(322 km.) in 4½ hrs., thus completing his Gold C with one Diamond.

The latest event is the acquisition of a club Olympia. This aircraft has recently had its first flights at Cranwell, and one of our many aims in the future is to use it to explore the lenticulars, which have often been noticed in this area. Who knows, we may be one of the first British flat sites to boast Silver C heights obtained in wave lift!

I.W.S.

## DERBY. and LANCS.

**S**ATURDAY, the 20th September, must really be taken as the opening of the season's social season. Basil and Queenie Meads gave a delightful party to celebrate their Silver Wedding Anniversary. It was a particular pleasure to see so many founder members under one roof and we all marvelled at, and later devoured a marzipan cake replica of the Camphill site. As this is Basil's 23rd year as Chairman of the happiest Gliding Club in the country, we can soon look forward to another Silver Anniversary.

Unfortunately, the weather being what it

was, there is little flying news to report. Due to the demise of our club Olympia, many more pilots have been flying the Skylark II.

During July, Stan Hickson completed a five-hour flight in a Prefect and José and Paul Newmark did theirs in Tutors. José at last recorded a Silver C height of 4,200 ft. in a Prefect having previously obtained the height but not the barograph trace in Tutors.

Special mention for Richard Godlee who obtained his C before breakfast and our more normal congratulation to Osborne, Riddall, McKenzie, Ellis, Essinghigh, Mosley and Carpenter who obtained theirs after breakfast. Also to David Baker who obtained his in thermals at Lasham.

Harry Harris, Gundry White, Milner, Galvin and Hare have all left the T-31 and are now busy investigating the differences between Tutor 1 and Tutor 2. O.W.N.

## EAST ANGLIAN R.A.F.

**I**N the past two months the emphasis has been concentrated on training, the weather having stopped us soaring except

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were used by all countries competing in the **WORLD CHAMPIONSHIPS 1954** in England, and were also used on all British machines in the Championships in Spain which gained 1st, 3rd, 9th & 11th in a field of 39 single-seaters.

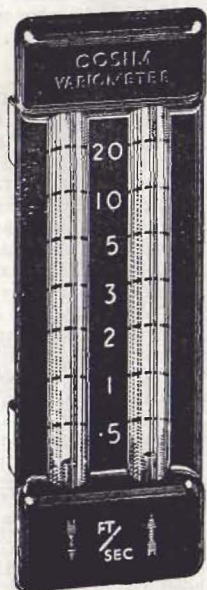
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for a few prolonged flights. Proof of this is shown by Flt. Lts. Evans, Hay, and West, F/O Purcell, S.A.C. Francis, and Messrs. Clark and Rayner all obtaining their A and B Certificates.

In September, we bade farewell to Flt. Lt. John Ansley, who has been posted. He has been our Secretary since the Club's formation. In his place we welcome F/O Dave Stephens.

The instructor situation has been serious until last month when Cpl. Alan Rutherford attended a course and obtained a C Category. Also, in September, we welcomed Roy Padgham from Andover who has come along for a few weeks to help improve the situation.

At a General Meeting recently, new Committee Members were elected, namely F/O John Strugnell being made Deputy C.F.I., and Dave Stephens officially elected into his new post.

A noteworthy cable break occurred recently. It was the Club's practice to have a considerable length of nylon cable at the end. On this occasion the steel cable broke near this nylon and before the loose end could be released, it whipped back, narrowly missing the cockpits of the T-31 and seriously damaging the elevator. Clearly, this could have been more dangerous, both to aircraft and occupants. Needless to say, the nylon length used is now extremely short.

In closing, we wish all Clubs everywhere a Happy Christmas, and success in the New Year. M.A.P.

## **GAMECOCK**

**T**HE transient membership of Service gliding clubs is a handicap which their civil counterparts fortunately are spared: although the widespread interest in gliding in the services ensures that an enthusiast stands a good chance of getting some flying in many of his various appointments, the clubs themselves have to suffer changes which at times are upsetting, to say the least.

Gamecock Gliding Club is sited at Royal Naval Air Station, Bramcote, Near Nuneaton (H.M.S. GAMECOCK) and is a member club of the Royal Naval Gliding & Soaring Association. Bramcote is to be closed by the Navy at the end of the year and the gliding club is one of the many activities to suffer as a result.

The idea of a gliding club at Bramcote

was first mooted in 1954 and eventually, with help from the R.N.G. & S.A. and two generous loans from officers on the station at the time, flying commenced in July, 1955. The initial equipment consisted of a Primary and two Cadets, the former loaned by the R.N.G. & S.A. and the Cadets purchased secondhand with the aid of the aforementioned loans. A winch was provided by the Navy and an old Ford V8 car was bought for retrieving and laying out the cable.

At this time, the airfield was in use at week-ends by the Midland Air Division, R.N.V.R., flying powered aircraft, with the consequence that gliding was seriously restricted. Most club flying took place after working hours in the middle of the week, with occasional meetings on Saturday and Sunday evenings in the Summer after powered flying had ceased. Under the circumstances, it was difficult to maintain continuity of instruction, but nevertheless, progress was made and throughout 1956 a number of A and B Certificates were gained.

Wednesday, 25th July, 1956, was a red-letter day in the history of the club, when the first C Certificate ever gained by a member was achieved through a flight involving a height gain of 300 ft. Later in the day, this same member, Inst. Lieutenant H. R. Terry, made a twenty-minute flight and a height gain of 1,300 ft.

A welcome addition to the finances of the club and to the experience of some of its members was the annual Dartmouth Cadets' Gliding Camp, held at Bramcote in 1956 and again in the succeeding years, 1957 and 1958. Club gliders were loaned to the Admiralty for the period of the camp each year and the funds resulting from this transaction were put to good use in keeping subscriptions and launching fees at a most satisfactorily low level. Unfortunately, some of the best gliding days of each year had to be sacrificed to this arrangement, but it made all the difference between insolvency and being a gliding club.

Dual training in the T-31 attracted a number of new members and throughout the remainder of 1957 and 1958, the club flourished. Jim Gunter was appointed to Malta in September 1957 and the job of C.F.I. was taken over by Lieutenant Tony Griffin who had learned to fly with the club.

Under "Griff's" leadership, flying carried on, week-end after week-end, irrespective of the weather. Provided the winch could

be hauled into position and a cable laid out, gliding took place, although bedevilled at times by mechanical faults in the retrieving buggy (still the old faithful V.8). During the winter of 1957-58, "Griff" had the help of Captain Leslie Whittingham Jones, who motored over Sunday after Sunday from Lichfield, where his regiment was stationed, and Lieutenant Peter Taylor, R.N.V.R., an old member of the Midland Air Division, who also had had considerable experience in training cadets of the A.T.C. at Cosford, in Shropshire.

"Griff" was eventually appointed away from Bramcote in March 1958. No member of the Royal Navy on the station was qualified to take over the job of C.F.I. and the situation would have been serious indeed for the club, had not Pete Taylor stepped into the breach and carried on. Another example of the dependence of the Royal Navy on the R.N.V.R.!

The Tutor was unfortunately broken beyond repair early in the year, but flying has carried on with one Cadet, the T-31 and the Grunau. In the last two months one final leg for Silver C, four C's and six A's and B's have been gained. It is hoped to send off at least two more solo before the club closes and perhaps there will be some more C's, if the weather is kind.

At the time of writing then, there are three more gliding week-ends and then the club becomes history. It has never been a large club; its equipment has never been first-class; it has never possessed a high performance sailplane; but people have enjoyed belonging, have made good friendships and have learned something of a grand sport. Several of the earlier members are gliding elsewhere and of those who have the unhappy task of winding up the club, a number will certainly want to carry on with other clubs, civil or service. So maybe enthusiasm and hard work have not been in vain; Gamecock Gliding Club has done a job.

## HALIFAX

WE have now been settled at Sherburn since June and our T-31 is now thoroughly acquainted with the airfield and most of the surrounding potato fields. Our instructors Mike Rose and Sam McHale have been ably assisted by Messrs. Jack Clarke and Ernie Haswell who have enabled us to fly Saturdays as well as Sundays. Most members were able to get in some ridge

soaring at one or other sites up and down the country during the Halifax holidays. The majority of the members are now quite good winch drivers, and the winch with the original drum diameter increased four inches is giving first class service.

This will no doubt stand us in good stead when we get to one of the three ridge sites we have under consideration under the wave that stretches from Camphill to Usworth. Between them by car and on foot the club has covered most of the ground under the wave, and now it remains for our President, John Haigh, to view it from the air in his Tiger.

We are much indebted to Chris Riddell, who taking the role of temporary C.F.I. has enabled us to get accepted into the B.G.A. By the time this is in print, we hope to have a permanent C.F.I., Mike Rose, whose B.G.A. category test took place in September. However with all our trials and errors we feel we have really got somewhere this year, and look forward to forging ahead in 1959; preferably in that wave. Our annual dinner has been provisionally fixed for December, venue not yet ascertained but in the Halifax-Huddersfield area. D.H.M.

## HANDLEY PAGE

SINCE Nympsfield the Bussard has been giving a series of Aerobatics Demonstrations. John Rymill gave an excellent display at Woodley on the occasion of the "At Home" of the H.P. Powered Flying Club. This was followed by a trip to Elstree where Geoff. Wass (C.F.I.) gave another much appreciated performance during an air display there.

The final show was at Dunstable where John again flew the Bussard. This time it was the National Glider Aerobatic Trophy where to quote "The Aeroplane" he gave "an entertaining show with some original features".

At home, we have now been granted permission, by the firm, to entertain guests on the airfield at Radlett. We now hope therefore to see some of our older members returning—with their womenfolk!

We have, however, just lost one of our keenest members to the R.A.F. in the person of "Angi" Chiesa, who is joining as a Pilot.

Three new Junior Instructors are now starting to take members up regularly, under the watchful eye of the older hands!

There are, at the time of writing, rumours

of good things ahead, so the Club is setting out now to make '59 its best season yet. With this then, we would like to wish all our friends "Happy Soaring for the New Year".  
L.W.D.

## KENT

SEPTEMBER has seen another three solos, by W. K. Cramer, Mrs. Owen, and Dr. Amarasinghe. Tug Burne flew the syndicate Skylark for five hours and two minutes, having kept a very careful note of the exact time of his launch.

The first days of October were more frustrating, as two further five-hour attempts were terminated by bad weather after about four hours apiece by landings at the foot of the hill. The two-seater also landed at the foot of the hill, just for good measure, and of course it rained throughout the entire period spent in retrieving the three machines. The retrieving of the club's entire fleet of hill-worthy craft (the Olympia was having a C. of A. at the time) was notable solely on the grounds of wetness.

The design and manufacture of feed-on mechanisms for the winches has been going on right through the summer and try-outs, modifications and further working gives us

cause to hope, albeit somewhat cautiously, that the worst of our problems in that line will soon be over. As our launching facilities have now been got into fairly good shape, and we can hope for more reliability in future, we are pleased to be able to take on a further 10 members who have so far been on our waiting list. This will bring our flying membership up to 140. M.G.

## LAKES

AT last, the Hangar is completed—a permanent testimony to the industry and enthusiasm of the loyal band of members. The time saved at both ends of a day's flying is now considerable, to say nothing of the psychological effect through immediate action.

During the last week in August, a course was held at Tebay Ghyll, and ten members participated. The weather was fairly kind, and 280 launches were made. A record number of 60 launches were made on one day. C.F.I. Ron Reid reported great progress, and two members soloed at the end of the week, namely Reg. Wolff and Roland Parke. It was a very tired but satisfied C.F.I. who was warmly thanked for his efforts when the course celebrated

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at a subsequent dinner.

Amongst recent visitors to the site have been David Carrow in his Skylark III, and Chris Riddell in the Skylark I. The latter gave us valuable assistance at a British Legion Fete at Levens Hall during September. After being winched off a field near the main A.6 road, he delighted the crowd by his aerobatics. There are still parts of the country where gliding is as yet unwitnessed! Chris also attempted a distance flight from Tebay the following day, in spite of very poor conditions, yet managed to land safely at Ribble head, a remote district about 23 miles distant.

Two of our members were "caught" by Television cameras at Brussels World Fair, in a convivial mood, and with the kind co-operation of Eamonn Andrews, managed to give the movement some publicity.

Certain functions are being arranged for the near future, for there is now more need than ever before to raise funds. J.W.A.

## LASHAM

**W**HEN it was not raining there was a bit of gliding here and there and at the time of going to press we are still landing on the grass parts of the aerodrome, though landings are assessed by the amount of spray breaking over the aircraft.

Indoor activities included the Special General Meeting held on 12th September to discuss the future administration of the Centre and to suggest methods of organising members to make the best use of instruction offered. To underline the significance of the proceedings the bar was closed as the meeting opened. For a time it looked as though the parched and desperate members would accept no proposals at all, but eventually a working party was elected to study ways in which the various clubs, each with a miscellaneous collection of assets, could best be linked with a central administrative body running the training school and providing flying facilities for trained pilots. The final decision on the organisation will be taken when the working party has made its report.

The new General Manager of Lasham, Commander John Phillips, was presented at the meeting and took over his duties a week or two later.

The new T-21b, largely built by the boys of Leighton Park School, has now joined the fleet.

While we are on the subject of advanced

flying we must proclaim our pride in David Ince and John Ayres for their triumphant performances in the National Glider Aerobatics Contest at Dunstable. We always thought they were good but it's nice to know the judges thought so too. More would-be competitors from Lasham applied to fly at Dunstable than could tactfully be entered, so a preliminary trial was arranged the week before the competition to sort them out. B.H.

## LONDON

**A**UGUST flying gave us 300 hrs. from 1,500 launches. Kerr, Brunt and Alexander gained their B certificates, while Harvey and Richardson who were course members did the same.

Brian Sacre flew the Club Olympia to Upton, 37 miles, but forgot to switch on his barograph so cannot count it for his Silver C distance. H. Kuntze took the Sky the same distance to Debden. Mike Fairman managed Royston and back as far as Henlow in his Meise. Charles Ellis and Douglas Bridson did out and returns to Reading and Thame, 68 and 40 miles. Bridson also did Benson and back, whilst young Phil Jeffery did Aylesbury and return.

For September's 1,400 launches, there were rather under 300 hrs., and 100 of these were in the last week. Mike Bird got his B. Adrian Fisher went solo again after being out of gliding many years. Messrs. Hammond, Childs and Goodwin, course members, got their B's, Sid Tomlin his C, Bob White his 5 hrs. leg, while Vic Tull and John Costin each flew 5 hr. legs just for fun—having completed theirs some time ago!

The test group is doing some flying on the Sky with a view to getting the C/G range extended. Details will be available later.

A correction to our last notes. Douglas Bridson, who shared Frank Foster's Skylark II at Dunstable, was not launched from the Club site when he flew to Driffield on his Gold C distance. Douglas can seldom be persuaded to say anything of his efforts so the writer assumed on hearing of the flight that it had started from our site. P.F.

## MIDLAND

**A**LTHOUGH we have had our share of the weather of 1958, which we all hope just *cannot* happen again, we have nevertheless logged some 2,350 hrs. since the

beginning of the year, from approximately 6,000 launches. With the part of the year left when we normally get some good hill-soaring, we hope that the year's end will see a good total of hours. Meanwhile, we wish to state that the prevailing airstream in this country is no longer from any direction approaching West!!

A recent temporary addition to our fleet was the Slingsby Swallow prototype. Flown by many Club members during its stay, and declared delightful, this aircraft is the subject of an article elsewhere in this issue, by our C.F.I. John Hickling. We have also been pleased to see David Ince with the Olympia 419 on two occasions recently, but the weather hasn't really played ball on either.

Looking forward to 1959, may I remind you that we shall be holding our Easter Rally as usual, when we hope to see again the ones who, in the past, have helped to make this annual event a success, plus those who have not yet had the pleasure of flying from this outstanding soaring ridge. C.G.

## NORTHAMPTONSHIRE

THE big news this month is the purchase of a Skylark II from a syndicate in Yorkshire. The new machine has been flown by everybody who could muster sufficient qualifications to satisfy a very sceptical C.F.I. and its performance is a delight; the acquiring of our first high-performance sailplane is a milestone, and we look forward with impatience to next spring and a crop of cross-country flights.

We have two new C's to report, W. Busby and L. Savory, while Peggy Moore, having got her B, becomes our first lady member to go solo.

Our move is still subject to discussion and in the meantime we have received welcome reinforcements from Bedford, where a new club is in the process of formation. For the time being they are to become members of the Northamptonshire club and we are very glad to have them with us.

B.C.H.

## OXFORD

IN spite of lack of evidence to the contrary, we are still alive although our spirits are somewhat dampened by the lack of good soaring flights to report.

Most of our flying has been of the circuit type, a state of affairs we hope will soon be rectified, for it is proposed to introduce

aero-towing facilities to Weston on the Green. This should enable our budding pundits to reach the fair soaring conditions which always seem to be just out of reach from a winch launch.

Thanks to the R.A.F. we were able to run during August a "Gliding Fortnight" which, it was thought, would produce some "silver legs" for a few of our pilots. The weather, however, wasn't kind to us, but we were able to give some concentrated instruction to a number of pupils who spent their holiday with us, with the result that no fewer than eight "A's" and "B's" were gained. Nevertheless, John Matheson gained silver height in the Blue Gull III and has since achieved five hours' duration at the Mynd in hill-lift, thermal and wave conditions.

By the time these notes appear, our youngest member will have achieved his ambition to fly solo. Ian Pratt has been with us for three years, and although he has long since reached solo standard he has been too young.

It is planned that he will solo on his birthday, 15th November, when he can claim to be Britain's youngest solo pilot. With over two hundred launches to his credit in various types of two-seater, he should make rapid progress and we wish him every success.

V.R.C.

## PERKINS

AS the number of five-minute circuits increase and the number of launches which result in those satisfactory creaking, bucketing circles which enable one to extend the flight diminish and grow fewer and farther apart, our committee looks back over the year with quiet satisfaction. In spite of the loss of our only single seater (a Tutor) in March, we now have a Baby Eon and a new Tutor as well as "Daisy May" our T-21B.

Of our forty-odd members, two, Colin Donald and Stan Hickson, have Silver C legs—fourteen have all A, B and C certificates, while of the remainder, four have A and B's.

We would like to mention Ken Tinkler who fought with the elements (or, rather, the lack of them) for 4 hrs. 35 mins. in an attempt for his 5 hours after an earlier and much briefer attempt which he wisely terminated when mother nature threatened him with an impenetratable front of cloud and water.



*Southdown Club's T-21  
is bungied from Firle  
Beacon.*

Four of our members had a week at Camphill and we would like to place on record the enjoyable time that they had—good food, good company and good flying—man cannot ask for more.

Our trailer is now finished and presents a brave sight. It will take either of our three machines and is of welded steel tube construction, canvas covered for the time being.  
S.W.H.

## PRUNES

**W**E are now operating at the new site at Littlelift, the most outstanding day recently being 32nd October, with a cloud base at 6 ft. and a 70 m.p.h. southerly gale. There were, however, short breaks in the cloud sufficient to allow the lightning to show; even the sparrows were grounded; nevertheless a few hardy Prunes dragged the equipment onto the field. The first machine away was the S.G. (letters whose meaning we do not know, but think it must be some sort of Gratification); it disappeared at a high rate in a northerly direction due only to the strength of the wind. Next away was the Skyscrapers syndicate Grasshopper, with Nicolas Dean Wills in the driver's seat; it was given an aero-tow with the Hunter and climbed at an alarming rate, a rate which can only be matched by its even faster fall. However, Nic now assures us that he knows what is on the other side of the moon. The day moved on, and we got news that the S.G. had landed in the far and frozen North. We were therefore surprised to see it over the aerodrome some two hours later. The pilot explained that he had

managed to get a Deer launch—details of this can be found in the London G.C.'s Christmas card for 1957.

Congratulations go to our C.F.I., Will Teachem, who has now managed to complete his A certificate with a straight glide of 33 seconds in the Skylark 3B—this we hope, will qualify for a B.G.A. annual best flight.

We had the misfortune recently to lose our best winch driver who left the 'drome at the end of an irate pilot's foot; we expect he will turn up at another club soon. He is easily recognised as he is blind, deaf and dumb, and only reacts to the words Wild Winch, at which he shows considerable delight. A reward of seven burned-out V8 clutch plates will be given to the Club who returns him to the Secretary at Littlelift.

C.L.O.T.

## SCOTTISH G.U.

**T**HE recent rains have done Portmoak no good at all and members are acquiring rare skill in operating under water. Some tractor drivers, however, are taking a long time to learn that weather conditions where the tractor is are often very different at the wingtip. The sight of a driver with a glider in tow steering carefully for a dry bit, while the man on the tip plunges up to his knees, is one of the recurrent pleasures of gliding at Portmoak.

Despite our difficulties, however, we press on, and gradually countless tons of industrial ash spread in the right spot are making the puddles vanish and the rough places plain.



Another major ploy at the moment is the painting of the hangar; it is not until one starts to paint the thing that one realizes what a very big hangar it is.

We have been working steadily through our backlog of ab-inities and John Ford, Stan Milne and Tom and Eric Dewhurst all performed creditable first solos recently. Gordon and John Whitehead, from the Aberdeen Club, flew their Tutor with us for three weekends, and both got their C's on Bishop Hill. This is the first active contact we have had with Britain's northmost birdmen for some time.

A small group has recently begun to operate on Connel airfield, near Oban, with a Tutor, joining forces with John MacDonald who has been flying a Cadet there for some time. Some slope soaring has been done on Ben Lora, a S.W. slope reachable from a winch launch, and somebody recently got his C with an 18 minute thermal flight. The purchase of a more advanced machine is being considered.

## SOUTHDOWN

**A**UGUST ended with a crash of thunder and a flash of lightning which left our cottage-cum-clubhouse in a state of even greater shambles than usual. Fortunately no one was in the vicinity to dodge a falling chimney, numerous roofing tiles, an exploding fuse box, and a wireless set which succeeded in blowing a hole through a wall.



Ron Walker, recently appointed instructor at the Southdown Club.

It might have been the wrath of the gods for allowing the Buck Ryan strip in the *Daily Mirror* to portray a distinctly Southdown-like gliding club offering an escape route via the T-21. As it descended in mid-channel they would probably have done better to have approached our friends at the Cambridge Club for authentic background.

Our actual flying results have been a little less spectacular, although despite the weather, hours and launches are still up on last year. Lasham were good enough to accept a second mid-week expedition with the Olympia, and an enjoyable week gave a 29 mile cross-country to Ron Walker in weak thermal conditions.

A new spoiler control lever on the Tutor is proving very effective in place of the previous succession of knobs and toggle levers. The Olympia like gadget seems to engender an air of confidence either because it's easier to use on the approach, or because it provides something reasonably substantial to hold on to.

Les Booth is our latest solo pilot, and is now almost as permanent a fixture on the Tutor as the new spoiler control lever.

At the end of the summer, our number of members has shown a steady increase and now stands at a higher level than ever before. Even so, we should still welcome some more members and look forward to expanding the membership when the second Olympia comes into service.

R.M.

## TAUNTON VALE

**S**INCE our last report the weather has been even worse than before and little flying of note has taken place. Mr. White, our President, was married recently and we wish both him and his wife every happiness in the future.

We are hoping shortly to start occasional aero-towing which should be an interesting change, as most of our members have never sampled anything other than auto-tows. A prospective member's Auster is to have a hook fitted and Brian Masters from Lasham has agreed to come along and do the first tows for us.

The committee have been scheming up ways of raising money for the purchase of a sailplane, and if their efforts are successful, we hope to have a Swallow or an Olympia, early next year. We should then be in a position to do our first cross-countries, and perhaps "the Hub", and possibly Dunstable

will see an airborne invasion from the "wild" West!

P.E.B.

## WESSEX R.A.F.

THE social life of the club has begun to increase in tempo with the election of an "entertainments committee", so now, with one party "under the bell" and the next already organized it looks as though members will be more fully occupied during the winter evenings. With no bar or club room, this side of club life has needed pepping up although we would much rather see profits from "Thermal Juice" turned back into the club rather than make an innkeeper happy.

During September displays were given by Wessex at four R.A.F. stations—three for "Battle of Britain", and one for the Observer Corps "Open Day" at Odiham. The Olympia 4's with their ability for inverted flying adds a little zest to the normal glider aerobatics.

Many thanks to Messrs. Elliotts for their kind loan. Drinks in "The Bell" the other Sunday were "on Mamie"—the wife of the C.F.I. who has just qualified for her A and B certs.

## YORKSHIRE

THE club held its Annual General Meeting on 28th September, when a packed clubhouse heard that the previous year had been the best in the club's history. Membership has doubled during the year, and flying hours have almost doubled. The club's finances are thoroughly sound, and progress continues, with new members joining every week.

There were a few changes of office. Donald Sharpe, who has been Treasurer for so many years, thought it was time he had a rest, so handed over his beautifully kept accounts to David Hill. Also, our Accountant, Mr. Bentham, desired to retire after serving the club from the early days. Suitable presentations were made to Donald and Mr. Bentham, with the thanks of the club for their splendid services. Mr. Fred Slingsby consented to be our President for another year, his election being unanimous. The remaining members of the committee have agreed to continue in office but we reluctantly accepted the resignation of Peter Lockwood, our C.F.I. Peter has been very popular in this office, but is now a very busy man, and he felt that he could not

afford the time to do the job as he thought it should be done. The new C.F.I. will be elected in the near future.

The cups for height and distance both went to Ron Helliwell, for 10,000 ft. and 85 miles. After the presentation by Mrs. Slingsby, a gruff voice was heard to mutter "Get 'em filled". He did too!

We are now running a scheme for the flying training of Air Scouts, and we also have a cadet membership for boys between 12 and 16 years of age, catch 'em young being the motto.

Looking to the future, the club buildings are the next big job. Plans are afoot for a new lounge, dormitory, vehicle workshop, etc. This, of course, will require large amounts of money, so a Building Fund is being established as a first step. The meeting finished with a very pleasant get-together and a noggin or two in the bar. Altogether a very pleasant occasion.

Our Slingsby Swallow has now arrived, and everybody is very pleased with it. It should be a very valuable addition to the club fleet.

E.H.

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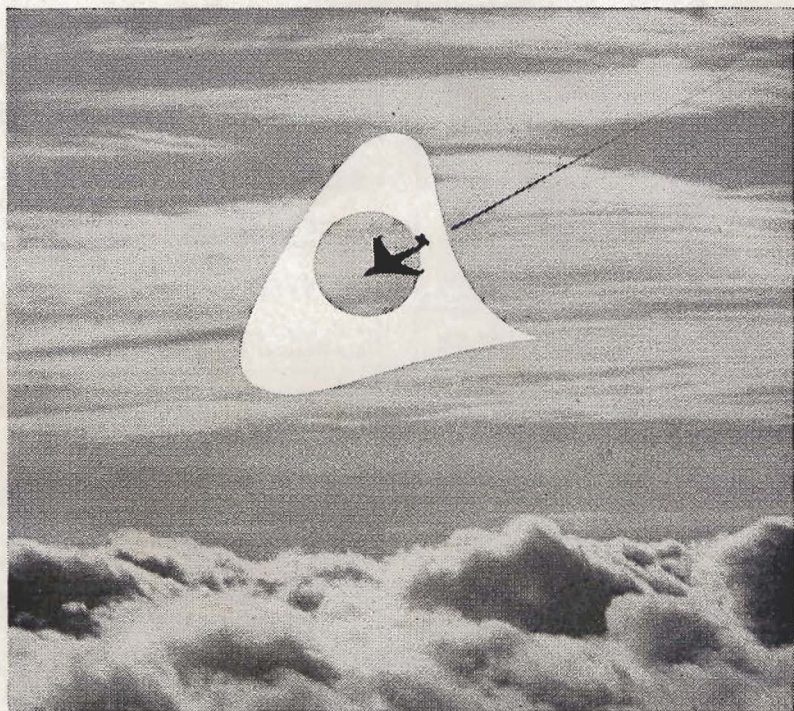
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