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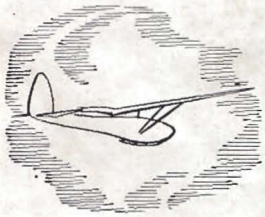
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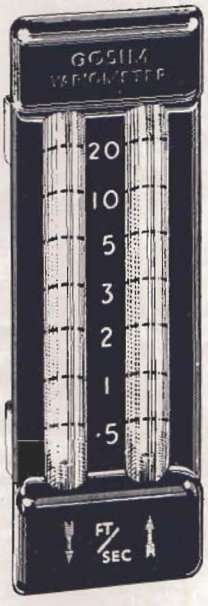
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THE FIRST JOURNAL DEVOTED TO SOARING AND GLIDING

SEPTEMBER 1948 ★ Vol XVI No 9

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COVER PICTURE—
Depicts D. F. Greig in his last flight at Samedan. A.P. Picture.

WAKE UP BRITAIN!

The Yorkshire Gliding Club

Annual General Meeting, Sutton Bank, Thirsk, Yorkshire. 29th August, 1948.

Extract from Chairman's Speech

I DO not intend to trespass on the ground covered by the Secretary's Report, which deals with the details of Club activity during the past year, but rather to draw your attention to a wider aspect of the position of the Gliding Movement in this country to-day.

The position of our own Club is typical of every experienced Gliding Club in Britain. Early in the War our Aircraft and equipment were purchased by the Government at ' knock-down ' prices and used for training in laying the foundations of the Glider element of our Airborne Forces. Many of our Club personnel were called upon for the same good cause, for when at last it was realised that a military gliding force was needed, the Clubs were the sole source and repository of practical gliding experience which could be called upon.

We have now had to replace our Aircraft and Equipment at four times or more the price we got for them, and in addition, the small subsidy which the Clubs got before the War—and which surely paid the biggest dividend this country has ever got out of an investment in civil aviation—has been withdrawn.

The result of all this is that the cost of soaring has soared entirely out of the reach of the average man and woman. We have a lot of members—and many more would-be members—who simply cannot afford to fly. Training in gliding and soaring has become an economic impossibility for us to offer to those without previous flying experience, and even if we are prepared to lose money—as we are for a year or two to keep things going—the cost of soaring is prohibitive for all but a very few.

There are many problems confronting this country to-day, and it may to some people seem of small importance whether Club Gliding does or does not survive in Britain on a notable scale. I want to say as strongly as I can that there is here a principle involved which goes far beyond that simple question. Soaring flight is only one of many activities which develop qualities, and cater for a type of man or woman, that this country can ill afford to neglect. Yet our Post-War national and social development takes little account of this kind of activity, and seems to concentrate on turning our people into neat rows of well-cared-for cabbages, all the same size and shape. The latest phase in our long Island history seems to be that of mediocrity and cossetted Spectatorship. Do we really think that the best of our people are going to be content to saunter securely along a neatly-rolled path from the cradle to the State-provided grave ? Had we not better remind ourselves that the spirit of initiative and adventure is not something slightly indecent, and that we neglect to encourage it at our National peril. Perhaps the matter has got a little out of the control of our earnest social reformers, with their multi-lateral Schools, Youth Centres and Safety First last and all the time.

Is it not time that we took another and closer look at these so-called leaders and their doctrines, and ask ourselves if these are the kind of people, and their's the kind of ideas that made our country great. Or would some of us rather decide that it's better to be a cabbage and that we ' couldn't care less ' ?

Whether we are interested in Gliding and Soaring or not—and as I have said it is only one of many activities to be commended—we in these islands should wake up and begin to look where we are going.

Perhaps some of our leaders at least are not so blind. Repeated assurances by Ministers for the future of Gliding Clubs have been given both in the House of Commons and outside it, but so far no assistance, either financial or otherwise, has been given which has reduced the cost of Club Soaring by a single penny.

I am not suggesting that a subsidy be restored to the Club as a token of gratitude for past services, nor that the well-to-do enthusiast who would like to fly his high-efficiency sailplane from the most attractive sites in Europe should do so at the expense of the State. (These people too, are doing a good job and trying hard to make some showing for British Gliding against the more flourishing glider organizations of countries lately under enemy occupation).

But what we are concerned with is that the young man or woman of average means who is prepared to make sacrifices of time, money and no little effort to do so, shall be able to afford training in soaring flight, and modest flying practise when trained.

(*continued on page* 15)



Flags of competing Nations were hung each day in order of Teams' arrival.

SAMEDAN—(concluded)

AT the end of the fourth day, Lorne Welch, who had come into the team as reserve when Charles Wingfield had retired before the Contests began owing to ill-health, was third in the marks for the whole competition. But the next day, Saturday the 24th, somewhat reversed the marks and positions. The set task was a circular of the Bernina massif. Start and finish were over a yellow strip on top of the Muottas Murail. The idea was to see how quickly the tour could be made and at the same time gain marks for height. The " form " was to dive over the starting line and then zoom up for height, before turning for the first turning point at Paradaieshutte (itself 8,400 feet) looking for lift on the way. On finishing, the need to save time meant brake-screaming dives towards the airfield in order to make another start without undue loss of time. However, the ' met gen ' was duff and thickening clouds put an end to thermal hunting for most people after a single circuit. Juez Gomez made the best height in the Spanish " Kranich " (9,350 feet), Wills 8,480 feet and Ara Torrell, also Spanish, made 8,450 feet. Out of 26 starters, 16 completed one circuit, and four did it twice. Wills' combination of height and distance gave him seventh place on the day.

The second week was to be different. How different no one guessed on the Sunday—' make and mend ' day. Forbes was flying with one green wing and one red, owing to ground transport damage. The Spaniards nobly offered Hassan of Egypt, the use of one of their machines when they ran a wheel of a retrieving car over one of his wings. However, the Swiss fixed him up. Blake and Nicholson swung the " Gull IV " compass, and the Italians left for home having run out of Swiss francs. The Polish representative, Kasprzyk, received a telegram of recall. Nobody knew why, but everybody guessed.

Monday to Wednesday, July 26th to 28th, were to be goal flight days. There was an official list of about 80 aerodromes within 500 kms. in Switzerland, Italy, France, Luxembourg and Liechtehstein. The best flight during the period was to count and competitors could have as many flights as they liked. In theory Forbes and Mallett had the best chance as they were fitted with radio which should make retrieving easier, but much depended on the choice of goal and the turn of weather. With these factors in mind, the British team decided to go over the Alps to Italy where, on the flat North Italian plains they could expect to meet more familiar conditions. However, the south easterly wind made them change their minds, and they decided to go with the rest in an all mountain course, the most obvious flight path being in the direction N.E. to Martigny along the watershed between the Rhine and the Rhone, and then northward to Lake Geneva. The East slopes of the watershed were clearly of great value in any South and South-East wind, since they obtained the benefit of any sun which was around.

Ara Torrell (Spain) alone reached his goal of Sion (124 miles), passing 6,000 feet above Schachenmann at one point, who, however, went further to Villeneuve (146 miles), but failed to reach his goal of Lausanne by 19 miles. Wills was the British best with 58 miles.

The next day, Tuesday, did not appear to offer any promise, the wind did not blow until 2 p.m. Before lunch Forbes had got up on thermals rising from the houses of Samedan to a sufficient height to see the active cumulus of Northern Italy, but he could not get there. But a Swiss " Moswey III " with Alwin Kuhn managed to profit by Forbes example and disappeared northwards, only missing his goal by nine miles. No one else got away.

Wednesday at last brought the sort of conditions our team had been waiting for and they decided to go for Northern Italy and the low cumulus over flat ground which they knew more about. Everyone else went Northwards, and it was here that Persson took the lead. It took him two hours to get sufficient height to leave Samedan, but then he went 182 miles to Geneva with 10,000 feet in hand and having climbed to over 18,000 feet three times en route. Schachenmann made a new Swiss goal flight record by getting to Lausanne (157 miles).

All the British team set off S. Eastwards to Italy. Welch turned back and went North to Thusis, 27 miles, but Forbes reached Locarno and Mallett, Bellinzona. Wills went a little further to Como and landed at Dervio. Forbes and Mallett, whilst waiting for the retrieving cars to arrive, arranged to meet for tea, not knowing what had happened to the rest of the party.

Wills found it wiser to keep below cloud all the way down the valley to Italy. Nicholson, following the same course, was apparently searching for lift and circling close to the spine from the main mountain massif which runs out above Gera on Lake Como.

It is thought that he was chased uphill by a wisp of cloud, and in a short period of bad visibility turned into the mountain. Seeing this in front of him suddenly he pulled up the nose and stalled, landing among the boulders just on the other side of the spine. An Italian woman was the first to reach him, and found him sitting beside his machine with his map. He knew exactly where he was and gave clear instructions as to what was to be done. He was unable to walk and a rescue party carried him for 3½ hours down the mountain side. Whilst resting in a priest's house, he quietly died.

About two miles away and apparently half-an-hour earlier, Greig had cut about a yard off his left wing in colliding with a cable log transporter, which abound on the mountain sides in these parts. The side of the mountain here was very steep. The machine spun twice and hit the ground on the third turn some 200 feet below. He was instantly killed.

Back at Samedan everyone had high hopes that the long hours of silence meant that these two were nearing their common goal of Naples, until an excited telephone message in Italian voices at about 6.30 told of pilots with broken legs. (It was thought that Nicholson had broken a leg, as he could not walk, but it now seems that he had back injuries which proved fatal)

The sympathy of the other contestants was most moving, and there was no competition next day, but it was decided that both Greig and Nicholson would not have wished the competition to stop. There was however, only one more day's flying on the 30th, when an "Out and Return" event was staged. Wills, Welch and Ron Claudi (in the spare B.A.F.O. "Weihe") competed, but the results are not to hand.

So ended the most tragic competition in which British Pilots have ever engaged, and the blow will be one from which it will take a long time to recover, for both Kit Nicholson and Greig are irreplaceable.



The last photograph of Kit Nicholson.



Herr Gehriger. Super tri-lingual chief of the Contest.

We had the best all round equipment and machines. The "Gull IV" proved itself and made its mark, but we were up against outstanding pilots, some of whom were thoroughly at home in the conditions. Persson, on the results, as holder of the world's height record, thoroughly deserved his title of World Champion. Had Wills barograph worked on the first day, we should have had fourth place. The Swiss made the most of their local knowledge. It is easy to be wise after the event, and our reasoning was sound, but what might have happened had we gone north instead of South on the 28th. Our period of acclimatisation had not been long enough to permit of our trying before the Competitions, the course we eventually took, or we might not have taken it, with entirely different results. Lastly, tribute ought to be paid to the Gehriger Brothers, (who write with such authority in the Swiss 'Air Revue' on Gliding), and who had put in so many months of arduous work to make the contests the success they undoubtedly were.

Once the organisation had shaken down it worked with miraculous smoothness, and the controllers never for one moment lost control. Results and decisions were given with commendable promptitude, and in short we learned more than lessons in soaring from our stay in Switzerland. K.J.

Competition

"Is it Worth While?"

"I HAVE come through my groundskids and initial hops unscathed. 'O.K.' says the instructor, 'take her up about ten feet and hold her there.' My heart pounds. My legs shake. The cable tightens and off we go. Gradually, reluctantly, I ease the stick back, but one wing drops, so I ease forward, get level, then try again. All set. Here we go. We shoot up to seemingly tremendous heights. I push the stick forward, my one aim to get back to the ground, the beautiful ground . . . . I have decided that I want to keep one foot on it. We bump back to earth but the winch keeps going. Heartless cow, I think, and anger makes me intrepid. We climb up again. I try to fly straight and level but there are so many things to think about. If I concentrate on keeping the wings level, I go off course. If I concentrate on flying straight, I leap up and down like a flying kangaroo. I skim in, almost touch down, up again, down again; the winch looms up, hurriedly I pull the release and after three distinct landings, come to rest utterly exhausted. The instructor appears: 'You didn't go high enough,' he says amiably. I ask, 'How high was I?' 'About four feet,' he says. I decide that he's not only nuts, he's a liar, too.'

The next trainee goes through much the same antics but I wonder why he stays so low? When he lands I ask him. He says indignantly, 'What's wrong with you, I was easily ten feet up.' Uh huh! I get it! Next time the instructor stands up the track and signals. I decide to make no mistake about height. I climb up. We still progress like a drunk swallow with St. Vitus' dance, nevertheless we're improved. We fly towards the instructor. We have bags of height, so I decide to fly over him, but unaccountably, just before we reach him, he crouches and sprints madly to one side. When I land, he trots up and says, 'What the hell are you trying to do? Clean me up?' I'm indignant, 'I was miles above you!' He shakes his head gloomily and mutters, 'Oh well, I suppose we all have to go through it.'

Comes the glorious day when, climbing up on the cable, I sight the sea three miles away. I level out, release and gaze entranced at this wide horizon. I feel like a bird; it's so quiet, so very quiet; the sea abruptly disappears, as though yanked down on a string; I hear a magpie carolling and a dog barking; I hear . . . . in my mind a ghostly voice says 'when you hear the birdies twittering it's time to get your stick forward.' Hell's bells! I'm stalling! Get the stick forward! Too late, ah, too late!

On to "S" turns. 'Straighten up after your last turn and land on the smooth part in front of the winch.' At once, I am seized by the conviction that I shall land not in front of, but ON the winch. It haunts me so that I don't get enough height and land halfway through my first turn on the roughest part of the run. Ho hum! The birdies never went through this!"

(Above is this month's prize entry won by Grace Roberts, V.M.E.G.)

4,200 FEET IN A "SG 38" OPEN PRIMARY TRAINER

By EDGAR BASHAM

Sgt. Basham is a member of Luneburg Gliding Club and began Gliding there in July, 1947. He obtained his Silver "C" at Oerlinghausen in March this year and has completed 80 hours' Gliding.

THE following took place at Luneburg, Germany, on Sunday, 25th July, 1948. It was a good soaring day as the following met gen indicates:— Wind N.E. 5-8 m.p.h. 3/10th C.U. Base 5,000-6,000 feet. Lapse rate 5° F. The "Kranich," "Meise" and our two "Grunaus" were well away at between 4,000 and 5,000 feet above the town.

It was my turn to fly, the cable had been retrieved and the only machine left on the ground was the open "SG 38" Primary Trainer with no instruments, so I decided once again to have a crack at thermal soaring the broomstick. As I strapped myself in, or rather on the Primary, I thought of my previous attempts, to soar in it. I'm afraid these met with little success, as apart from delaying my descent for an extra minute or two by making a few turns in areas of lift, I'd never achieved more than five minutes.



Sgt. Basham immediately on landing. The straps of the camera with which he took the adjoining photographs can be seen over his shoulders.

After casting off from the winch launch at about 800 feet, I felt a slight push under my left wing, so I immediately started doing fairly shallow left hand turns of about 30°. Having completed about a dozen turns or so I found I had drifted down to the take-off end of the airfield; I seemed to have maintained height or possibly gained a little, but it was difficult to tell at this stage. At the expense of losing the thermal I decided to change my direction of turn, hoping that this would give me better lift. I swung out of the left turn, and into a right for about 270° then straightened out for two or three seconds to get back into my original position. As soon as I felt myself back in the thermal, I started the right-hand turn, again.



1. *Luneberg through my Botts.*
2. *A "Grunau" came to call.*
3. *What are those down there?*
4. *Now for the Shoot-up.*

I carried on like this for a while, keeping my turns as constant as possible. According to the noise of the airflow and the uneven pressures on the seat of my pants, I was not in the centre of the thermal, but by a little gentle manoeuvring managed to get everything smooth, and the lift constant throughout the turns.

Sure enough I was gradually climbing away from the airfield, and also gently drifting down wind, but I estimated that a dead duck would just about make the airfield from my position, so I calculated that I stood a fair chance in the primary.

I continued doing smooth and even turns (at least there was no turn and slip indicator to prove I wasn't) for about 15 minutes when two "Grunaus" appeared quite close to me, then the "Meise," followed by the "Kranich". Whether they had come along sightseeing, or expecting to find a terrific thermal, I did not know, but anyway I tried out my new camera on them, while I gripped the stick between my knees.

(*continued on next page*)

Gliding in France—

GRENOBLE, A SOARING EDEN

by GUY BORGÉ

JUST behind the Rhône Aéro-Club, the Dauphiné Aéro-Club at Grenoble has taken the second place in the competition of the French Soaring Groups.

Causes are easy to find if one looks at the special position of Grenoble : this town is situated at the point of convergence of three narrow valleys in a wide natural circus, with parallel chains of mountains higher and higher to 13,500 feet. Such a situation must give great interest for soaring :

1. Each valley canalizes the wind that becomes strong and very ascendant on contact with the opposite mountains.

2. The circus allows one to soar in any wind direction, and offers a great variety of slopes.

3. Plenty of thermals exist on the mountains of the circus ; even in the worst anticyclonic situations, orographic clouds crown the tops. Thermals increased by a valley-breeze effect the good wind flowing up the slopes.

When the Dauphiné Aéro-Club (at Grenoble) began to receive some sailplanes in 1947, the first flights showed how right were these ideas, although the site was very new and still needed serious prospecting work to know all its advantages.

With a simple wind-launch, duration and altitude legs are possible during all the year, because unfavourable days are rare : strong North-North West winds blow 150 days a year. The airfield is 2 miles from Grenoble ; it possesses some splendid cemented runways used by any power plane, but less interesting for the skids of the sailplanes.

The distance from the starting point to the first slope is 1.5 miles, tailwind flown by the sailplane after the wire-release. That distance is not excessive, for the lift even spreads above the tarmac. The pilot begins to use the first slope AB (see the map). When he has a sufficient altitude, as at Challes les Eaux, he comes to the Montavie slope (BC), then to the " Quatre Seigneurs " slope, where he can climb to 5,000 feet above the airfield, at 3 miles from it. Behind this hill, he finds some other ones, higher and higher, similar to the steps of stairs, that begin to become very steep at the snow capped Belledonnes (10,000 ft). But there are other huge mountains at their back, to 13,496 feet (Barre des Ecrins), and I think we can look for a future Alps crossing Grenoble-Torino (90 miles), to Italia. Here Golden " C " heights should be possible, but very dangerous without experience and strong sailplanes.

Moreover, turbulence is considerable in every part of this country, and pupils receive instructions to land very fast in order to keep good control of their machines near ground-level.

Even during the winter, powerful thermals exist above the slopes ; the " C.800 " climbed on the 1st February to 6,000 feet by a pure thermal. When I visited Grenoble on the 14th December, 1947, I had to work very hard to get down after an hour's flight : under the clouds, the anemometer suddenly rose to 60 miles, the variometer to 10 feet/second. The sailplane groans in all its jofnts, and I am not very happy ! Even in a performance machine it would have been hazardous to enter these clouds by risking blind flying and meeting a mountain.

Distance flights offer many difficulties on account of the scarcity of fields near Grenoble and the present lack of knowledge of the inexplicable currents. The instructor, M. Cellier, once tried a distance leg and crossed 25 miles. Low then, he preferred to land in a small meadow and not to go away into an abrupt valley, without a handkerchief landing field for 10 miles.

M. Cellier is 23, and he does very good work at Grenoble as a flying instructor. He knows the slopes so well that he can soar his " C.800 " on the darkest night without a light. He hopes to beat the French two-seater duration record, and at his first test he flew the " C.800 " for 11¼ hours, of which 4 were at night. He took off at 11.32 and landed at 23.02 after having reached 6,000 feet.

Visitors, who receive from him and his pupils a very friendly welcome, are permitted to hire the Club machines. These consist of a nacelled primary " Avia 152 ", a " C.800 ", 1 " Emouchet " and 2 " Nord 1300 ". With this poor fleet, the Dauphiné Aéro-Club meanwhile took the second place of the

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4,200 FEET IN A "SG 38 "—*continued.*

I made nearly thirty exposures, half of which did not come out (I told you it was a new camera) then experiencing that sinking feeling, realized I had lost the thermal, so I started heading back towards the airfield, as I was about two miles away by this time.

I had been flying straight for nearly a minute when I felt a lift under my right wing. I automatically turned her, she felt O.K. and I thought she was going up, but at that height it was difficult to judge. It looked as if the dead duck was going to be pushed to make the airfield, so I headed for home.

After a few anxious moments trying to estimate the penetration of a " SG 38 " I found it was better than I anticipated and arrived over my take-off point with several hundred feet to spare. I touched down a few yards from where I had taken off after being airborne 31 minutes.

It was not until the other pilots, two of them official observers landed, that I learned I had climbed to 4,200 feet.



French soaring sections during 1947 with the following results: 1,023 hours, 3,200 launches, 24 "B" badges, 18 "C" badges and 20 Silver "C" legs (altitudes and durations).

I am sure that with more numerous machines Grenoble would become a very important Centre in the Samedan class, allowing Alpine training and splendid performances.

A FIRST ESSAY IN CLOUD FLYING

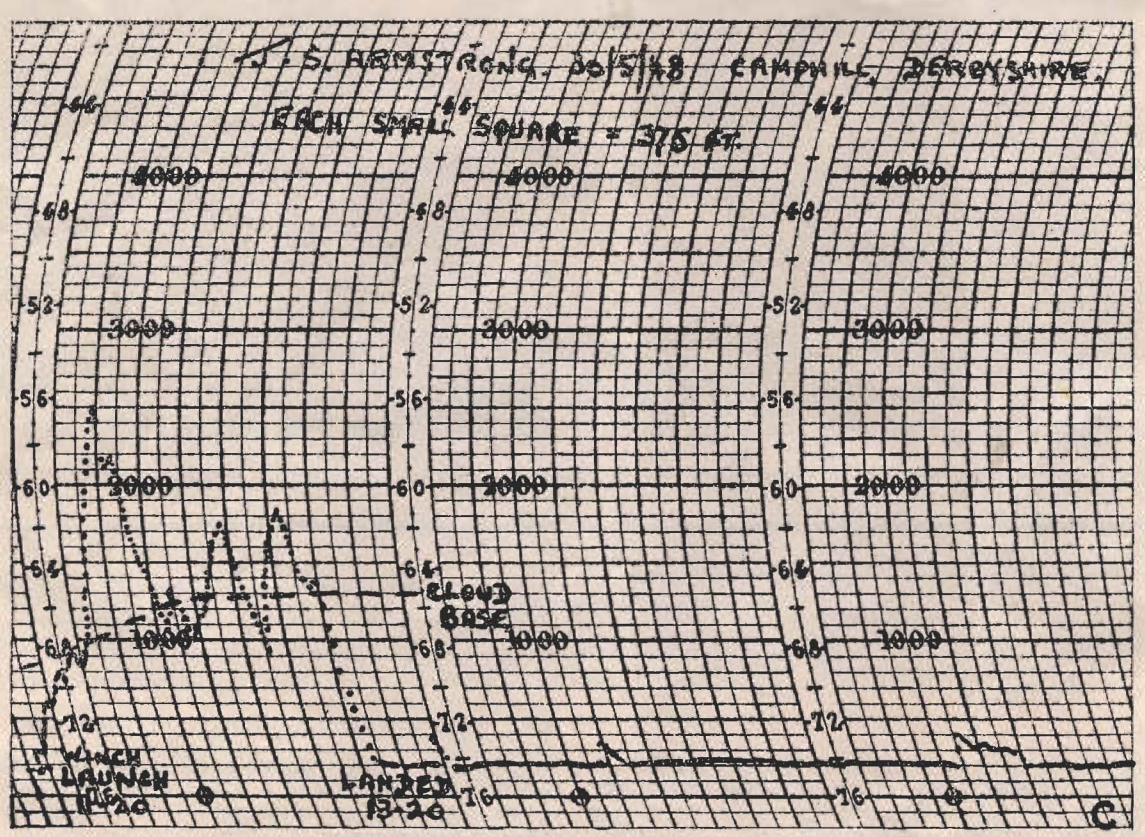
A Climb to 9,850 feet A.S.L. from a Winch Launch at Camphill

By J. S. ARMSTRONG

THE following account of a recent flight from the Derby and Lancs. Club site may be of interest (and perhaps a comfort !) to those pilots who, like myself, have so far lacked the opportunity of entering a really big cumulus cloud, and have been wondering rather nervously perhaps, just what it is like. My own experience previously had been limited to a few brief excursions into not very active clouds, and perhaps a 1,000 feet or so of climbing inside.

Sunday, the 30th May, was a promising morning at Camphill with an 8 to 10 m.p.h. breeze from the south-west, and cumulus forming early and developing rapidly over the Bradwell and Hope valleys. The tephigram showed considerable instability from ground level, and with vague aspirations towards Golden " C " height I optimistically had my barograph sealed and was launched in an " Olympia " at 11.20 a.m. A few weeks previously one of our ex-bomber pilot members had reached a height of 9,200 feet A.S.L. in a " Grunau " on his first cloud flight in a sailplane, and the same pilot had just been launched and was busily circling up to cloud base. This seemed a good omen.

The winch launch gave me 650 feet or 1,850 feet A.S.L. but almost immediately I found a gentle thermal which took me up to 2,700 feet and then



faded away. Having now got 1,500 feet above ground to play with I marked down a promising looking cloud forming about a mile away across wind and set off towards it. On the way I encountered another thermal which took me to cloud base at 3,700 feet. Meantime the original cloud I had noted was growing hugely and I deserted the one overhead to make for it, arriving under its now very large and dark base at about 3,000 feet. Sure enough there was lift in plenty, smooth and strong, and after casting around to find the best portion I switched on the electric turn and bank indicator, tucked my head inside the cockpit, and settled down into easy right-hand circles. We entered the huge bell-bottom of the cloud at just under 4,000 feet, the time being 11.40 a.m.

The next 2,000 feet went smoothly and uneventfully by in lift of 8/10 f.p.s. and I began to relax a little from my feverish concentration on the instrument panel, and vice-like grip of the stick. However, the lift soon increased to 10/15 f.p.s. and it grew rather rough. The speed occasionally crept up to about 60 m.p.h. but I had no real difficulty in controlling the machine, although I had considerable difficulty in believing what the instruments indicated on occasions ! There was no sensation of turning at all and the stick and rudder seemed to be central most of the time. As the area of lift was apparently very wide, I maintained quite a gentle rate of turn and the natural stability of the " Olympia " no doubt did the rest.

At about 8,000 feet ice began to form very rapidly on the cockpit cover although I did not feel at all cold. Removing my gaze for an instant from its grim concentration on the panel I was shocked to see at least ¼ inch of ice, or rather rime, on the leading edges, and a solid block enveloping the pitot head. It all looked very horrifying and un-aerodynamic, but the A.S.I. continued to function and the controls felt normal so we kept on circling. Soon afterwards the air became very rough and the gloom lightened at one particular part of the circle. I guessed that we were nearing the edge of the cloud and tried to work my way back towards the darker portion. Interrupting the circling was not a good thing so far as I was concerned and our progress for the next minute or two was somewhat drunken as I did not want to actually straighten out and fly out of the cloud while there was still lift to be had. We were still rising at a good rate and the roughness was no worse than average hill-soaring. Shortly afterwards, however, it grew very much lighter, the lift died to 2 or 3 f.p.s. and then suddenly we were in dazzling sunshine under a brilliant blue sky and in the midst of a wonderful fairyland of cloud peaks and valleys reaching as far as one could see in all directions, and glistening in the vivid light.

On looking back I saw that the cloud we had just left was a slender pinnacle rising well above its fellows and we had actually come out of the very top. There seemed no immediate prospect of getting any higher and I had already decided for various reasons not to go across country, so the thing to do seemed to be to make the most of the opportunity to do some further cloud flying. In one of the cloud gaps, I had already noticed the outskirts of a large town, which must be Sheffield, so I headed S.W. and proceeded to enjoy the magnificent cloud scenery. I reckoned we had been just 30 minutes inside the cloud and decided that this cloud flying was just too easy ! Alas for my presumption ! When I glanced at the instruments again the A.S.I. was registering 10 m.p.h. and as I watched it dropped slowly back to zero. We were now down level with the cloud peaks and hardly a gap in sight in the white carpet below. For a short time we twisted and turned like a hunted hare trying to dodge the monsters and hoping that the ice on the pitot would melt, but the time soon came when the cloud won and settling down on a straight S.W. course we plunged in. Incidentally the sinking speed of the " Olympia " was now 5 f.p.s. no doubt due to the ice on the wings.

For a time all went well until I saw the green ball shoot up and could not resist the temptation to circle. In a matter of seconds we were in trouble in some of the roughest air I can remember. The turn needle persisted in going hard over to one side, the right I think it was, and in spite of all I could do the speed rapidly increased until the whole aircraft felt like a taut fiddle string and the jolting and buffeting was so severe I was afraid the cockpit cover would break loose. Remembering all I had learned in the Bar I let go the stick which fell forward, eased out the dive brakes and concentrated on getting the turn needle central. This achieved I eased the stick back ever so gently, felt a surprising amount of ' G ', and then suddenly was flying quite normally again. The compass when it settled down indicated East, but I was much too scared to attempt another turn and carried on until with a sigh of relief we came out of the side of what seemed to be quite a respectable sized cloud. Our height was now 7,000 feet but there were more gaps in the clouds here and we successfully avoided most of it and arrived at cloud base at 5,200 feet still in the clear.

After half-an-hour of flying around in powerful thermals from 4,000 to 5,000 feet without daring to enter cloud again, the ice began to fly off the pitot in large lumps which crashed against the cockpit cover most alarmingly, and soon the A.S.I. was operating again.

There was still plenty of good lift about and I made two further climbs inside cloud to 6,800 feet and 7,400 feet respectively, in neither of which was the lift anything like as powerful as in the first cloud. This is clearly indicated on the barograph chart by the spacing of the dots. These clouds seemed to be rougher than the first one, or perhaps my flying had deteriorated as I was now extremely cold. I greatly regretted not having worn any flying clothing or even a pair of gloves, as my hands were quite numb, and after two hours of the most exhilarating flying I have ever had I was forced to return to Camphill or I felt sure I would be frost-bitten. A final 75 m.p.h. dive with full brakes was followed by a landing at 1.20 p.m. and a much appreciated hot lunch.

The moral, if any, seems to be always to wear warm clothes and have some gloves handy in the cockpit even on the sunniest day as you never know your luck.

GLIDING IN POLAND

Post-War developments, 1945—1948

By WITOLD CHARLES STARZEWSKI

AS I have mentioned in my previous article, only 2 gliders were left out of the 1,400 we had before the war. The Germans left us 180 " SG 38 ", 140 " GB II " and 40 " Olympia," " Kranich," " Weihe," as well as some other types, most of them damaged. Considering the almost total destruction of all gliding centres, the deficiencies in auxiliary equipment, such as ropes, winches, tugs, parachutes and also the quickly diminishing number of gliders still fit for use, the difficulties with which our fanatics of gliding-sport had to struggle appear enormous. The number of the " C " certificates awarded after the war is small in comparison with France or Czechoslovakia, but one must remember that the centres of those countries have not been destroyed, but developed, and their fleet increased. The same can be said about glider-factories.

The development of our gliding-sport can be illustrated by the following facts :

1946—first important cross-country-flight of 270 km, achieved by B. Puzej from Balice near Cracow ;

1947—first Polish " E " (Golden " C ") won ; new national altitude record established ; our pilots take part at the Samedan contest ; some new " D's " have been added to our previous number of 230 badges of this class (Szypula, Niewiarowski, Golata, Zatwarnicki, Mazurkiewicz) ; the most important cross-country flights are :

B. Puzej km. 360, 220, 200 Orlowski km. 285.
A. Zientek km. 360, 153 Dembski km. 250,150.
Jankowski Ben. km. 265, 165 Zatwarnicki km. 150.

The year 1948 brought, apart from some new cross-country flights, an increased interest in goal and goal-return flights. The first was made by ing. Puzej—a fine cross-country-flight along a broken route of two parts : 1st day : Cracow—Zar (a mountain contest centre)—Czechoslowak frontier and back Zar—together 140 km ; second day : Zar—Cracow—Warsaw—280 km. He also made some shorter goal-flights on his " Weihe" (85, 60, 50, 60 km.). Adam Zientek made flights from Zar (200 km. " Kranich," 230 km. Sep). Another flight was made by Adamski from Zar ("Olympia" 162 km.) A highly interesting flight was made by Urbanowicz from Jezow (former " Grunau ") in Silesia on a " GB II " to Leipzig (240 km.) in Germany. It was the first visit of a Polish pilot in the Russian Zone. Although our pilot had no passport he returned after 10 days. A young " B "-pilot gave us a pleasant surprise this May by making a flight of 140 km. under a street of cumuli from Gliwice (on " GB II "). Further flights were made by Jasinski (60 km.) and Bojanowski (140 km.) from Balice.

Polish Gliding Contests :

Our first post-war soaring contest took place from 10th—20th June at Zar (Western Carpathians), situated over a beautiful lake at a river dam. The altitude-difference is of 400 m, but the slope itself is not very large and a little too narrow for 25 gliders. The centre has a landing ground at the foot of the mountain and a newly finished rail-lift for gliders. Apart from three fine comrades and sportsmen from Czechoslovakia, 22 Polish pilots took part at the contest, some of them trained ab initio after the war. The ever young " old boys " Kasprzyk and Plenkiewicz, who recently returned from Roumania via Great Britain, did some unexpectedly fine flying. The best of our newly trained pilots was J. Bojanowski, who remained in the leading group of old routinists during all the contest. His forte is calm and sure cloud-flying. Another unexpected challenger was Miss Irena Kempówna, a charming student of the Gdansk Polytechnic.

The programme of the contest (which was an elimination before the International Contest at Samedan) included speed-race along closed routes, gained altitude pointing, and open or goal cross-country-flights. Because of bad weather some items of the programme had to be dropped and much more than usually was due to luck. The favourites of the contest used " Sep "-gliders, this being the only type to be flown by our pilots at Samedan. Our new training type " Mucha " stood her first test particularly well and took the seventh place after " Sep " and " Weihe ".

The first ten places were taken by : Zientek, Kasprzyk, Adamski, Miss Kempówna, Miller Plenkiewicz, Kempka, Bojanowvki, Dziurzynski and Glesk (Czechoslavakia).

Our British colleagues should meet at least four of them as their competitors at Samedan.

(*See p.* 2—ED.

I LIKE TO GLIDE

I like to glide beneath a summer sky
With plump white cu, five thousand feet on high,
Beneath the veils of twisted cirrus thread.
I like the blue ; the greenery flat spread
And drift the little townships slowly by.'

I like to feel the sailplane heave and shy
And hear the structure creak it's thermic cry
And make the nose a ribbon'd circle tread ;
I like to glide.

I like to see the tall cloud towers nigh,
Part tinted with the sunset's blood-red dye,
And, as that Royal day retires to bed,
So I shall gently follow in its stead
And memorise these colours with a sigh ;
I like to glide.

MICHAEL ERDMAN.
(125 G.S. and L.G.C.)

Glider Meeting at Cranfield

July 17th-25th, 1948

WHILE our top class glider pilots were away at Samedan, some of the rest of us enjoyed a week's aero-towing meeting at Cranfield at the invitation of the College of Aeronautics. The gliders and trailers were housed in one of the College's large hangars and the crews lived in comfort in Mitchell Hall.

Assistance from the British Gliding Association had enabled us to obtain a grant of petrol coupons for retrieving and we were all set for a good week's gliding.

A previous meeting at Easter this year was held in fine but very stable weather conditions. The poor soaring conditions then had been attributed by some to the local clay soil and it was with some apprehension that we faced a nine-day meeting after several weeks of dull, wet weather. The passage of a warm front on the first day further soaked the ground and it was inevitable that the first four days, in spite of hot sun, showed little thermal activity. After that, however, warm sun, together with some helpful polar air, gave five days of quite good soaring conditions and the Cranfield bogy was laid.

The Sailplanes attending the Meeting were :—

"Grunau II"	College of Aeronautics G.C. (Adam, Hall, Hearne).
"Gull I"	London G.C. (Allen, Hanks, Cadman, Ellis).
"Gull I"	Lee, Smith, Arnold.
"Camel"	Ivanoff.
"Minimoa"	Wright, Latto, Reilly.
"Buzzard"	Mrs. Price.
"Olympia"	Anson, Buckley, Hurry.
,,	Cochemé.
,,	Rice.
,,	Boughton, Cooper, Lowcock, Sanders and Yates.
,,	Jennings.
,,	Hiscox.
,,	Turner, Farrar.
,,	Stephenson.

The last three "Olympias" attended for a few days only.

We were well served with tugs. Stafford Allen's aged Tom-Tit and the Newbury Eon with Gipsy Major engine flown by Jimmy Antill did most of the tows, but Jack Rice's Tiger Moth, the College of Aeronautics' Tiger Moth and the Bristol Club's Auster also took a share.

Although thermal conditions were not outstanding, a total cross-country mileage of 850 (in 27 flights) was recorded. Among the best were two goal flights by Dan Smith in the "Blue Gull"—one of 100 miles to Beccles and the other of 67 miles to Cranwell. On the first Smith reached the sea at Lowestoft at 4,500 ft., but returned to his goal at Beccles. Other good flights were Ivanoff's 78 miles to Bircham Newton in his little "Camel", Hurry's 76 miles to West Raynham in the red "Olympia" and a local soaring flight of 4½ hours by Sanders in the cream "Olympia". Silver "C" distance legs were completed by Allen ("Gull"; 45 miles to Newmarket) and Yates ("Olympia"; 44 miles to Leicester).

The complete list of cross-country flights during the Meeting follows. Not included, but worthy of note is a flight of 85 miles from Birmingham to Holbeach by Jack Rice in his "Olympia" in the course of an attempt to reach the Meeting from Wolverhampton.

				Miles
Sunday, 18th July—				
Lee	"Blue Gull"	Beeston		18
Monday, 19th July—				
Hiscox	"Olympia"	Cardington		10
Tuesday, 20th July—				
Arnold	"Blue Gull"	Molesworth		29
Wednesday, 21st July—				
Ivanoff	"Camel"	Bircham Newton		78
Hurry	"Red Olympia"	West Raynham		76
Jennings	"Blue Olympia"	Cardington		10
Cadman	"Gull"	Waterbeach		38
Sanders	"Cream Olympia"	Bromham		8
Thursday, 22nd July—				
Dan Smith	"Blue Gull"	Beccles (Goal)		100
Jennings	"Blue Olympia"	Tempsford		17
Adam	"Grunau II"	Biggleswade		15
Wright	"Minimoa"	Bourn		28
Allen	"Gull"	Newmarket		45
Yates	"Cream Olympia"	Gransden Lodge		24
M. B. Price	"Buzzard"	Tempsford		17
Anson	"Red Olympia"	Cambridge		36
Ivanoff	"Camel"	Southill		17
Cocheme	"B.S.I. Olympia"	Wyton		30
Friday, 23rd July—				
Jennings	"Blue Olympia"	Tempsford		17
Arnold	"Blue Gull"	Tempsford		17
Wright	"Minimoa"	Tempsford		17
M. B. Price	"Buzzard"	Tempsford		17
Saturday, 24th July—				
Yates	"Cream Olympia"	Leicester		44
Hanks	"Camel"	Brixworth		22
Lee	"Blue Gull"	Northampton		17
Sunday, 25th July—				
Dan Smith	"Blue Gull"	Cranwell (Goal)		67
Hall	"Grunau II"	Glatton		32
	Total Cross-Country Mileage			846

THE POWER DRIVEN KIRBY TUTOR

(Slingsby Sailplanes Ltd.)

IN these enlightened days one may mention "putting in a little engine" without fear of violence, and Mr. Slingsby has done it very smartly with the well-tried "Tutor" Airframe—modified—(and what a collection of headaches assembles under that modest word !)—and a 37 b.h.p. J.A.P. aero engine. The design is largely the result of the enthusiasm and splendid team spirit of the drawing office staff, who took the work on in addition to other duties for the mere joy of doing an interesting job very well. I was allowed to fly it after watching a demonstration by Mr. Slingsby, and found the experience at once unusual and most delightful. Despite the lack of differential brakes, it is easy to taxy, and upon opening up for take-off the urge is immediate and most determined. The usual little swing as the tail comes up has to be corrected with firm and early rudder, and almost immediately (in very light wind) she flies off the ground. Safely airborne, the climbing attitude is found at 30 knots or thereabouts and is easily held with one finger on the stick. At only 2,400 r.p.m. (full throttle) the engine is quite happy and seems almost casual about its job. Climbing straight ahead through some fairly rough air there was excellent response on all controls. Levelled off, and throttled back to 2,000 r.p.m. the "Tutor" finds its own even keel and responds to turns promptly and smoothly on stick alone—or breathe on the

THE POWER DRIVEN KIRBY TRAINER—*continued.*

rudder if you want to be very accurate ! All controls are firm and positive in action and fore and aft stability is most impressive.

On the downwind leg, I was able to locate my 12 year old daughter busily harvesting wildflowers—from which I deduced that my performance in the air was not at the expense of panic on the ground ; unless of course it was callous disregard for the aged parental neck ? (You never know kids these days).

I wasn't very proud of my approach. When the throttle is closed there is slight swing against the torque, the trace of rudder to correct being effortless once applied. I rather under estimated the rate of sink, and had to use engine on final approach, being duly impressed by the easy way in which I was able to patch up my rotten judgment. " Feeling " for the runway on hold-off, I found it somewhat early, but the second " landing " stayed down firmly and there was very little tendency to swing as I let her run almost to a standstill before applying brake.

The two main impressions were, first, that fore-and-aft stability is admirable and would be almost perfection with the added refinement of a tail trimmer ; secondly, I would prefer the throttle control in the form of a lever placed at a lower level, rather than the plunger type control which is fitted rather high up.

The popular " Kirby Tutor ", allied to the J.A.P. engine has resulted in a splendid little aircraft which is a pleasure to fly in its prototype form, and I shall look forward to flying it again (if asked) with keen anticipation. The real ultra-light aircraft enthusiast will do well to keep an eye on the progress of this type.

GEORGE HINCHLIFFE, Yorks. Gliding Club

ULTRA LIGHT AIRCRAFT ASSOCIATION

IT is with regret that we have to announce that Ronald Clegg is relinquishing his post as Honorary Secretary of the Association. The development of his own affairs necessitates that he shifts the centre of his activities to the West of England and he feels that he would not be able to carry out efficiently the duties of secretary from a point so far distant from London.

As the " principal founder " and moving spirit of U.L.A.A., Ronald Clegg will be sorely missed as Honorary Secretary, but we of the Executive Committee are glad that we shall not be entirely without his services and advice as he has agreed to remain Chairman of the Executive Committee and will act as Chairman of the Communications Sub Committee which will deal mainly with radio communication, in which line he is an acknowledged expert.

The post of Honorary Secretary is, therefore, vacant and the Executive Committee members will share the Secretary's work until such time as the post is filled. Bearing in mind the considerable amount of work which has to be handled on a purely voluntary basis, the Committee would be pleased to hear from any member who, having the ideal of cheap and safe flying before him, is prepared to devote a fair amount of spare time to the Association.

An Honorary Secretaryship is, at the best of times, a somewhat thankless task, but we feel that we are echoing the voices of the whole membership when we express our sincere thanks to Ronald Clegg for the extremely efficient and unselfish way in which he has discharged his task, for it is largely due to his forethought and ability that the Association has become an established fact in the world of aeronautics. His sucessor's task will be the lighter for it.

DESIGN SUPPLEMENT

Contributed by G/C. E. L. Mole—Chairman Design Sub Committee.

Design Team Approval

1. We are glad to be able to announce that the Air Registration Board have now given official approval to our Design Team as their consultants on U.L.A. matters. This team has been formed of volunteer designers and stressmen who are interested in the U.L.A. movement and who have agreed to give professional assistance to our members and to undertake design and stressing checks in their spare time at very reasonable charges. Head of the team is Mr. A. R. Weyl, the well-known authority on aerodynamics who designed and constructed a number of ultra light aircraft before the war. Mr. Weyl will be pleased to advise members on their design or stressing problems, and will prepare an estimate of the fee required for any particular work to be undertaken. The work will be divided up amongst the team as may prove most suitable or convenient, but Mr. Weyl will co-ordinate the effort and will be personally responsible to A.R.B. for recommending their approval in each case.

2. Members are strongly advised to take advantage of these facilities which will enable aircraft designs, major modifications and repair schemes to obtain A.R.B. approval at considerably less cost than at firms of approved consulting engineers. Those interested should address their problems to the Head of the Design Team through the Acting Hon. Secretary at 24, St. George's Square, Westminster, London, S.W.1.

Slingsby Motor-Tutor

3. We are pleased to learn that the Motor-Tutor, which has been re-engined with a 37 h.p. Aeronca J.A.P. engine on loan to Slingsby Sailplanes Ltd., from the Association, has now flown and is proving highly successful. We have not yet received official performance figures for the aircraft, which is still undergoing its trials, but Mr. Slingsby claims that it becomes airborne in about 50 yards and climbs at about 30 knots to 1,000 in 2½ minutes. He states that the top speed is about 70 m.p.h. while the stall is too low to be shown on the indicator. We understand that certain glider pilots, without previous power-flying experience, have flown the aircraft successfully and have been very much impressed with it. We hope before long to see it demonstrated officially at various air displays.

4. Having had many enjoyable hours flying in the pre-war " Drone ", the writer is enthusiastic about the motor-glider class and was to some extent responsible for persuading Mr. Slingsby to undertake the

Motor-Tutor project. It should be understood that motor-gliders are *not* auxiliary-powered sailplanes; they are designed to be as simple and robust as possible, with their aerodynamic efficiency sacrificed to some extent in favour of cheapness and ease of construction and maintenance. By virtue of their low-wing loadings and high aspect ratios, they obtain excellent take-off and climb performance at low forward speeds, thus permitting safe operation with low power. Their landing speeds are so low that engine failure loses much of its hazards and, indeed, a forced landing with a " dead " engine is little more difficult to achieve than with the unpowered glider.

5. The conventional type of U.L.A. has a better cruising performance and is more manoeuverable than a motor-glider, and its flying characteristics are similar to those of the normal light aircraft. It is, therefore, more suitable for advanced flying purposes. Motor-gliders, however, despite their low cruising speed of about 60 m.p.h., can be used for moderate cross-countries except against strong headwinds and, moreover, they have the following operational advantages :—

(a) they offer a means of power flying conversion to glider pilots of " B " Certificate standard without the expense of dual instruction. We hope also that they will enable ab initio pupils to be trained in power flying after instruction on a ground trainer. Our Operations Sub Committee are investigating the practicability of this latter scheme.

(b) With their very low landing speeds and good low speed control characteristics, they are probably the safest type of powered aircraft.

(c) their very short take-off and landing runs allow operation from private fields and a wide variety of sites. If required, in an emergency they can be launched by means of a glider winch or catapult.

6. The Motor-Tutor has been developed from the well-known " Tutor " glider which has been extensively tried out and proved by the A.T.C. The wings, rear fuselage and tail unit are completely standard and, with the exception of the fitting of a wheel undercarriage, the only major alteration is that the cockpit has been brought back to a position under the wing to balance the weight of the engine in the nose. Mr. Slingsby is so pleased with the performance of the aircraft that he proposes to build several more and is considering offering for sale kits of parts for amateur construction. We should be most interested to hear our members' views on this project.

Suggestions for a Midget U.L.A.

7. We have received a letter from Mr. Robert Blucher, of 2415 8th Avenue North, Seattle 9, Washington, U.S.A., who is working on a midget flying wing project. He plans to build a plane as small and as simple as possible, with not more than a 15 foot wing span, and about 300 to 400 pounds in weight. Whilst we are not in favour of such very short spans, which are likely to be over-sensitive laterally, we are very interested in the concept of the smallest practicable man-carrying aircraft. Meanwhile, Mr. Blucher would like any members interested to correspond with him and exchange information and experiences.

Suggested high-speed Diesel U.L.A. Engine

8. In Bulletin No. 1 (Vol. 2), we published a suggestion by a member, Mr. Scott Mackirdy, as to the development in larger sizes for U.L.A. purposes of the high-speed diesel two-stroke engine as used in model aircraft. We considered that the advantages of extreme simplicity and lightness were attractive, but for various mechanical reasons we doubted if the idea was practicable.

9. We have since received a letter from Mr. R. S. Walker of the R.A.F. at Cranwell who has had experience of these two-stroke Diesel engines and who pointed out further snags which confirmed our view. Some form of speed control would be necessary as the little engines operate only at maximum power. Starting would be difficult with such a high compression ratio and he considered it doubtful if it would be possible to swing the engine by hand. The little engines use a " glow plug " of platinum wire for ignition purposes, this being heated for starting by means of a small battery, but this system would be unsuitable for our size of engine and we must have some form of ignition control or, alternatively, a fuel injection system to obtain reasonable engine performance at varying speeds.

10. It seems clear that by the time we had developed the high speed model aero engine for our purposes, it would be as complicated and almost as heavy as a conventional engine, with probably considerably less reliability. Consequently, although at first sight the idea had some interesting possibilities, we shall give no further consideration to it.

Kadenacy Principle of Two-Stroke Engine Design

11. In Bulletin No. 16 (Vol. 1), we published a paper by Mr. R. G. Carr on the possibilities of two-stroke engines for U.L.A. purposes in which he mentioned the improvement in volumetric efficiency that could be obtained by use of the harmonic type of induction system. We have since received the following notes on the Kadenacy principle of charging two-stroke engines from Mr. J. G. Giles of our Design Sub Committee.

" The principle was evolved by M. Michel Kadenacy (a French citizen) and the numerous patents which protect the idea are now owned by Armstrong Whitworth Securities Ltd., of Slough. The first commercial engine made under licence was the Petter Harmonic Engine (1935/6) and the principle has now been applied to many types of engines by numerous oil-engine manufacturers. The best results have been obtained in the Petter ' Superscavenge ' engines which can be operated for short periods at 125 lb./sq. inch B.M.E.P's, approximately double the pressures previously obtained in similar engines and greatly exceeding the equivalent four-stroke performance.

Owing to the close guard maintained against publication of the results of research, etc., the true story of the actual principle is somewhat obscure but it appears that the effect is obtained by developing high gas velocities through the exhaust port. The velocities are supersonic (circa 5,000 ft./sec.) and are obtained by a rapid opening of the valve or port, but not necessarily earlier than usual nor, having a large opening area. The admission port is opened at the

point when the cylinder pressure falls to atmospheric pressure, or just before.

The best effects are obtained in uniflow designs are volumetric efficiencies of 160 per cent have been obtained without the use of additional air-charging means. In a petrol engine, however, such excessive flow of mixture would represent considerable waste of fuel, since the excess would be lost to exhaust. A further disadvantage of the system is that the effects are dependent on a particular engine speed and to ensure satisfactory performance of the engine at other speeds, a blower is usually required. In particular, starting can be very awkward.

The most usual form of Kadenacy engine is to have one or more exhaust ports in the cylinder head, with inlet ports at the bottom of the cylinder. There seems no reason why a double piston engine (of the Trojan type, which is a simple uniflow design) could not be adjusted to the system. This type of engine would retain the simplicity of the two-stroke and make a compact arrangement for an aero engine, but unless the Kadenacy effect can be spread over the engine speed range and overcharging prevented, it could hardly be put to use at the present time."

12. The writer considers that the development of the two-stroke engine on the lines suggested by Mr. Carr and incorporating the Kadenacy principle described above should be well-worth encouraging for U.L.A. use. To overcome Mr. Giles' criticism regarding excessive loss of mixture to exhaust through over-charging, it is suggested that direct fuel injection could be utilised instead of a carburettor so that the induction charge would consist simply of plain air.

OPERATIONS SUPPLEMENT

Contributed by F/O. I. G. Imray, Chairman, Operations Sub Committee.

Pilots' Qualifications for U.L.A.A. Badges—*continued.*

In the last issue of the Bulletin we published the qualifications required of ultra light aircraft pilots before becoming eligible for issue of the U.L.A.A. Enamel Badge. Those required to qualify for issue of the ' higher " badges—the Bronze and Silver—and conditions governing the award of a special Gold badge are given below.

The Bronze Badge

Candidates must be able to prove 50 hours solo on ultra light aircraft types.

Practical Tests

(a) A cross-country flight consisting of two legs, the route to be selected by the Instructor/Examiner. The minimum distance shall be 100 miles, and evidence of arrival at the correct turning point must be produced. A landing may be made at the turning point for re-fuelling if required in the interests of safety.

(b) One successful (practice) Precautionary Landing, including previous reconnaissance of the field.

Oral Technical Examination

The candidate must have a good knowledge of the following :—

(a) Action in the event of a forced landing.
(b) Precautionary landing procedure.
(c) Elementary Meteorology including, recognition of dangerous weather symptoms; how to obtain and make use of a Met. Report and a Route Forecast.
(d) Elementary Map Reading; D. R. navigation and Log Keeping.

The Silver Badge

Candidates must be able to prove 100 hours solo in ultra light aircraft types.

Practical Tests

(a) A Navigational Test, consisting of a cross-country flight of three legs. There shall be no intermediate landings and evidence must be produced of arrival at the turning points. The total distance shall be consistent with the range of the particular aircraft being used for the test, having regard to a safety margin. A Flight Plan must be submitted and arrival back at the finishing point must be within a certain time of E.T.A.
(b) A Cross-country flight in the form of a " Grand Circuit " of at least 500 miles, to be completed as one unbroken tour.
(c) An aerobatic test. (Details will be published at a later date).

Oral Technical Examination

The candidate must have a good knowledge of the following :—

(a) Advanced pilot navigation.
(b) Elementary aerodynamics.

In addition to the above, candidates for the Silver Badge must produce evidence that they are proficient in assisting with engine and airframe overhaul and/or construction.

General Note

Unless specifically stated otherwise, all practical flying tests for U.L.A.A. badges must be carried out on ultra light aircraft types.

Over-riding Clause

The Operations Sub Committee of the U.L.A.A. reserves the right in the case of Qualified Service Pilots, or Civil Pilots professionally qualified (i.e. holding a Civil "B" pilot's licence) to exempt them from any or all of the Flight Tests and Oral Technical Examinations, and shall consider them eligible for the award of U.L.A.A. Badges, subject to the fulfilment of the requirements as to hours on ultra light aircraft types, and the production of proof of qualifications. In the case of the Silver Badge, the clause requiring production of proof of proficiency in assisting with engine and airframe overhaul and/or construction must be complied with.

The Operations Sub Committee also reserves the right in the case of "A" licence holders to exempt them from any or all of the flight tests and oral technical examination in respect of the Enamel Badge. The requirement as to solo time in ultra light aircraft and sections (d), (e) and (f) of the Oral Technical Examination for that Badge must, however, be complied with in all cases.

The Gold Badge

This Badge shall be awarded at the discretion of the Executive Committee of the Ultra Light Aircraft Association to members of the Association in recognition of some outstanding flight in an ultra light aircraft type, such as the setting up of a new international record or for some flight which has prestige value to the ultra light aircraft movement. Award of Gold Badges shall not normally exceed five in number each year.

WAKE UP BRITAIN!—*continued from page 1.*

Not that they be spoon-fed with it for nothing, but that it be made economically practicable for them in return for what they can afford. In the absence of a direct subsidy, it would go a long way towards achieving this object if the Government would undertake the cost of maintenance and repair of Club Aircraft and Equipment necessary for training and modest soaring experience. That is one way.

There are of course other ideas, and I will close by mentioning one in order to condemn it. Our Club does not approve the extraordinary recommendations about assistance to Gliding contained in the Preliminary Report of the Government appointed Committee on Private Flying. It is remarkable what nonsense can sometimes result from good intentions, but it is to be hoped that the extravagant ideas of that report will not be taken as being the views of responsible Club opinion in this country. What we are asking for is prompt action to supplement the many assurances of a 'desire to help' that has been given, something quite modest in scale and well within the bounds of practical achievement. As in the years before the War the Yorkshire Gliding Club trained more Pilots than any other provincial Club, we may perhaps claim to know what we are talking about.

WAKE UP BRITAIN! and I don't just mean about Gliding.

(The Yorkshire Club has resigned from the B.G.A.—*Ed.*)

NEWS FROM THE CLUBS

SOUTHDOWN GLIDING CLUB Ltd.

Gliding Notes

Since our last notes appeared in SAILPLANE AND GLIDER, great strides have been made, but very recently a great disaster has overtaken us.

The club fleet has been increased from one "Cadet" and one "Grunau" to a total of five machines. The new machines are a pair of "SG 38's" obtained from the B.G.A. and a "T.21.B" two-seater bought with the Kemsley Loan. After a great deal of correspondence, applications, forms, forms and more forms, we obtained permission to transfer the hangar from the pre-war site at Devil's Dyke, Portslade, to Friston and in the middle of July a start was made. All available "Bods" gave up a week-end's gliding and travelled to the Dyke where they worked like niggers and had the 30 feet by 100 feet hangar dismantled in an amazingly short space of time. A contractor carried the parts to Friston and put down the foundations. For three week-ends only, a skeleton staff was in action on the flying field whilst the remainder worked on the hangar. A week's camp which was held following August Bank Holiday, produced only four flyable days out of ten and by the Friday night the hangar was sufficiently advanced to house the "Cadet", "Grunau" and "T.21.B." Only the club house remained to be attached and the end doors to be hung. On the night of Saturday, August 7th, a great gale swept the South Coast and on Sunday morning the hangar was lying flat with the three club machines and a "Scud", owned by Brigder and Billeness underneath. The "Scud" is now written



The Morning's Chaos.

off completely, the "Cadet" and "T.21.B." are damaged and in need of complete overhaul, and the "Grunau" has one wing and the fuselage root fittings badly crushed and strained. Total damage is provisionally assessed at about £500, maybe more, maybe less. This is a serious catastrophe as the club funds are very low indeed and we have no airworthy gliders to bring in capital. Everything depends on whatever loans can be arranged and on the pockets of the 40 odd club members. Undaunted, however, we are commencing such repairs as are within our ability and hope to have the "Cadet" or the "Grunau" flying within a month.

No cross-country flights have been made from the site this year and there has been a very noticeable lack of thermals. Good soaring winds have prevailed since the spring however and some very enjoyable cliff soaring has been possible. The four mile trip to Beachy Head has been made on several occasions and on one week-end in particular the call of "Any more for the lighthouse" was heard echoing around the airfield every time the "Grunau" or the "Scud" passed overhead! Ray Brigden and Johnny Billeness have each flown Silver "C" duration in their "Scud" and Jarvis in the "Grunau" performed a similar feat. "Joe" Hahn, a former member, now at the Bristol club, attended the August Camp and on the last Saturday he attempted his 5 hours; after 3 hours, 20 minutes, however, the wind dropped and he had to land.

Visitors to the club have included "Doc" Slater and Messrs. Anson and Buckley with their "Red Olympia". Just before the Samedan contests began, Lorne Welch spent half-an-hour circling over the site at about 5,000 feet during a cross-country flight from Redhill via Folkestone and Friston to Cooksbridge, Sussex.

Since Christmas, training has continued using the "Cadet" for all purposes, and early in February, Messrs. Jordan and Foord, took their "C" certs. in it. These two together with the Hon. Sec. Ken Newman, George Constable and Tony Portington, have converted to the "Grunau" and all have their "C's". Other members including David Tullett, aged 17, John Portington, Snodgrass and Geoff Ingham, have commenced circuiting the "Cadet" and have taken their "A" and "B" certs. Tony Clarke has in the space of a few months joined the club, converted from power to gliding, taken "A," "B," and "C" certs., caught several thermals and has now been appointed as an instructor.

The two-seater which was delivered only three weeks before

the hangar fell on it, has done good service and has proved self-supporting in that it earns enough to pay back its share of the Kemsley Loan and the insurance premium on it. Its performance seems equal to that of the " Grunau " although of course it is not so responsive. The fact that it has just taken the weight of half the length of the hangar roof on its wings, without any outward sign of spar fracture, says much for Slingsby's design and We are not, of course, accepting the apparent lack of damage, in any case the fabric has suffered a good deal and the rudder is written off.

SCOTTISH GLIDING UNION

July at Bishop Hill produced three " C " Certificates, gained on Sunday 11th by George Bolton, Alan Moncur and Peter Labarre. George Bolton, who was one of the first A.T.C. cadets to be trained in the S.G.U., made sure of his Certificate with fifty minutes' flight, and reached 2,300 feet above the Bishop —and, incidentally, above cloud. We can imagine that David Young, who has always been George's opposite number and rival in gliding and working for the Club, was gnashing his teeth at his enforced inactivity, due to a poisoned arm. However, there are west winds yet to come.

At Balado, the first Holiday Gliding Course was held during the week 24th-31st July, in blazing hot weather; on the one day, the 26th, when the wind was too high for primary training, the Course watched David Hendry, Andrew Thorburn and Donald Campbell soaring off the Bishop. Andrew Thorburn was Chief Instructor, David Hendry and Peter Pearce winch-drivers. There were eleven members of the Course, all of whom took their " A " Certificates, and two, with previous power or gliding experience, their " B " Certificates, with an average of 20 launches each. No damage was done to any of the three gliders in use—" Dagling," " SG 38 " and " Cadet ". The fact that accommodation and good meals were provided at an hotel in Kinross possibly lost us some flying time, but obviated catering worries and provided a refreshing break from the airfield. Speaking of refreshment; this Course owes sincere thanks to Martha Mailer, who came to watch her husband learn to glide and stayed to make tea indefatigably.

The second Course, August 7th-13th, had disappointing weather. Thorburn and Tom Davidson were Instructors; Robert Parker, Billy and Dorothy Lawson winch-drivers. Only the " SG 38 " was in use, as the " Dagling " had rudder-trouble, but all eleven members of this Course obtained " A " Certificates, again with an average of 20 launches apiece.

The tentative exploration of Scottish standing waves, carried out in early August by Jacques Cochemé, J. C. Rice and Mr. Ivanoff, will be reported elsewhere in " SAILPLANE AND GLIDER ".

LONDON GLIDING CLUB

July

This was, indeed, a black month. During the first week we had a most unfortunate accident at Dunstable which resulted in the death of a course member, while at the end of the month we suffered the irreparable loss of two of our finest members, who were killed in the Italian Alps during the International Soaring Contest.

E. H. Hill, an instructor with the A.T.C. at Hornchurch, was an experienced aeroplane pilot of some 900 hours, and quickly took his " B " and " C " certificates early in this month's course. It was while flying " Tutor No. 2 " for his silver " C " duration test that he collided with the 2-seater, lost part of his tailplane and dived into the ground. He was killed instantly. Although the nose and starboard wing of the 2-seater were damaged Rutherford was able to retain control and landed safely with his passenger. At the time of the accident there was no suggestion of the air being overcrowded, as the wind, although light, permitted an extensive " beat " to be flown and the other craft were well spread out.

As reported elsewhere, Nicholson and Greig were killed within a few miles of each other while attempting a desperate passage of the Alps in a most determined effort to gain badly needed points for their team. We are sometimes asked, " What is a sportsman ? " We confess a definition eludes us. But we can point them out. And these were of the cream.

The meeting organised by the College of Aeronautics Gliding Club at Cranfield during this month drew most of the London Gliding Club's private owners. Although the weather was not ideal some very good performances were put up. The " Blue Gull " team were well to the fore, each of its three owners making the best flight of the day on at least one occasion. Dan Smith did it twice with goal flights to Beccles (98 miles) and Cranwell (68 miles). The " Camel " made a remarkable flight (for its size) to Bircham Newton (77 miles) and John Hurry made a Silver " C " flight to West Raynham (76 miles). The L.G.C. " Gull " took Cadman 38 miles to Waterbeach and John Allen 45 miles to Newmarket, the latter a Silver " C " distance flight. " Annoyance " is the only true description for the feelings of most visitors to Cranfield, when Stephenson arrived over the aerodrome at a great height after being winch launched at Dunstable, while most of us were unable to get away from Cranfield even with an aero-tow. He did this twice, and then just to prove it was as easy from either end, had a launch at Cranfield and flew to Dunstable and back.

Early in the month Tony Reilly flew to Shoreham, Sussex, in " Minimoa", but as he carried no maps there is still some doubt about the route taken. Nobody believes him when he describes the route he thinks he took, and he is equally certain he didn't take the route everyone suggests he must have taken. So will any readers who saw a lost-looking " Mini " wandering about over Beds., Herts., Essex, Middlesex, Surrey, Kent, Sussex or Buckingham Palace, please write in and settle this matter, once-and-for-all ?

Another fine flight this month was Frank Foster's climb of 10,800 feet in our " Gull IV " thus getting half way towards a " Gold C ".

This flight was made after a lot of hill-scraping under most unpromising looking conditions, and involved a very considerable amount of blind-flying, the quality of which, the pilot says, improved considerably after it had been proved that the dive-brakes were firmly frozen-IN.

Despite the unfortunate occurrence mentioned above, the July course produced a good crop of

certificates. The 17 members attending took 9 " A's," 12 " B's," and 8 " C's," and flew 28 hours, 57 minutes solo and 10 hours, 57 minutes dual. Of the " C " certificates gained, 3 were members without any previous experience of flying whatsoever. Credit for this sort of achievement must go to our overworked instructor, Hugh Wheatcroft, but thanks are also due to Rutherford and Foster, who put in a lot of time as assistants.

Apart from the total loss of " Tutor No. 2 " our No. 4 was U/S for two weeks after Cleaver had omitted to note a change of wind during his flight, found he was overshooting and headed hopefully for the " tradesmen's entrance ". Unfortunately he got a wing-tip caught in a bush while coming up the garden path and ended in a heap on the mat.

Summary of flying for July (Figs. do *not* include flights at or from Cranfield.) No. of Launches 1196; Hours flown 193; Cross-country Flights 126 miles.

Certificates taken:—14 " A ", 18 " B ", 9 " C "; Silver " C " duration 2, height 1, distance 1; Gold " C " height 1.

LUNEBURG GLIDING CLUB
B.A.F.O.

July has been a fairly successful month for us. We have carried out 872 launches and completed just over 100 hours' thermal soaring, in 14 flying days.

The most remarkable flight carried out as yet at our club, was made by Sgt. Basham on the 25th July, from a 800 feet winch launch, he climbed to 4,200 feet in an open " SG 38 ". The actual height was confirmed by 5 pilots who were flying in the vicinity and at that particular height at the same time.

The longest flight in July was made by F/Sgt. Tanner on the last day of the month. He attempted to stay airborne for 5 hours, in thermals for his Silver " C " endurance test. Unfortunately he had to land after 4 hours, 5 minutes, as it was getting rather late and the lift disappeared rapidly.

Cpl. Hatch was more fortunate, for on the next day, 1st August, he took the " Kranich " up solo, and stayed airborne for 5 hours, 48 mins., landing back on the airfield. He thus completed his last leg of his Silver " C ".

L.A.C. Smythe, A. C. Frosdick, A. C. Lord, beginners this season, have obtained their " C " Certificate.

On Saturday, 31st July, a daily record flying time was set up of 25 hours, 54 minutes thermal soaring. The previous record was 14 hours, 20 minutes, set up on the 13th June, 1948.

DERBYSHIRE AND LANCASHIRE GLIDING CLUB
Club Notes for July

Summer Camp, 3rd to 11th July.

Our first members' camp this year comprised about eighteen pilots accommodated at the Club and about half-a-dozen in the various caravans. Altogether, approximately thirty members flew during the week.

Some of the older members were keyed up for cross-country trips but the only flight of any note was by L. R. Robertson who reached Watford (130 miles) in conditions which did not tempt any other pilot to leave the site.

Total flying for the week was 173 hours. " Grunau " and " Kite " pilots had just about as much flying as they could do with, in spite of the fact that the weather was not entirely favourable. The remarkable feature of the week was the way in which the wind would hang around north most of the day, too light to risk a trip to Siggate and then suddenly back the merest fraction to give us hours of excellent soaring in the evening. We actually had soaring during some part of every day.

It was not intended to carry out a great deal of training but Jill Donisthorpe and Betty Drewry were " converted " and Heck Booth and Derek Roper completed five hour tests. There was a spate of landings behind the back wall, four

THE SLINGSBY "PREFECT"

The latest and most up-to-date Club Type Intermediate Sailplane

Designed for full compliance with the latest requirements for semi-acrobatic category, using new constructional methods ensuring great strength with low structural weight.

Roomy and comfortable cockpit—handling characteristics equal to the most expensive sailplanes—remarkable stability.

Best gliding angle - 1 in 22. ***Lowest sinking speed - 2.75 ft. per sec.***

Price ex-works - £425

Provision for parachute, and complete set of instruments. Wheel brake optional.

pilots landed on the moor, fortunately without any damage to machines.

Teachers' Rest 24th to 31st July.

It has become customary to organise a small party for one week every year mainly for instructors. The conditions are that the party must be independent of Club domestic facilities and each pilot must be reasonably competent and able to look after himself. Usually the gliding wives do the catering and " invite " the party.

By way of contrast to the first week's camp, the weather was brilliant and the amount of soaring practically nil. The total time did not exceed seven hours from Monday to Friday. On Monday, Harry Midwood in the " Kite ", caught the only thermal of the day, on Tuesday he and Margaret Swale caught the only two thermals.

On Saturday, 31st July, a colossal thunderstorm broke up flying just before tea. After tea, the sky cleared a little and conditions appeared to be similar to those we have sometimes had before, after heavy rain. A stiff breeze was blowing up the hill and light cloud was forming at 400 feet directly above the edge and gradually extending back over the site. Poor visibility prevented us from gauging the extent of the cloud in front of the edge. After some hesitation, one of the " Olympia " pilots was launched through the cloud and was shortly seen over the valley in what appeared to be reasonably safe conditions. Other machines were launched later and the fortunate pilots enjoyed one of those all too rare flights which remain clearly in the memory for all time. The machines, off the launch, forged out into the clear air over the valley and climbed up to two or three thousand feet in less than ten minutes. Overhead, the sun was partially obscured by cirrus. Towards the west the whole country was covered by an undulating mass of nimbus strata, which, streaming down the hills in front, slowly dissolved before it reached the bottom of the valley. To the east, the whole of the site and indeed the whole of that familiar stretch of country bounded by the Bradwell and Hope Valleys and Middleton Dale was hidden from sight by billowing clouds.

This lovely and unusual sight might well have inspired in any pilot a respect amounting almost to nervous prostration were it not for the precisely defined area through which it was possible at all times to see the bottom of the Bradwell Valley. The event most to be feared was the closing of the gap. What happened eventually was that the cloud base slowly descended to hill top level and four instructors in " Olympias " went to the bottom with the Club " Grunau " as well.

Shortly before this, the " Tutor " had been launched and the pilot kept the rest of the club in stitches with his efforts to go to the bottom. Determined that he could neither stay up nor land back on the top, the pilot picked out the official landing field and proceeded to make his approach from about 300 feet. At the end of each beat he found himself higher than before, so he put the speed up. In spite of all he could do, he still found himself higher at the end of each beat, so eventually he had to give it up and land on the top again. The evening's entertainment was concluded by a visit to the bar with drinks on the retrieved instructors, some of whom had not had to buy a round since their Silver " C's " !

Gliding has its lighter moments and the innocent remarks of two-seater passengers would fill a separate line book. Two young ladies who, as it turned out afterwards, thought the two-seater was controlled entirely by the winch-wire, asked if they could go up together. It was explained that only one of them could go at a time. " Well," said one of them indignantly, " What about that little bald-headed beggar with horn-rimmed spectacles. He's been going round in it all afternoon." No prizes offered for the name of our most famous two-seater pilot.

Totals for the month.

635 launches. Certificates: " A " 5; " B " 3; " C " 1; 5 hours 2.

VICTORIAN MOTORLESS FLIGHT GROUP

Hullo there, kids. Split up as we are, working like busy little bees here and there, we haven't seen much of each other lately, excepting in our own working circle. Pretty soon, though, we're going to have lots of fun. Colonel Ryan has generously granted us permission to put up the hangar at Berwick Aerodrome. This kindness is typical of the Colonel's and Mr. and Mrs. Casey's attitude to the Group, ever since the V.S.A. first approached them about using the aerodrome. It is something we will not easily forget, for it has marked a turning point in the career of this Group.

Now we are awaiting an O.K. from the Building Directorate. It's reasonable to assume that this will be forthcoming, as we have the materials and the workers. Next, we'll submit plans to the Pakenham Council and then, ah, hark to the sound of the driving hammer, the dull earthy thud of postholes driving down, the clangour of steel upon steel, the musical tinkle of shattering glass as some clumsy oaf neglects to pull his head in. Eat up your spinach, my hearties, get plenty of sleep and build up those reserves. Wait for it !

Subsidy.

The proposed subsidy has been shelved, as far as Victoria is concerned. It's no part of a Secretary's job to go into the whys and wherefores, rights and wrongs, of the case, but I think it should be placed on record that the Civil Aviation Department displayed great patience and co-operation throughout the negotiations. Air Vice-Marshall Williams, a man busy with matters of great importance, went so far as to call a special round-table conference, in a final attempt to straighten things out. The usual—and easiest—thing, of course, is to blame the Government Department. This Group has never found Civil Aviation anything but courteous and helpful; we certainly have no reason to change our opinion now.

Progress Report.

Good progress has been made on the " Coogee," " Rhon " and " Whippet ". Our President, zealously working in fading light, temporarily nailed Viv Drough's thumb to " Coogee's " leading edge; well, all right, all right, he HIT Viv's thumb, anyway. Viv is in charge of the " Coogee " job, so if you're looking for something to

do, he'll give you the gen on where and when work is going on. Phone Central 1925 or XM1294. Young Nance could do with another pair of hands to help sand "Coogee" down ready for re-painting. Nance will tell you it's an awful lot of glider, when approached with one small piece of sandpaper in one small pair of hands. Mike Bruce still has a list of jobs ready for any takers—his numbers, MXY330, Ext. 303 and WA8493. Best to clear these jobs up as speedily as possible, don't you think, so's we can get right on to the hangar when things start moving?

New Members.

Welcome to Diana and Marion Teare, whom we've often had with us at the drome and who've now joined as Associate Members.

Newcomers.

To Helen and Jack Iggulden, a daughter, Roberta. To Joyce and Ken Summons, a daughter, Diane. (More women glider pilots? Having duly inspected both these prototypes, your correspondent congratulates, on behalf of the Group, those concerned for a truly fine effort.)

Debenture Coupons.

Hon. Treas. asks me to remind you to surrender your debenture coupons. The exact technical wording eludes me at the moment, but no doubt you'll do as Patch asks.

V.S.A. Badges.

Victorian Soaring Association is seeking designs for a badge. Any ideas? (What a stupid question to ask a glider pilot—they're always full of them, usually wacky.) Submit your designs to the Hon. Sec. of the V.S.A., John Wallis, 862 Burke Road, Camberwell.

NOTICE

Under medical advice the Editor must reduce his activities and he may be unable to continue to edit SAILPLANE. The Directors of THE GLIDER PRESS, LTD. therefore have decided to offer the magazine for sale to suitable applicants. Tuition and supervision will be given for an adequate time. An unique opportunity for someone to make a niche for himself in the International Gliding World.

Enquiries to—
A/Cdre. J. C. RUSSELL, C.B., D.S.O., c/o SAILPLANE.

ROYAL AERO CLUB GLIDING CERTIFICATES

AUGUST, 1948. **(Issued under delegation, by the B.G.A.)**

GLIDING CERTIFICATES: "A" .. 130 (Nos. 8606—8735 inclusive)
"B" .. 61
"C" .. 46

SILVER "C" 8 (Nos. 157—164 inclusive)

No.	*Name*	*A.T.C. School or Gliding Club*	*Date taken*
	"B" CERTIFICATES		
2302	Ivor Edward Moss	83 G.S.	25. 7.48
2610	Arthur Wright	Martin Hearn	6. 8.48
3338	John Douglas Jones	94 G.S.	4. 5.47
4005	Albert Michael Rose	Hamburg District G.C.	17. 7.48
6132	Herbert John Prowse	Bristol G.C.	7. 8.48
6213	Rouald Lee	41 G.S.	24. 7.48
6385	Bernard Harry Greenaway	84 G.S.	18. 7.48
6497	Gavin Dennison Wilson	Scottish G.U.	29. 7.48
6800	Antony John Cope	41 G.S.	24. 7.48
7082	John Austee Martin	162 G.S.	25. 7.48
7455	John Shaw Scott	1 G.S.	8. 8.48
7474	Arthur Percy Jennings	162 G.S.	25. 7.48
7678	John William Charles Gates	Imperial College G.C.	16. 7.48
7715	Ronald Alastair Bute Macfie	Imperial College G.C.	31. 7.48
7819	John Vincent Byrne	45 G.S.	25. 7.48
7864	Douglas Edward Ince	4 G.S.	7. 8.48
7944	Robert King-Clark	Oerlinghausen G.C.	23. 7.48
8059	John Joseph Parker	182 G.S.	1. 8.48
8597	John Tweedy	Derby and Lancs G.C.	25. 7.48
8611	Elizabeth Allanson Drewry	Derby and Lancs G.C.	10. 7.48
8613	John Mears	R.A.F. Lubeck G.C.	18. 4.48
8615	Richard Arthur Pendry	Air H.Q., B.A.F.O.	11. 4.48
8616	John Richard Batt	Luneburg G.C.	16. 6.48
8617	Percy Vernon Hayley	Bristol G.C.	10. 7.48
8620	Roy Sizer	140 Wing G.C.	3. 9.47
8621	John Raymond Musgrave	130 G.S.	15. 5.48
8623	Ernest Lewis Thomas Westman	84 Group G.C.	2. 7.47
8626	Peter Geoffrey Rackliff	Bristol G.C.	9. 7.48
8628	Guy Alfred Eric Stares	163 G.S.	26. 1.47
8629	Norman Donal Batstone	Bristol G.C.	5. 6.48
8637	William Woodney Boggs	Hamburg District G.C.	18. 7.48
8638	Derek Irwin O'Callaghan	203 G.S.	26. 6.48
8641	Patrick Alan Dickson	Reinsehlen G.C.	26. 5.48
8642	William George Robinson	186 G.S.	25. 7.48
8644	Leslie Robert Bulling	Derby and Lancs G.C.	24. 7.48
8651	John Hampden Hardie Galloway	R.A.F. Lubeck G.C.	15. 6.48
8652	David Esmonde Evans	Oerlinghausen G.C.	3. 7.48
8653	Alan James Wells	Cambridge G.C.	16. 7.48
8654	Robert Christopher Botsford	Imperial College G.C.	2. 8.48
8655	Vivian Joseph Gibson	24 G.S.	8. 8.48
8656	Mario Luis Bosi	Derby and Lancs G.C.	2. 8.48
8657	Ian Gough Wellsted	R.E. Flying Club	8. 8.48
8658	Thomas William Bousfield	Bristol G.C.	9. 7.48
8662	Thomas Victor George Blanks	129 G.S.	17. 6.48
8664	Raymond Reynolds Atwood	Bristol G.C.	29. 7.48
8683	Ian Grant Mackay	Air H.Q., B.A.F.O.	7. 3.48
8686	George Gilfillan	London G.C.	12. 7.48
8687	Stanley Payne	66 Group R.A.F.	27. 7.48
8688	William Henry Graham	London G.C.	16. 7.48
8689	Douglas Graham	London G.C.	16. 7.48
8692	Arthur John Toft	122 G.S.	15. 2.48
8704	Harold Joseph Carling	188 G.S.	25. 7.48
8705	Geoffrey Ingham	Southdown G.C.	1. 8.48
8706	Brian Stanley Gorringe	Imperial College G.C.	31. 7.48
8714	John Frank Fyson Lathbury	Air H.Q., G.C.	8. 5.48
8715	Vivian Charles Carr	London G.C.	25. 7.48
8716	Glynn Ellery	Bristol G.C.	9. 7.48
8723	Robert Joseph Foster	203 G.S.	18. 4.48
8725	John Havard Evans	130 G.S.	9. 5.48
8726	John Wilton Smith	Derby and Lancs G.C.	18. 4.48
8734	Bernard John Vaughan Case	London G.C.	8. 8.48
	"C" CERTIFICATES		
957	Ian Macleod	Oerlinghausen G.C.	14. 7.48
1199	John Mackenzie Taylor	Oerlinghausen G.C.	14. 7.48
1817	Harry Johnson	Oerlinghausen G.C.	20. 7.48
2789	Claude Ernest Savage	London G.C.	12. 8.48
3338	John Douglas Jones	94 G.S.	14. 7.48
3816	Albert Sutcliffe	182 G.S.	5. 6.48
4167	John Ivor Morris	26 G.S.	8. 8.48
4496	Douglas Benson Mills	23 G.S.	25. 7.48
2654	Eric John Pope	146 G.S.	4. 8.48
4761	Victor Ernest Smeed	Midland G.C.	7. 8.48
5187	Frederick Richard Bert Lutey	62 Group R.A.F.	12. 7.48
5746	Richard Knowles	R.N., G. and S.A.	7. 8.48
5790	Robert Henry Casbard	146 G.S.	27. 7.48
5807	Peter Rivers	London G.C.	12. 8.48
5811	John Lewis Roberts	London G.C.	12. 8.48
6070	Louis Douglas Palfrey Joseph	42 G.S.	20. 4.48
6203	Denis Alec Morley Jackson	122 G.S.	27. 7.48
6303	Dennis Joseph Letch	146 G.S.	27. 7.48
6314	Percy William Alan Shearn	126 G.S.	14. 8.48
7050	Alfred George Winter	London G.C.	12. 8.48
7335	Phillip Auriol Edgar Jeffery	London G.C.	8. 8.48

Stars of the Silver Screen.

Fox Movietone's News-reel in glorious black and white starred the Beaufort Club's " Phoenix ", Bill Iggulden, President of the V.S.A. and Doug Lyons, Beaufort Club, plus sundry extras. Sumpin' funny went on that day—the camera doesn't lie and there were Esme Hilditch and Ron Roberts taking off, Bill and Doug landing, all, so the commentator commentated, on the same flight. All done with skyhooks, no doubt. Still, it was a beaut movie.

Logbooks.

The Group issues logbooks free to its members (you lucky people, you) but there's long been a need for a good logbook suitable for glider pilots and such a one is now available from the Gliding Research Group, 5 Cassie Street, Walkerville, Adelaide. Measuring 4 inches by 7 inches, it's stoutly bound, has good quality paper and is divided into sections for date, aircraft, locality, time in air and remarks; cost is 6/6d. Gliding Research Group is doing good work in locating and offering at reasonable rates to the gliding movement, hard-to-get materials.

Auntie Grace.

As reported in last month's newsletter, your correspondent had the time of her life earbashing defenceless teen-agers over 3DB-LK on the subject of gliders, clouds, thermals and " there was I "; Nance Iggulden and Viv Drough made faces at her from the sidelines. Since then, your Hon. Sec. has been sheepishly reading to the Committee, in Correspondence Inwards, letters from little tots wanting to join " the gliders ". However, it was with considerable relief that letters were received also from grown-ups; though what they were doing listening to the children's session one doesn't know.

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GLIDING CERTIFICATES—*continued.*

No.	*Name*	*A.T.C. School or Gliding Club*	*Date taken*
7733	Philip Edward Rose	Midland G.C.	13. 7.48
7823	Leslie Maxwell Rhoderick Bray	London G.C.	15. 8.48
7836	Dennis Edwin Varney	Uetersen and District G.C.	18. 7.48
7944	Robert King-Clark	Oerlinghausen G.C.	27. 7.48
8055	Cedric Ormonde Vernon	London G.C.	22. 7.48
8208	William James Leslie Small	Air H.Q., B.A.F.O.	30. 7.48
8597	John Tweedy	Derby and Lancs G.C.	8. 8.48
8615	Richard Arthur Pendry	Air H.Q., B.A.F.O.	12. 4.48
8616	John Richard Batt	Luneburg G.C.	18. 7.48
8620	Roy Sizer	140 Wing G.C.	16. 9.47
8623	Ernest Lewis Thomas Westman	84 Group G.C.	4.11.47
8638	Derek Irwin O'Callaghan	203 G.S.	16. 7.48
8641	Patrick Alan Dickson	Reinsehlen G.C.	23. 6.48
8644	Leslie Robert Bulling	Derby and Lancs G.C.	8. 8.48
8651	John Hampden Hardie Galloway	R.A.F., Lubeck G.C.	11. 7.48
8652	David Esmonde Evans	Oerlinghausen G.C.	25. 7.48
8653	Alan James Wells	Cambridge G.C.	2. 8.48
8683	Ian Grant Mackay	Air H.Q., B.A.F.O.	27. 3.48
8686	George Gilfillan	London G.C.	12. 7.48
8692	Arthur John Toft	122 C.S.	27. 7.48
8714	John Frank Fyson Lathbury	Air H.Q., B.A.F.O.	8. 5.48
8715	Vivian Charles Carr	London G.C.	8. 8.48
8723	Robert Joseph Foster	203 G.S.	16. 7.48
8725	John Havard Evans	130 G.S.	15. 5.48
8734	Bernard John Vaughan Case	London G.C.	12. 8.48

SILVER BADGES

157	D. A. Smith	(356)
158	P. J. Anson	(7850)
159	J. H. Edwards	(4963)
160	E. E. Hatch	(7706)
161	I. G. Mackay	(8683)
162	G. D. Perks	(7744)
163	P. H. Blanchard	(6682)
164	J. C. Rice	(823)

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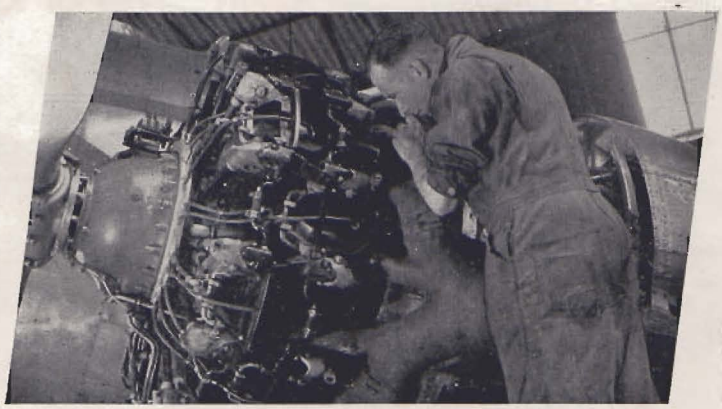
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