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SAILPLANE AND GLIDING
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COVER PHOTOGRAPH.—The Olympia 419 being flown by Nicholas Goodhart at Lasham.—Photo by Charles Brown.

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OFF TO LESZNO

SHORTLY after this issue appears, the British team will be leaving England for the World Gliding Championships at Leszno, Poland. Those going are:—

Cdr. H. C. N. Goodhart, R.N., Skylark III. Crew: Lorne Welch and Bryan Jefferson.

Lieut.-Col. A. J. Deane-Drummond, Olympia 419. Crew: Mrs. Deane-Drummond and Major J. Archer.

P. A. Wills, Skylark II. Crew: Mrs. Wills and Ray Stafford-Allen.

Cdr. G. A. J. Goodhart, R.N., Olympia 415. Crew: Frank Irving and P. Swift.

Team Manager, Ann Welch; Radio engineer and Reserve Pilot, John Williamson; Meteorologist, C. E. Wallington; Aircraft Engineer, Harry Midwood; Press Officer, Ken Owen.

This year again the British Team will be very well equipped. With the exception of the Skylark III, which belongs to its pilot, the gliders and trailers have been loaned by the manufacturers, Slingsby Sailplanes Ltd. and Elliotts of Newbury Ltd. The Standard Motor Co. are providing five Vanguard III Estate cars, and Pye Telecommunications are equipping both cars and gliders with radio.

The Team and the British Gliding Association are most grateful for this very generous help, and for the financial and other assistance given by the many individuals and organisations listed on another page, without which it would have been impossible to enter such a strong team, or even to go to Poland at all.

The departure date from England is on 6th June, crossing Dover-Ostend. On the previous afternoon, 5th June, our Patron, Prince Philip, has graciously invited the Team to Buckingham Palace to wish them good luck. On arrival at Leszno, the pilots will put in a week of intensive practice to get used to the local conditions before the actual start of the contests on 15th June.

Looking back over the Championships of recent years, it is possible to get a good idea of the growth and development of Gliding: soaring technique, and particularly higher-speed gliders, have improved greatly. But with these improvements, excellent for the increase of fun with gliders, has come an added seriousness; championships can by no stretch of the imagination now be regarded as a gliding holiday. The sort of flying needed to get anywhere near the top is of such a standard that, within the limit of present day technique, it must be virtually faultless. The physical and mental strain on the pilot in his efforts to achieve this near perfection is very great, pressed as he is by competitors, many of whom are highly subsidised, and who have been in serious training.

Though serious, and not a little wearing, World Championships are immensely exciting, and I do not think that there is a Team member who would not go, even if his job was only cleaning the cars.

A.W.

The First 500 Km. in U.K.

by Nicholas Goodhart

It has been a long-standing ambition of mine to do 500 kilometres in the United Kingdom and preferably, of course, to be the first to do it. Friday, 11th April, was a normal day in my office in London until 5 p.m., when I checked with the Met. Office and learned that the forecast was for unstable north-easterlies over South England. On checking with Betsy Woodward to see if she would crew for me, she asked what I was planning to do, and on being told I had the 200-km. goal speed record in mind, she asked "Why not 500 kilometres?"

From that moment on, things began to move. First to my home at Inpken for the night, then up at 05.45 to drive over to Lasham, where at 07.45 the hangar was not even open. A hectic hour followed during which my Skylark 3 was rigged, my Auster refuelled, declarations declared, barographs loaded, sealed and started, cameras organised, maps marked and all the other minor confusions of getting organised were completed.

At 08.45 we took off with Betsy driving the Auster and me still trying to get things sorted out in the Skylark 3 cockpit. Towing is not much fun at the best of times, and on this occasion the thermals soon began to increase, making it a full-time job to keep in position. There was a head-wind of about 15 knots, so progress over the ground was slow; however, Betsy was extremely successful in keeping a steady 71 knots indicated (max. permissible rough air speed) and in due course Cambridge came in view.

Not knowing whether the air mass would be colder than the North Sea, and thus whether the thermals would start on the coast or some distance inland, I had asked to be towed to a position a few miles north of Cambridge, from which a dog-leg track via Edgehill and Boscombe Down would give me a comfortable margin on 500 km. to St. Just. During the tow, cumulis had developed rapidly in good streets, and it had been apparent that one could have started comfortably as early as 09.15; however, release was finally made at 10.28 over Ely underneath a good cloud street. A couple of minutes was then devoted to the ghastly aerobatics inevitable in trying to take hand-held vertical photographs, and the flight was on.

It was soon clear that it was a cracking good day with good cloud streets and thermals which averaged as high as 600-700 ft. per min. Unfortunately, of course, my track did not lie straight along the cloud streets, and so it was necessary to step across every now and again when a convenient opportunity occurred; however, the going was good and I was able to work between 3,000 and 5,000 ft. without any worries at all.

After an hour there was a small delay when a blue patch presented itself on course, and a little circumnavigation was necessary, but this did not have any serious effect on the average speed which, over the first 1½ hrs. (the time taken to Edgehill), worked out at 83 kms. per hour (51 m.p.h.).

At Edgehill more incompetent manoeuvres for photographs were indulged in, and with an alteration of track of some 80° I set off somewhat more across the cloud streets for Boscombe Down. There was little to worry about, as every active-looking cloud had a good thermal underneath; however, gaps between clouds were fairly big and I found myself being edged to the east of my track. In due course the railway junction at Ludgershall near Tidworth came

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underneath, so I decided to make it my second turning, since it would give a slightly greater run to St. Just. Calculation showed that if I maintained the present speed I should get to St. Just about 4.30, i.e. with lots of time in hand, so it was worth while trying to lengthen the distance. The Edgehill-Ludgershall leg took, surprisingly enough, only 1 hr. 5 min. for an average of 86 km. per hour (53 m.p.h.).

Once Ludgershall had been photographed, the worst should have been over, as the cloud streets led (it seemed) straight down towards Cornwall; so I relaxed and dug out a sandwich, only to get into trouble near Salisbury with a whole cloud street which was going down instead of up, with a result that the average speed for the first 45 minutes from Ludgershall was a pathetic 72 km. per hr. to the Old Man of Cerne Abbas. This was considerably south of track, but I had seen from some distance back a fine cloud street running along about 10 miles in from the coast, and I was able to join it at this point with enormous benefit to my average speed, which now jumped to 100 k.p.h. for the next 70 minutes as I cruised, practically without circling, past the Lyme Bay area, over the Exe estuary and straight on over Dartmoor.

Conditions were so good that I was dreaming about pressing on to the Scilly Isles when I got to Lands End, though I wasn't quite so enthusiastic about the plan when I found the Islands were not marked on my map.

My next cloud was over Harrowbeer disused airfield and it was curiously weak; however, I pressed on smartly from it over Cornwall, only to realise that there were nothing but dying clouds in front of me. The time was 3.0 p.m.—sun time too: no nonsense about Summer Time—and yet the sky was dying. Something had clearly gone wrong, but if I was to stay airborne there was only one thing for it and that was a smart 180° and back to my last and rather pathetic cloud. Having found some weak lift I was able to review the situation. Back along my track the sky continued to boil well, but over Cornwall the last traces of cloud were disappearing everywhere except to the south along the coast where some very tired-looking clouds were still at least semi-active.

For the next hour progress was excruciatingly slow at heights between 2,500 and 4,000 ft., scarcely doing more than keeping airborne. Finally the Falmouth estuary was underneath and at 4,000 ft. I started my final glide. With a little bit of luck it might just get me to St. Just airfield, but I guess I must have used up all my luck for a large part of the final glide took place in air sinking at 200-300 f.p.m., and in addition the wind had swung round to N.N.W. and was slightly against me. The result was that I arrived in a nice field at a place called Rosudgeon just 10 miles short of St. Just at 4.30, having spent just under eight hours in the cockpit and being extremely glad to get out and take the kinks out of my back. Total straight-line distance was 295 miles, and distance including dog-legs was 319 miles.

After telephoning my position to Lasham, I then had a peaceful night in a neighbouring bed-and-breakfast establishment while Betsy drove down and got to me at 08.00 on Sunday morning. And so back to London all Sunday and into the office on Monday morning, which is where we came in.

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1958 World Gliding Championships Donations to Fund

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B. Newland	1	1	0
M. P. Seth Smith	5	0	0
R. E. Parsons		10	0
J. S. R. Salmond	2	2	0
A. Doughty	1	1	0
B. Poynter	1	0	0
Army Gliding Club	10	0	0
Sir Charles Dorman	5	0	0
Derbyshire & Lancashire G.C.	10	10	0
Air League of the British Empire	25	0	0
Polish Air Force Association	3	3	0
J. P. Armstrong	2	10	0
Royal Naval G.S.A.	5	0	0
South Western G.C.	5	0	0
Kronfeld Club Members	12	0	0
Kent G.C.	5	0	0
A. H. M. Pocock	1	1	0
C. J. Walker	1	1	0
Bristol G.C.	10	0	0
R. Graves	1	0	0
D. D. Carrow	2	0	0
G. F. Marshall	5	0	0
Miscellaneous			
Anon.	2	11	9
TEAM CONTRIBUTIONS:			
A. J. Deane-Drummond Team	100	0	0
H. C. N. Goodhart Team	100	0	0
P. A. Wills Team	100	0	0
G. A. J. Goodhart Team	100	0	0
C. E. Wallington Base Team	25	0	0
K. T. Owen Base Team	25	0	0
H. V. Midwood Base Team	25	0	0
Mrs. A. Welch, Team Manager	25	0	0
A. E. Slater (OSTIV)	10	0	0
Betsy Woodward „	10	0	0
A. H. Yates „	5	0	0
	£1,657	12	9

DONATIONS AND LOANS OF EQUIPMENT

The Standard Motor Company: five Standard Vanguard Estate Cars.

Slingsby Sailplanes: one Skylark II.

Elliotts of Newbury Ltd.: one Olympia 419 and one Olympia 415.

Appleby & Ireland: nine Compasses.

Shell-B.P.: Maps and Guides.

Esso: Maps and Guides.

Ever Ready Battery Co.: Batteries and Torches.

Automobile Association: Membership and other facilities.

Walter Kidde: Oxygen Equipment.

Normalair: Oxygen Equipment.

British Oxygen Co.: Oxygen Equipment.

Pye Telecommunications: Glider and Car Radio.

A FIELD STUDY COURSE

A COURSE on "Weather and Flight", directed by Dr. R. S. Scorer, assisted by a panel of lecturers, is to be held from 20th to 27th September at Preston Montfort Field Centre, near Shrewsbury. Weather will include the study of cloud forms, and flight includes soaring flight and the flight of birds and insects. The fee for the course, including board and residence, is £8 8s. Application should be made to The Director of Extra-Mural Studies, The University, Edmund Street, Birmingham, 3.

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Entries for the World Championships

From various sources, mainly a Bulletin issued by the organizers, we have the following information about the composition of the teams and the machines they intend to fly; (O) signifies the Open Class, (S) the Standard Class (15 m. span limit).

AUSTRIA
Leopold Harrer, Mg-23 (O).
Georg Fennes, Mg-23 (O).
Josef Fuhringer, Mg-23 (O).
Hans Resch, Mg-23 (O or S).
A laminar-flow machine with "V" tail, designed by Ing. Kunz specially for the Standard Class and called "15 m.", is evidently not to be used after all.

BELGIUM
P. Lafosse, Ka-6 (S).
A. Xhaet, Ka-6 (S).

CANADA
W. J. Mix, Breguet 901s or Jaskolka (O).
C. Yates, Breguet 901s or Jaskolka (O).
G. Oates, Breguet 901s or Jaskolka (O).

CENTRAL AFRICAN FEDERATION
Harold F. Burditt, Jaskolka bis (O).

DENMARK
Joergen Friis, Eon Olympia (S).
Mogens Buch Petersen, Ka-6 (S).
Niels Sejstrup, Eon Olympia (S).
Aage Dyhr Thomsen, Mü-13 d or Jaskolka (O).

W. GERMANY
Heinz Huth, Jakob Laur, Ernst-Günter Haase, Ernst Frowein.

GREAT BRITAIN
Nicholas Goodhart, Skylark III (O).
Anthony Deane-Drummond, Olympia 419 (O).
Philip Wills, Skylark II (S).
Antony Goodhart, Olympia 415 (S).

HUNGARY
Nandor Opitz, Standart Futar (S).
Lajor Legenyei, Siraly II (O).
Kisely Erno, Siraly II (O).

NEW ZEALAND
Keith Wakeman.

SOUTH AFRICA
Evert Domisse, Jaskolka bis (O).

SWEDEN
Harry Molander, Zugvogel 3 (O).
Per Axel Persson, Zugvogel 4 (S).
Irve Silesmo, Zugvogel 4 (S).

UNITED STATES
Stanley W. Smith, Breguet 901s (O).
Paul F. Bikle, Breguet 901s (O).
Lyle A. Maxey, Jaskolka (O).
Francis B. Compton, Mucha-100 (S).

YUGOSLAVIA
Bozidar Komac, Meteor (O).
Aleksander Seradic, Meteor (O).
Vasilije Stepanovic, Ilidenka 1T (S).

Other nations reported to have entered teams are:—ARGENTINA, AUSTRALIA, BRAZIL, BULGARIA, CZECHOSLOVAKIA, FINLAND, FRANCE, ISRAEL, JAPAN, LUXEMBOURG, NORWAY, RUMANIA, TURKEY and U.S.S.R.



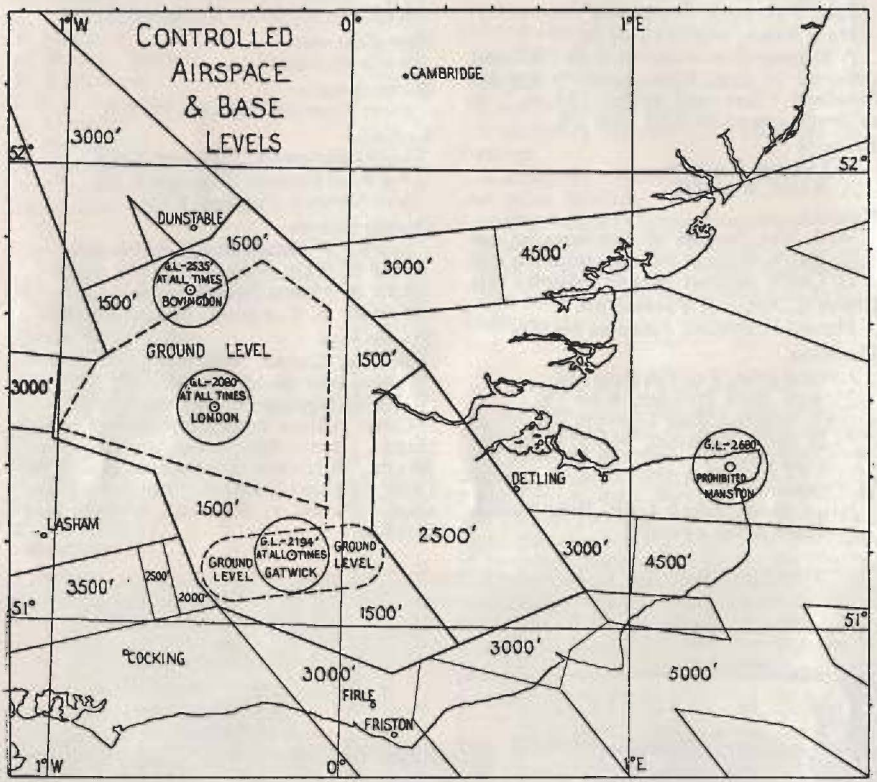
Some of the British team's Standard cars and trailers, ready for Poland

AIRWAYS NEWS

CONSEQUENT on the opening of Gatwick, a considerable modification to the air traffic control arrangements in the London area is being made. At the time of writing this has not actually come into force, but it is anticipated that it will be law by the time this issue of SAILPLANE & GLIDING is published.

The adjoining map shows the new boundaries of the control zones, control areas and airways, together with the heights of the bases.

Significant changes from the gliding point of view are:—



(a) Green One to the east of the London area airway has been moved south so that its northern edge is 3 miles south of Detling. The boundary of the Control area has been moved west so that it just clears Detling, also this section of the control area has its base at 2,500 ft. Detling is therefore just in an area unrestricted at any height.

(b) The control area has been extended south. There is still a 7-10 nautical mile band along the coast in which it might be possible to squeeze under the airways.

(c) Gatwick control zone has been

introduced, together with the usual circle 10 n. miles in diameter round Gatwick extending to 2,000 ft. altitude, in which flight is prohibited even under VMC.

(d) Blue One has been removed north of the London area, which has increased the size of the triangle of free air adjacent to Dunstable.

Tops of Airways, control zones, control areas, have in general been raised to 25,000 ft., but since few glider pilots make a habit of cloud flying over the tops of airways, this is perhaps less important than the changes in the heights of bases and the horizontal extent.

The rules for flying a glider in controlled airspace have not changed; they remain that if you are in controlled airspace you must be able to see horizontally for 5 miles *and* you must be at least one mile horizontally from cloud *and* you must be 1,000 ft. vertically from cloud. Aerobatics are prohibited and you should not linger in controlled airspace.

Maps cannot yet be bought with this new airway system marked on them, so it is essential that pilots who fly in this area mark their maps to show the important changes.

Further changes particularly in the heights of airways bases are still to come, and will appear in SAILPLANE & GLIDING at the earliest opportunity.

A place for Total Energy Venturis

by R. B. Cobb

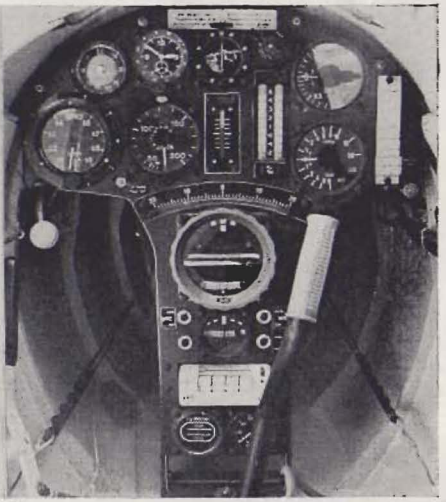
THE advantages of the total energy variometer are now well known to sailplane pilots in this country and throughout the gliding world, and the only objection to this arrangement of the variometer by some pilots is the possibility that the Venturi mounted forward of the cockpit may disturb the laminar flow at the nose of the machine.

In order to overcome this objection, a German pilot, Bernt Spiegel, has adopted a suggestion of mine and mounted the Venturi on the rudder unit as shown in the accompanying photograph, and had good results.

Perhaps someone else will try this method and let us know the results. I would suggest that the tubing connecting the Venturi to the variometer be either metal or well-anchored rubber, and that thought be given to arranging the water-trap so that it is connected to the lowest point of the system.

The second photograph shows this pilot's instrument panel, which seems to have everything, including radio.





At the 1958 B.G.A. Ball



Above, from L. to R.—Ian and Yvonne Bonham, Basil and Queenie Meads, Philip Wills, and Mme. Dega, wife of the Polish Air Attaché

Below, L. to R.—John Rushton, Ann and Lorne Welch, J. C. Reussner





Above, Listening to the Cabaret: in front can be seen Mr. Airey Neave and the Polish Chargé d'affairs, M. Tomorwicz

Below, on left, Evie Deane-Drummond receives the California in England Trophy from Mme. Tomorwiczova; on right, the Press Officer who will accompany the British team to Leszno, Kenneth Owen, dances with his wife Suzette





Glider Maintenance—7

by R. C. Stafford-Allen

TYPES OF CONSTRUCTION AND INSPECTION FOR DAMAGE

BEFORE we can deal with the matter of inspecting a glider for damage we must first have some idea of how the machines are built and what each part of the structure is meant to do. Gliders can be roughly subdivided into three main types: two-spar, strutted single-spar and cantilever. This classification applies to the wings. Fuselages and tail units we will deal with later.

The classic example of two-spar construction is the Slingsby Tutor. Each wing has two spars running spanwise and each spar has its own strut. All the lift force is taken by these spars in bending and the loads are transmitted to the fuselage by means of the struts. To brace the wings in the fore-and-aft direction (drag bracing) there is a system of diagonal members inside the wing, connecting the two spars. There are also crossed wires bracing the two struts. Thus braced, the wing clearly cannot twist, for if it did it would have to move forward or backward, and this it cannot do because of the diagonal bracing and the strut wires.

The fuselage of this aircraft is a plain box of ply with four longerons of spruce and a number of frames to stiffen the sides and to preserve the correct shape. The top of the box is not covered with ply, but has a light triangular fairing covered with fabric to give the whole a good streamline form. This triangular top is only a fairing, but it must be realised that all the rest of the fuselage, ply sides and bottom and longerons, frames etc., is the main load-carrying structure, and no damage to this can be tolerated if the aircraft is to be considered airworhy.

The tailplane is a simple triangle with a leading-edge member or spar on each side and a main spar running from tip to tip. The main spar's chief job is to carry the elevator. The tailplane is attached to the fuselage by two bolts, one at the joint of the leading-edge members, and one at the midpoint of the main spar. These bolts are anchored to frames in the fuselage. The main spar is also stabilised sideways by two small struts to the fuselage frame.

Struts and wires are expensive in drag. To secure greater efficiency the struts must go, or at least two of them. This brings us to the next type of construction.

The single-spar strutted type is typified by the T-21, Kites I and II, Gull I, Grunau Baby, etc. In this form the wing is built with one massive spar which is placed at about a third of the chord from the leading edge. This is about the average position of the Centre of Pressure for most normal conditions of flight. This great spar takes all the lift forces in bending and transfers the load to the fuselage through one single strut on each side of the aircraft. This spar and strut, however, have almost no stiffness in twist, so something else has got to be added to stop the wing from twisting.

Now the stiffest thing, weight for weight, in twisting is a tube; so the leading edge of the wing is made a wooden tube by forming it out of ply glued to the spar. It is a "D"-shaped tube, it is true, and not a circular shape which we usually assume a tube to be; but it is a tube for all that, and it is enormously stiff in twisting. To deal with the bracing in drag we usually find that at the root of each wing there is a big diagonal, sometimes called the drag spar, which connects up to the fuselage via the rear fuselage pin and runs diagonally forward to join the main spar a few feet out from the root. Usually the triangle formed by the root rib, main spar and drag spar is completely covered over with ply. Outboard of this junction of main spar and drag spar, the drag forces are dealt with by the leading-edge ply tube. This tube is stiffened all along its length by many nose ribs which also ensure the correct aerofoil shape. It will now be obvious that this tube is a vital part of the structure, and it is of the first importance that there should be no damage here. Should any damage be found, the tube cannot do its job properly and the aircraft is not airworthy until the damage has been made good.

Fuselages in this type vary a good deal from a wooden girder, as in the T-21B,

through various shapes of ply box fu elages to the round or oval section monocoques. These last are pure ply tubes, stiffened where necessary by frames, and by longerons or stringers running lengthwise.

From here it is a simple step to the third type of sailplane construction which is—

The Cantilever Wing

In this type, instead of hinging the wing on to the fuselage and then holding it there by means of a strut, we simply beef up the spar at the root end and connect the spars of each wing together rigidly so that the main spar can be considered continuous from tip to tip. The fittings in the joint of the two wings do take enormous bending loads, so they have to be very big and strong. In consequence, this type of construction is somewhat heavier than the other two types, but this is far outweighed by the gain in aerodynamic efficiency which results from the deletion of the struts. The leading-edge ply tube is there, and it does exactly the same job as before, dealing with the twist and drag forces. Also we find our old friend the drag spar in the root, and the ply triangle boxing-in the root, mainspar and drag spar. Fuselages in these types are usually pure monocoques, for reasons of aerodynamic efficiency. Tailplanes are often mounted as cantilevers, though a few types still use tailplane struts.

The three-piece wing, which has come into favour lately, merits a word. It is a cantilever just as before, but it has two joints outboard instead of one joint in the middle. The construction of the wing, however, is basically the same: one spar, leading-edge ply tube, etc. It is a little deceptive at first sight, since these sailplanes often use a laminar-fl ›w wing section, and this necessitates the use of ply covering to guarantee the surface finish required. This ply masks a lot of the structure which would otherwise be fairly easy to detect.

One peculiar type must be mentioned, and that is the Slingsby Prefect. This is a half-and-half type of construction. There are two spars in each wing, but they are so strongly braced together by stout diagonal members that they can almost be considered to be one spar. They are so stiff in twist, like this, that only one strut is needed, and, although the wing has a leading-edge ply box or tube, this does not by any means take all the twisting loads.

Having acquired some knowledge of what holds the things together, we can now go on to discuss the subject of inspection for damage.

Now, the usual cause for this inspection is when the machine has been subjected to some unusual strain, such as a heavy landing, or when it has been involved in a crash. The first thing to do is to find out, if you can, just exactly what happened. If you can do this, you can then work out what parts of the structure have taken the worst pasting. For instance, a machine may have received a heavy landing by touching lightly on the wheel, rising to four or five feet and then pitching on to its nose. In this case you might well find that the drag bracing was damaged and some of the front frames in the fuselage crushed. On the other hand, a heavy landing may well mean stalling on to the ground from four feet and hitting tail-skid first. In this case you are much more likely to find crushed main bulkheads in the fuselage, torn-out aileron horns, and compression shakes in the top longerons. In case the expression "compression shake" is strange to you, it may be as well to say now that we shall go into this more thoroughly later on. The next thing to remember is that you must trace the path of the impact through the structure and follow along each member looking for damage. Never forget that, although the impact came on one end of a member, you may well find the damage at the other end. A longeron, for instance, may get a bash at the tail end from a tail-first landing, but the damage may be right up near the wing where you may find a compression shake.

Now, what sort of damage do you look for? Well, timber, when it fails in tension or in shear, simply breaks or splinters. The damage is obvious. However, when it fails in compression you may simply find a compression shake. These compression shakes are often very difficult to detect. Often the only visible sign is a hair-line crack in the paint or varnish, running across the grain of the wood. If in doubt, you can always find out whether a suspicious-looking mark is a compression shake or not by a little judicious bending or twisting of the member. If it is a compression shake, the crack will open. How does a compression shake occur? To answer this we must first look at the structure of timber itself. An ordinary piece of timber consists of a bundle of fibres running lengthwise, bound together

by resinous substances (Fig. 14a). When the timber is compressed beyond its elastic limit (Fig. 14b), the fibres simply fold over



Fig. 14a

for a short length and double back on themselves. Needless to say, the timber is now useless and must be replaced.

Other signs of damage you may find are: pulled fittings, stretched holes in fittings, and the fittings themselves moved on their timbers. This last is usually easy to see, as the paint line will show where the fitting was before it shifted. If you find a bracing wire slack, it is almost a certainty because its attachments or the surrounding structure have shifted. Slack control cables also nearly always mean that a fitting somewhere in the circuit has been pulled out of shape or wrenched adrift from its mounting. Go through the circuit from end to end until you find the damage. As a general rule, it is much quicker and better to replace fittings with new ones rather than to try to repair or reclaim damaged ones.

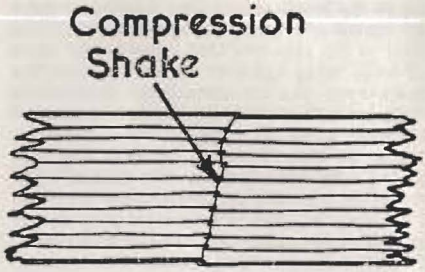
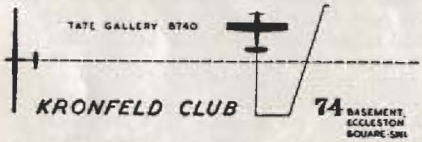


Fig. 14b



As some members have noticed there is now a very fine Charles Brown enlargement 5 ft. x 4½ ft. behind plate glass on the bar wall. The photograph shows an Auster towing an Olympia with a magnificent cloud background.

Other improvements include the completion of the coffee bar by Angie and his helpers and on Wednesday nights they are rivalling Ron in the sale of liquid refreshment.

As a spur to finishing the decorations the Landlords have offered the Club a further Lease which will expire at the end of March 1962, so unlike certain gliding clubs, not a hundred miles from Eccleston Square, security of tenure is not our major worry.

During the Summer, Wednesday nights will continue regularly with feature films being shown alternate weeks.

Tennis in the Square will also be organised and anyone interested should contact the Hon. Secretary.

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

June	4th	David Ince—his record flight and the 419.
	11th	SOUND BARRIER—feature film with Nigel Patrick, Ralph Richardson, Ann Todd and Dinah Sheridan.
	18th	"The Early Days" by F. N. Slingsby.
	25th	Polish Gliding feature film—"The First Start" with English sub-titles.
July	1st	SCOTT OF THE ANTARCTIC—feature film with John Mills. Commentary by PETER SCOTT, we hope.
	9th	Welcome Home to the British Team from Poland.
	16th	D. G. O. Hiscox "The London Gliding Club".
	23rd	THE WAY TO THE STARS—feature film with Michael Redgrave.
	30th	National Gliding Week (no lecture).
Aug.	6th	MALTA STORY—feature film.

Annual Best Flights

THE good gliding weather was certainly a long time a-coming this year, but when it came it seems that a good many people were ready for it and some outstanding flights have been achieved. Easter was about as bad as it could have been, though Good Friday was at least good in parts, and gave one competition day for the Long Mynd rally.

The Annual Best Flights position has built up as follows:

Distance, Single-seater

6th March. P. Scott, Eagle, Nympsfield—Shrivenham, 28 miles.

4th April. F. G. Irving, Skylark III, Long Mynd—Lasham, 124 miles.

12th April. H. C. N. Goodhart, Skylark III, Ely—Rosudgeon, 295 miles.

13th April. D. H. G. Ince, Olympia 419, Lavenham—2 miles S.S.W. St. Just, 315 miles.

Goal-flight, Single-seater

6th March. P. Scott, Eagle, Nympsfield—Shrivenham, 28 miles.

12th April. Anne Burns, Skylark III, Lasham—Perranporth, 193 miles.

100 *km. triangle, Single-seater*

20th April. P. A. Wills, Skylark II, Lasham—Welford—Thruxton, 2 hrs. 30 mins.

D. H. G. Ince, Olympia 419, Lasham—Thruxton—Welford, 2 hrs. 30 mins.

These two flights also rank as *out-and-return* to Thruxton .. 42 miles

Distance, two seater

12th April. W. A. H. Kahn and J. Williamson, Eagle, Odiham—Perranporth, 194 miles.

This also counts for Goal (two seater).

Other good flights recorded are:

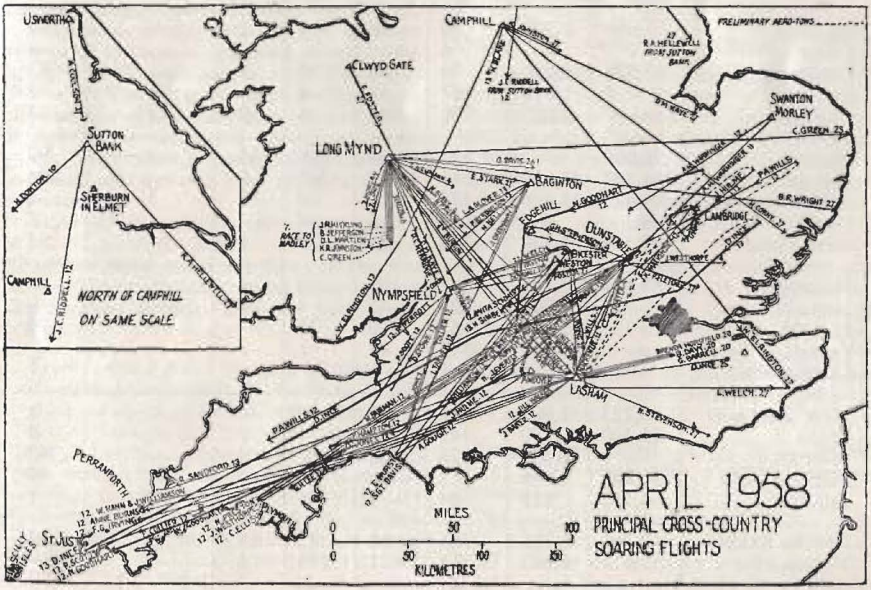
P. Scott, Eagle, Nympsfield—Culmhead—Drift, 305 km. (Gold C).

P. R. Hampton, Skylark II Lasham—Exeter .. ..109 miles

H. C. N. Goodhart's flight on 12th April was a dog-leg flight totalling 319 miles.

No altitude flights have been reported.

H.C.N.G.



F.A.I. REPORTS ON GLIDING

STATISTICS from the Annual Report of the Fédération Aéronautique Internationale for 1956 (published 1957) are given below. Countries for which the entries are zero, and those which have not sent in returns, are omitted. Similar information for the previous year was given in SAIPLANE & GLIDING for April, 1957, on pages 90-91.

Government subsidies for Gliding.

BELGIUM: 1,950,000 Belgian francs (£14,000) for the National Centre and the clubs.

CHILE: tax exemptions; petrol and oil; gift of 10 gliders.

DENMARK: lottery bringing in 75,000 Kr. (£3,950) for all sporting aviation for two years.

FRANCE: 40-50% of cost of equipment; partial tax refund on petrol.

GERMANY: DM 12,500 (£1,060) for participation in World Championships.

GREAT BRITAIN: partial tax refund on petrol.

GREECE: 600,000 drachmas (£5,500) for all sporting aviation.

HOLLAND: 440,000 fl. (£41,400).

INDIA: Rs. 20,000 (£1,500) to Delhi Gliding Club.

ITALY: Air Ministry gives subsidy to Aero Club of Italy, to help activities; also loans a certain number of gliders.

JAPAN: 1,000,000 yen (£1,000); also gliding instructors' course held by Education Department.

LUXEMBOURG: 50,000 Lux. francs (£365).

NEW ZEALAND: loan of material and use of aerodromes.

SPAIN: 250,000 pesetas (£2,100) for all sporting aviation.

SWEDEN: 335,000 crowns (£23,000).

SWITZERLAND: 833.6 Swiss francs (£68).

TURKEY: public donations.

YUGOSLAVIA: 341,922,000 dinars (£410,000) for all sporting aviation.

Country	*No. of flights*	*Total hours*	*Total gliders*	*Certificates*				*No. of clubs*
				C	*Silver*	*Gold*	3 *Diamonds*	
BELGIUM	2,000	1,100	50	39	5	2	—	10
CHILE	—	—	6	—	—	—	—	8
DENMARK	12,528	1,636	70	56	10	2	—	25
EGYPT	—	1,234	17	32	4	—	—	2
FINLAND	—	2,023	108	105	6	2	1	43
FRANCE	76,000	—	1,122	794	206	39	3	97
GERMANY	384,527	48,910	1,611	1,297	247	6	—	804
GREAT BRITAIN	99,429	15,826	175	315	69	3	1	36
GREECE	103	—	12	16	4	—	—	5
HOLLAND	59,569	8,324	114	86	20	1	—	34
HUNGARY	85,519	15,945	—	108	70	4	—	—
INDIA	—	1,000	23	46	4	1	—	—
ITALY	—	5,768	53	120	21	—	—	20
JAPAN	—	—	142	42	1	1	—	—
LUXEMBOURG	—	6	1	—	—	—	—	1
NEW ZEALAND	5,223	1,000	17	21	—	—	—	—
SPAIN	11,290	190	145	—	1	1	—	4
SWEDEN	—	6,836	226	468	17	9	—	42
SWITZERLAND	24,209	6,948	173	—	27	60	—	40
TURKEY	4,945	818	84	73	6	—	—	1
UNITED STATES	17,744	8,195	265	68	32	18	3	63
YUGOSLAVIA	52,674	8,802	311	421	156	6	—	—

MIDLAND GLIDING CLUB EASTER RALLY

by Geoffrey Benson

THE 1958 rally was organised rather differently from that of previous years. In the past the Friday has been a practice day and Saturday, Sunday, Monday and Tuesday, competition days. Experience has shown that some competitors have to leave on Monday evening and others cannot arrive in time to fly on Good Friday, which is a working day in the Midlands.

This year the Saturday, Sunday and Monday were compulsory competition days and competitors could, before the start of the rally, opt to fly on either or both the Friday and Tuesday; the winner was the aircraft with the highest average marks for the days on which it was entered.

Marking was based on the 1957 "Nationals" marking with the following amendments—

(a) Distance marks were given for the whole distance covered, provided that the aircraft had covered the minimum distance laid down. Distance marks were therefore in direct proportion to the distance covered.

(b) Speed marks were 40 and distance marks 60 in races—a reversal of marks for speed and distance in the 1957 Nationals. It was felt that the marking in the Nationals was unduly severe on pilots who failed to complete the task, and tended to make pilots concentrate on completing the task, and that speed was a very secondary consideration.

The weather was anticyclonic throughout, with N. to N.E. winds. Unfortunately, excessive cloud cover on three of the five days led to no competition on Saturday and Sunday and a very "chancy" day on the Tuesday.

Friday, 4th April.—A good thermal day with light to moderate N. to N.E. wind; high cloud cover increased in the afternoon. Task: a projected line from the Long Mynd through Lasham. Most pilots got away on their first launch. Frank Irving (Imperial College) reached Lasham in Skylark III (120 miles) and was the day's winner. David Scallon (Surrey) and Mick Kaye (Derby & Lancs.) landed near Lasham and Charles Green (Midland) south of Greenham Common, 108 miles; all three flew Skylark II's. Ken Blake (Derby & Lancs.) covered 88 miles but was 10 miles off course, and Burton (Surrey) 55 miles. Only one pilot failed to get away.

Saturday, 5th April-Sunday, 6th April.—Neither day was a competition day. The one pilot (Scallon) who got away on Sunday reached 6,000 ft. in his one and only thermal and landed at Hampton Court (Viscount Henford's estate), 25 miles away.

Monday, 7th April.—Light to moderate N.E. winds with rather too much cloud cover. Task: a race to Madley airfield, 34 miles. All machines except two got away and one failed to cover sufficient distance (10 miles) to score. Five machines reached Madley at the following speeds:—

Pilot	*Sailplane*	*Club*	*m.p.h.*
Hickling	Eagle	Midland	37.1
Jefferson	Skylark II	D. & L.	30.9
Martlew	Olympia	Surrey	28.5
Johnston	Skylark II	D. & L.	24.3
Green	Skylark II	Midland	14.1

Other pilots did varying distances and were mostly well to the west of the course. Charles Green started his final glide at 3,000 ft. above Shobden airfield, but failed to allow for the westerly drift of the wind; instead of Madley airfield appearing when and where it should have done, the Black Mountains appeared instead! Charles soared these for over an hour before definitely fixing his position and flying on to Madley. His time of 2 hrs. 25 mins. was understandably an hour longer than any of the other pilots to arrive! In this race John Hickling in the Midland G.C. Eagle did a straight glide of 18 miles from his first thermal, during which his loss of height was rather less than 2,000 ft.

Tuesday, 8th April.—Light to moderate N. to N.E. wind with almost complete cloud cover.

The position at the start of the last day was interesting, as four machines all had a good chance of finishing as the winner: the Midland Eagle (Hickling), the Derby &

Lancs. Skylark II (Kaye and Johnston), Midland Skylark II (Green) and the Surrey Olympia (Martlew, Burton, Kerridge). Also the Beer Tray challenge trophy between Midland and Derby & Lancs. was in the balance with Midland slightly in the lead. This trophy originated in 1937 and has been competed for at irregular intervals since then.

Only two pilots got away on thermals—Kaye and Kerridge on successive launches. Kaye landed at the Bristol Club site at Nympsfield, 61½ miles, and Kerridge a mile or so away for half-a-mile less distance. The only other pilot to get away was Bob Swift (Midland Olympia) who on the last launch of the day gaily set forth on a down-wind dash from the top of the launch; much to everybody's surprise—including his own—he covered 16½ miles by soaring four small north-facing ridges.

Thus ended the 1958 Rally with Kaye/Johnston in the Skylark II very well-deserved winners. They flew consistently well on all three competition days, their daily average being over 90 points. Martlew/Kerridge/Burton finished second in their Olympia, the former having been in the winning team the previous two years. And the Derby & Lancs. Club relieved the Midland of the challenge trophy.

We would like to thank Jock Findlater for his weather forecasting, and also all competitors who did so much to make the rally so enjoyable. We will do our best to arrange for really good weather next year and hope to have most of those who took part with us again then.

FINAL RESULTS

Aircraft	*Club*	*Pilots*	*Points Fri.*	*Mon.*	*Tues.*	*Daily Average*
1. Skylark II	Derby & Lancs.	D. M. Kaye, K. R. Johnston	95.2	77.2	100	90.8
2. Olympia	Surrey	D. L. Martlew, G. E. Burton, D. C. Kerridge	43.6	83.6	99	78.7
3. Skylark II	Surrey	P. Hampton, D. Scallon, J. H. Holder	97.1	21.6	NE	59.4
4. Skylark II	Midland	C. Green	87.1	65.8	0	51.0
5. Skylark II	Derby & Lancs.	B. Jefferson, K. Blake, A. Baynes	62.4	87.8	0	50.1
6. T-42 Eagle	Midland	J. H. Hickling	NE	100	0	50.0
7. Skylark III	Imperial College	F. G. Irving, W. N. Tonkyn	100	0	0	33.3
8. Olympia	R.A.F. Windrushers	A. T. Morgan, O. Cretney ..	2.3	37.0	NE	19.7
9. Skylark II	Cambridge Univ.	G. S. Neumann. Mrs. A. M. Neumann, B. H. Smith ..	13.5	25.6	NE	19.6
10. Skylark II	Midland	D. R. Lowe	0	38.8	NE	19.4
11. Olympia	London	N. P. Anson, V. Ginn ..	32.4	0	NE	16.2
12. Gull IV	Derby & Lancs.	R. D. Dickson, R. G. Fowler, R. Illidge ..	0	36.6	0	12.2
13. Olympia	Midland	B. R. Wright, R. Swift, G. Davies	2.4	0	26.4	9.6

Note.—NE= Not entered this day.

Challenge Trophy

Competition between Midland G.C. and Derbyshire and Lancashire G.C.: scores of two best machines in each club.

Derby. & Lancs. 90.8+50.1=140.9

Midland 51.0+50.0=101.0

News from Poland

by Adam Zientek

A RECORD IN WINTER

ON 2nd February, at Jelenia Gora (Giant Mountains), several sailplane pilots were launched into the "Halniak" (the Polish word for foehn wind). The wave lift proved thoroughly good, with a ceiling that rose during the day to over 8,000 m. (26,250 ft.). After a few hours Rozanski reached an absolute altitude of 8,130 m. (26,670 ft.), equal to the single-seater record which had stood for eight years. Jan Pakulski climbed still higher to 8,380 m. (27,490 ft.) and thereby set up a new national record.

Rozanski, Pakulski and Zylka qualified at the same time for the height Diamond, while some others made climbs of over 3,000 metres.

ACTIVITIES IN 1957

DURING the past year 2,300 active glider pilots, including 800 beginners, put up about 32,000 hours' flying and covered 190,000 km. (118,000 miles) in aggregate distance. This beat the previous year's performances by about 1,000 hours and 40,000 km. (25,000 miles).

All three existing high-performance centres, Jezow (formerly Grunau), Lisie Katy and Zar, reported an output of 2,200 to 2,800 hours each. Lisie Katy took leading place in total distance with 24,000 km. (15,000 miles). With justifiable pride this centre reports further that, in spite of its quota of away landings, it got through the whole year's flying activities without a single accident to a pilot or any serious damage to the flying equipment.

TATRA'S FOEHN DECLARES ITSELF

ALTHOUGH most Polish holders of Diamonds made their altitude flights in waves, the Tatra region, the highest mountain chain in the country, has hitherto not been opened up for soaring flight. A few trial expeditions in earlier years proved fruitless because for weeks and months the foehn wind refused to blow.

At the end of 1957 an expedition was once again assembled on the aerodrome at Nowy Targ, situated about 16 miles north of the Tatra, and already after a few days the first success came in the form of an altitude flight of 5,200 m. (17,000 ft.).

On 11th January the foehn again appeared, but was accompanied by violent turbulence. Josef Dankowski, who made three flights on this day, reported that in the rotor zone he was involved with continually changing upcurrents with peak strengths of 16 m./sec. (52½ ft./sec.). "At times I got the impression that the Jaskolka was going to break in pieces", he said after landing. The barogram of one flight lasting more than an hour had a saw tooth appearance throughout, and even at more than 5,000 m. altitude (16,400 ft.) the turbulence did not cease. It was remarkable that, in spite of well-developed wave clouds lying at 7,000 m. (23,000 ft.), it was not possible to connect properly with the wave. However, when success came finally at 6,000 m. (19,700 ft.), the oxygen had given out and this remarkable flight had to be terminated.

Evidently wave-flying over the Tatra is not so easy, but much greater heights should be attainable than at Jelenia Gora, where the maximum ceiling lies at about 10,000 m. (32,800 ft.).

The expedition is to stay at Nowy Targ till the late spring. In case of snowy conditions, skis are ready for attachment to both tugs and sailplanes.

O.S.T.I.V. Congress at Leszno

There has been a change in the date of the 7th Congress of the Organisation Scientifique et Téchnique International due Vol à Voile, which is now to be held from Thursday, 19th June to Saturday, 28th June. It will be at Osieczna Castle, 7 miles from Leszno and 9 miles from the airfield where the World Championships are being held. The Technical and Meteorological Sections will cover a great variety of subjects, not excepting muscle-power flight and dynamic soaring.

Slingsby's 45 Varieties

The type numbers given by Slingsby Sailplanes to the firm's products, of which the latest is T-45 for the new "Swallow", have intrigued many gliding people who would be quite unable to put down the whole 45 on paper. Mr. Slingsby has now prepared a list of them all, with notes on each, and with the help of this we have compiled the following account of the work for which the F.A.I. has just honoured him with the Lilienthal Medal.

1. FALCON 1, 1931.—A single-seat sailplane trainer; built from drawings supplied from Germany on the advice of Günther Groenhoff and Carli Maggersuppe. In the prototype, built at Scarborough, F. N. Slingsby gained his C gliding certificate at Ingleby Greenhow in 1931. Flying in the 1932 National Contests, he gained five awards, and Mungo Buxton, by flying it from Ireleth, near Barrow-in-Furness, to Hawkshead at the north end of Lake Coniston, raised the British distance record to 13 miles. It was eventually sold to the London Gliding Club. About 12 of the type were sold during the following five years.

2. FALCON 2, 1934.—Built to order in 1933 for the late C. Espin Hardwick founder of the Midland Gliding Club. It was a Falcon 1 with a few refinements such as rounded wing tips and modified tail surfaces. It was ceremonially destroyed by fire at the Long Mynd in 1955 after its owner's death. It was the first sailplane to fly from the Long Mynd, piloted by F. N. Slingsby. Only one was built.

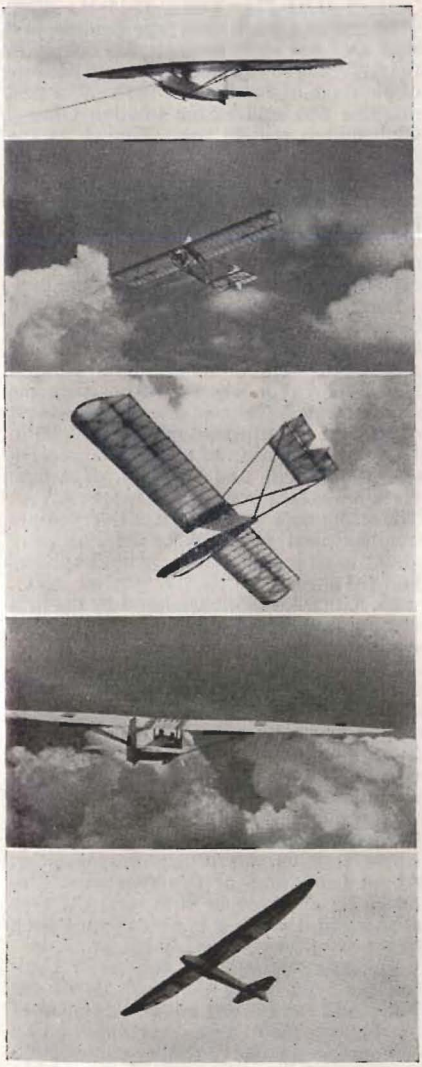
3. PRIMARY TRAINER, 1934.—This was built to drawings supplied by the British Gliding Association for 25s. per set of three sheets. The drawings originated from America, where metal tail booms with modified tail units were introduced to replace the wooden girder and rather flimsy wire-braced tail end of the German Zögling trainer. The result was strong enough but rather tail-heavy. Several machines of this type were built by R. F. Dagnall, of Guildford; hence the name "Dagling". The Slingsby firm made large numbers of these; some had detachable nacelles to improve performance and were thus capable of soaring flight.

4. FALCON 3, 1935.—This was the first machine designed by the Slingsby firm from experience gained from the construction of earlier types of German aircraft. The production and development of the prototype was encouraged by C. E. Hardwick, who offered to purchase the aircraft when completed. The whole of the design work was carried out single-handed by Mr. Slingsby, and the construction by Mr. Brayshaw and another lad named Kenneth Brown. The Falcon 3 was completed in 1935, when the Slingsby firm moved to Kirbymoorside on the invitation of Major J. E. D. Shaw. The first flights were made at Welburn Aerodrome from car launches and the soaring flights at Sutton Bank. It became very popular and all the leading gliding clubs used the Falcon 3 for dual instruction and joy riding, and about 20 machines of this type were sold in Great Britain and overseas. The type twice put up an international duration record for two-seaters: 9 hrs. 48 mins. in 1937 during the first International Contest at the Wasserkuppe (pilots J. S. Fox and W. B. Murray), and 22 hrs. 13 mins. in 1938 during the National Contests at Dunstable (pilots W. B. Murray and J. S. Sproule).

5. GRUNAU BABY II, 1935.—Built under licence from the Aero Club of Germany. A large number were produced for clubs and a few exported. The first machine was supplied to Sir Alan Cobham's Air Displays in which the late G. E. Collins (first British Silver C pilot) flew it.

HJORDIS, 1935.—No number allotted. The machine was designed in sketch form by Mungo Buxton and the workshop drawings were prepared by F. N. Slingsby. It was a high-wing full-cantilever tapered-wing aircraft with pendulum-type elevator and circular section fuselage. The general configuration was unlike any other sailplane of its day. Although the performance was excellent, its handling qualities were not satisfactory. Philip Wills owned the Hjordis with Mungo Buxton and made many record flights with it. It was eventually sold to a club in Johannesburg. Only one was built.

6. KIRBY KITE, 1935.—The first gull-



Some of Slingsby's earliest types. Top to bottom: No. 1, Falcon I; No. 3, Primary Trainer; Ditto, with Nacelle; No. 4, Falcon III; No. 5, Grunau Baby II. The Falcon I once held the British distance record and the Falcon III twice put up an international two-seater duration record.

wing type produced in Britain. Designed by F. N. Slingsby and constructed entirely from general arrangement drawings and full-size templates in only three-and-a-half months, partly because it had many features of the Grunau. The drawing office work for the firm was carried out after working hours and often through the night. On its first soaring flight at the National Gliding Contests, John Neilan, then a medical student, flew it 55 miles from Sutton Bank to Withernsea, gaining his Silver C height and distance qualifications.

7. KIRBY KADET, 1936.—Designed by the firm, which now had one draughtsman-cum-fitter (J. S. Sproule), to the order of the Midland Gliding Club as a replacement for the Nacelled Primary. Later known as the CADET 1 in the Air Training Corps, which adopted it as a standard solo trainer.

8. KIRBY TUTOR, 1937.—Developed by fitting the Kadet with a tapered outer wing panel with longer wing struts. It had very good soaring qualities. The A.T.C. called it CADET 2.

9. KING KITE, 1937.—Designed by the firm under the supervision of Mungo Buxton. Peter Shaw, a Cambridge engineering graduate who joined the firm, and J. S. Sproule were responsible for the drawings. Three were entered by the British team at the Wasserkuppe international contests in 1937, but although it had good performance its handling characteristics were far from satisfactory, and it had a tendency to spin at low speeds, no doubt due to choice of wing section, tail heaviness, and insufficient wing twist. It was fitted with full flaps.

10. KIRBY KITTEN, 1938.—A low-wing single-seat monoplane designed to use the Scott Squirrel engine. The airframe was completed but the engine was not satisfactory, and the project was abandoned.

11. KIRBY TWIN, 1938.—A high-wing twin-engine cabin two-seater, designed by the firm for the Weir engines. The fuselage and a few wing parts were completed but the engines were not forthcoming. The propellers were aft of the wings.

12. GULL 1, 1938.—Designed by the firm with depleted drawing office staff. Prototype purchased by Dudley Hiscox. Geoffrey Stephenson made the first Channel crossing in one in 1939, and Norman Preston has recently flown Gold C distance (300 km.) in another.

13. PETREL, 1938.—Developed by the firm from the German Rhönadler to the

order of N. Frank Charles of the Barrow-in-Furness Gliding Club. It has a remarkably low sinking speed but very little speed range. About six of this type were built, some with "pendulum" tailplanes and some with conventional fixed tailplane and elevator.

14. GULL 2, 1939-40.—A cabin-type high-performance sailplane with side-by-side seating. The design was commenced in the autumn of 1938 by F. N. Slingsby, and due to lack of drawing office staff the prototype was constructed from direct lofting from G.A. drawings. The full cantilever wing was in three parts and had a total span of 65 ft. The Gull 2 was ready for its tests, but these were stopped because of the war restrictions. It was requisitioned by the Air Ministry in 1942 or 1943. After protest, the machine was offered back to the firm. However, the Air Training Corps pressed to retain the machine for propaganda flying, promising to allow the firm to carry out flight tests; but flight tests were prevented and not carried out until 1952.

15. GULL 3, 1940.—A full cantilever version of the Gull 1. Only the prototype was built.

16. Not named, 1940.—A small-span high-performance type using the Gull 2 outer panels (each 22 ft. 6 in. long) to a modified Kite 1 fuselage. Not completed.

17. Troop Carrier 8-seater, 1941.—Drawings were completed to a design contract from the Ministry of Aircraft Production, but the machine was not built, as the Hotspur was adapted for production for training.

18. HENGIST Troop-Carrier 15-seater and equipment, 1942.—Designed by the firm to M.A.P. specification and 18 machines built. This type was produced by M.A.P. against the possibility that tugs would not be available for the larger Horsa. One interesting feature was the bellows-type flap developed by the firm and patented in 1942 (before the Bristol effort).

19. Target Glider, 1943.—Of 16-ft. span, developed for Naval experiments.

20. Tandem two-seater trainer, 1944.—A 50-ft. strutted type designed by the firm to meet the demand of the A.T.C. for a simple type of dual trainer. Only the prototype was built, and this was used for experiments on an aircraft carrier by the Admiralty, known as carrier-wake trials. This machine was eventually lost at sea, but the equipment and the pilot were saved.

21. T-21, T-21A, T-21B, 1944-46.—First produced as a 50-ft. span type strutted, and later modified to 54 ft. This was offered to the A.T.C. in 1944 but not taken up because of shortage of funds until 1947. The first machine was sold to the London Gliding Club and is still in use. Known in the R.A.F. as the SEDBERGH, it is now used by many countries throughout the world.

22. PETREL 2, 1945.—Drawings completed but the prototype not built.

23. KITE 1A, 1946.—A post-war version of the Kirby Kite; it was considered too expensive for its limited performance.

24. Tandem two-seater, 1946.—Designed by the firm to Ministry of Supply specification as a trainer for the A.T.C. Three prototypes were built with and without flaps. This type was loaded up with the requirements of almost every department of R.A.E.; it performed reasonably well in spite of its handicap of copper-bound wing tips, rudder T.E. and intercom. The final version was far too expensive for the A.T.C. The experience gained from this venture was sufficient to convince Air Ministry D.O.R. that in future it should buy its gliders "off the shelf".

25. GULL 4, 1946.—Designed by the firm as an advance on the Olympia. The type was a success, and about six were produced.

26. KITE 2, 1946.—An effort to produce a high-performance strutted type at low cost. By a reduction of depth of wing section normally used for sailplanes, we hoped to offset the loss of efficiency due to turbulence round strut ends. The lack of wash-out over the three outermost wing ribs produced characteristics which alarmed the average sailplane pilot of that day, whose training was usually very sketchy. About two dozen of this type were produced by an associate firm, and the type abandoned, though it is now coming back into favour.

27. WIDOW, 1948.—A two-seater twin-fuselage type, using the fuselages of the Tutor and the existing wings. The gap of 8 ft. between the fuselages was made up by a centre-section panel of similar construction to the parallel portion of the main planes for ease of production. Horizontal struts of tubular steel connected the lower part of the fuselages. The bay between the fuselages was wire-braced in two planes to provide a rigid structure. A special tail unit connected the rear end of the fuselages. Rudders were connected by a light push-

pull rod. The machine had a wonderful and impressive appearance, but was not covered. The main conversion components have been sold to an experimental group at Lasham.

28. High-performance two-seater project; abandoned 1948.

29. MOTOR TUTOR, 1949.—As the result of considerable pressure on the part of Group Capt. E. L. Mole and Martin Hearn, Ltd., we reluctantly agreed to put an engine in the Tutor. A Scott Squirrell was used for the first prototype, then we were loaned an Aeronca J.A.P. by J. A. Prestwich, and this engine was found to be good from the start. The Ultra Light Aeroplane Association urged the firm to press on for a Certificate of Airworthiness, and the Kemsley Trust gave a tentative order for six Motor Tutors. After a dreary tussle with A.R.B., a C. of A. was granted with an endorsement to the effect that the aircraft could not be used for training. As training was its only slender reason for existence, the whole effort was wasted. Two prototypes are still in existence.

30. PREFECT, 1949.—A strong and reliable replacement for the Grunau Baby. Used in the A.T.C.; Holland, Belgium, Egypt, with first-class results. A very popular type for club use.

31. TANDEM TUTOR, 1950.—Developed from the Tutor as a cheap dual-control two-seater for the initial stages of training in "circuits and bumps". This type became very popular at the outset, and a large number have been sold overseas, both complete and in kit form. Known as CADET 3 in the A.T.C., which has cut its repair costs by less than half since it adopted this type of training. About 180 have been built.

32. GULL 4B.—Designed as a strutted sailplane; not completed.

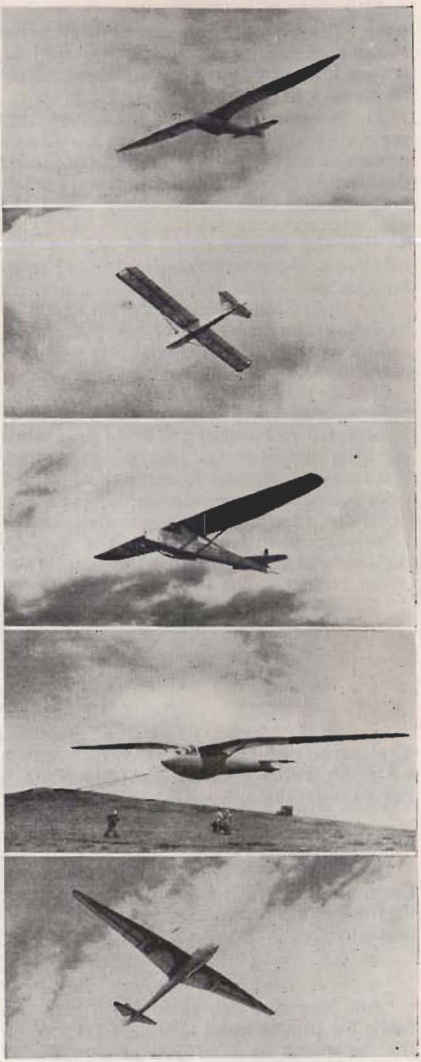
33. Two-seater full-cantilever cabin version of the T-21B.—Design study only.

34. SKY, 1951.—The Gull 4 modified to a span of 18 metres, with longer tail arm, inflated root section, better dive brakes, and other features. With this type "Jock" Forbes won the 1951 British Championships and Philip Wills the 1952 World Championships.

35. TANDEM TUTOR.—Type 31 modified to special order for Australia to 50 ft. span.

36. Design Study for a high-performance two-seater, 1951.—Drawings completed.

37. SKYLARK 1.—Originally intended for carrying out tests with various lateral-



Some more early Slingsby types. Top to bottom: No. 6, Kirby Kite; No. 7, Kirby Kadet (Cadet I); No. 8, Kirby Tutor (Cadet 2), pre-war version; No. 12, Gull I; No. 13, Petrel. All these types are still flying but the post-war Tutor's wing has a straight leading edge.

stability devices; hence the three-piece wing. The wing loading, due to meeting the rough gust case of Section E, B.C.A.N.R., is very high, which is not surprising, as the structure was to be stressed to 9.5 *g*.

38. PRIMARY TRAINER, 1952.—Adopting the main features of the German SG-38 as a basis, the firm simplified many fittings and the landing gear. Cadet 1 wings were easily adapted, and also the complete Cadet tail unit. Special attention was given to rigging so that the aircraft could be quickly dismantled without unlocking any of the turnbuckles.

39. High-Speed Towed Target, 1953.—M.O.S. project.

40. SLINGSBY-HAYHOE Racing Monoplane, 1953.

41. SKYLARK 2, 1953.—In view of the high normal flying speed of the Skylark 1, we decided to increase the wing area, thus reducing aspect ratio and wing loading. With an oval-shaped fuselage the machine went into quantity production.

42. EAGLE, 1954.—This was designed as a private venture to meet the A.T.C. requirement for a high-performance two-seater trainer. The prototype (A) showed promise. The second prototype (B) had a straight leading edge, no leading-edge cutaway from the canopy, more room in the cockpit and other desirable items. With Commander Nicholas Goodhart and Captain Frank Foster as co-pilot, it gained first place in the 1956 World Gliding Championships two-seat class. Another prototype (C) was produced with the pilots' seats further forward from the wing leading edge.

43. SKYLARK 3, 1955.—The success of the Skylark 2 prompted the leading pilots to press for higher aspect ratio. We increased the span to 55 ft.—later to 59 ft. This required a larger tailplane surface and rudder and fin area. The extra weight in consequence required a new location of the pilot's c.g. so the fuselage nose was lengthened. The type has proved a great success.

44. Stratosphere Pressurised Cabin Sailplane, 1955.—Design study to an American Air Force specification. The drawings were not detailed or the project followed up.

45. SWALLOW, September 1957.—The result of popular demand for a cheaper sailplane of medium performance; now in the prototype stage.

THIS GLIDING

SMALL boy on Dunstable Downs, seeing a glider being winched up: "That one's got a guiding line."—*A.E.S.*

* * *

Beryl Stephenson, at end of National Championships: "It was so darn tense that we finished up criticising each other's backseat driving."—*W.A.H.K.*

* * *

"But, one and all, the French pioneers made the fundamental mistake of regarding the aeroplane as a winged version of the automobile they knew so well, to be occupied by the equivalent of a chauffeur, driven off the ground, and steered cumbrously about the sky; whereas the Wrights looked upon the flying machine as an aerial steed, to be ridden and controlled in the atmosphere with all the skill and dexterity of a horseman: that is why they mastered the glider first, to learn the air and its ways, and could fly and control it in winds of up to 30 m.p.h. When they came to make a powered machine they retained the horse-and-rider concept, and succeeded brilliantly."—*Charles Gibbs-Smith, in "The Times", reviewing half-a-century of powered flight in Britain.*

* * *

"As your page is probably the most widely read 35-mm. opus, you might like to help me find the owner of a 35-mm. camera which I found by the road-side in the Micheldever district. The police have been unable to trace the owner and, consequently, tell me that it is mine. I developed the film and enclose the negatives. Publication of one of the photographs might locate the owner." *Letter to "The Amateur Photographer", which prints a photo from the negative showing John Cotton sitting in his sailplane.*

BOOK REVIEWS

TWO BOOKS FROM POLAND

Le Vol a Voile en Pologne: by WLODZIMIERZ HUMEN. Published by Editions "Polonia", Warsaw, 1958.

THE author of this book, which is in French throughout, is president of the Gliding Committee of the Polish Aero Club. It is mainly historical, and the first glider mentioned is the "Lotnia" of 1896, designed and constructed by Czeslaw Tanski, a contemporary of Lilienthal. We are not told how it flew, but he was still active in 1911, building his first aeroplane.

News of a world gliding record of 21 minutes, put up at the Rhoen in 1921, stimulated the Polytechnic School at Warsaw to build a glider; others followed, and in 1923 came the first Polish gliding contest, at which "each flight, in fact each manoeuvre in the course of a flight, had surprises in store of which the explanation brought new discoveries." It was held in afforested hilly country; nine gliders took part, 18 flights were made, and Tadeusz Karpinski won with a flight of 3 mins. 14 secs.

The next contest, held among low hills near Gdynia, gave poor results, and it was not until 1928 that the first real soaring flights in Poland were made. Then things got really started, including the training of new pilots: from 4 instructional flights in 1928 the figure rose to 41,200 in 1934, when there were 80 gliding groups active. A third and fourth national contest were held in 1935 and 1936 at Ustianowa in the Carpathians; then, as thermal soaring had become well established, in 1937 the national contest was moved to a flat site (for the first time in any country, though the author does not say so). Polish pilots were invited to the German contests on the Wasserkuppe in 1932, and went there again for the 1937 international contest, where they did extremely well, Zabski winning the altitude prize and Mynarski sharing the distance prize.

By 1939, the author points out, Poland was second only to Germany in the total number of Silver C certificates earned. Incidentally, Great Britain then came third.

Na Falach Halniakowych: by ADAM ZIENTEK. Published by Wydawnictwo Ministerstwa Obrony Narodowej, Warsaw, 1956.

THIS book, by our principal contributor from Poland, is all about soaring in waves, though according to its title it deals with the foehn wind (Halniak). It is true that good waves are often found in foehn winds, but they occur in other winds as well; nobody would call the Helm Wind warm!

A chapter on famous waves in other countries includes, of course, the Bishop Wave projects, and the Southern Alps. The section on Germany mentions Klöckner's 37,000 ft. record over the Alps in 1940, but not the first wave flights in history, which were made among the Giant Mountains of former Silesia in a region which is now part of Poland and is called Jelenia Gora. And in the British section there is a translation of Philip Wills's description of his cross-country wave flight from Camphill during the 1954 Internationals. Would you like to know what he and his crew (call-sign "Justin") really did say to each other over the radio? Here it is:

"Justyn? Tu Filip. Czy sylszysz? Odpowiedz!"

"Filip? Tu Justyn. Glosno i wyraznie. Odpowiedz."

"Lece nad chmurami, nie widze ziemi. Wysokosc 1500, wznoszenie. Polozenie—okolo 8 km na wschod od Sheffield . . . Jedz do East Retford. Gdy tylko zorientuje sie, podam ci dokladna pozycje. Odpowiedz."

"Zrozumialem. Bywaj!"

A gliding pundit in the R.A.F. once asked to be recommended "a good book on lee waves", as if there were at least a dozen of varying merit to choose from. This, so far as I know, is the first complete book on the subject ever published.

A. E. SLATER.

National Gliding Week

26th July-4th August

As reported in the February issue, this year's National Competitions will be run on a regional basis. Six clubs will be taking part, covering the following areas:—

CENTRAL REGION.—Derbyshire & Lancashire Gliding Club, Camphill, Derbyshire .. .. (12)

LONDON REGION—London Gliding Club, Dunstable, Beds. (20)

NORTHERN REGION.—Yorkshire Gliding Club, Sutton Bank, Yorks. .. .. (20)

SCOTTISH REGION.—Scottish Gliding Union, Portmoak, Kinross .. .. (12)

SOUTH-EASTERN REGION.—Kent Gliding Club, Detling, Kent .. (20)

WESTERN REGION.—Bristol Gliding Club, Nympsfield, Glos. (20)

The numbers in parentheses denote the maximum number of competitors the Club will be able to take, including home entries. This total is 104.

Pilots wishing to enter must apply to the British Gliding Association (not to a Club) by 19th June on the official entry form, enclosing the fee of £6. Gliders must have a B.G.A. or A.R.B. Certificate of Airworthiness, and the 1st pilots must have a Silver C, or a B.G.A. or A.T.C. Instructors' Category. Launches will be paid for as required.

There will be no National Winner, each Centre awarding prizes for the winners at its own site. There will be no handicapping, and gliders may be flown by Individuals or Teams; two-seaters may be flown with one or two occupants at the discretion of the 1st pilot. Marks will be awarded to the glider and not to the pilot.

Tasks will be set each day by the Club organisation to suit local conditions. Weather information for the benefit of the Task-setters will be prepared centrally by C. E. Wallington (who arranged the weather for the last Nationals at Lasham), and transmitted to each of the Centres before briefing. One of the following tasks will be set each day:—

Free distance.
Pilot-selected Goal.
Speed flights (point-to-point, out-and-return, dog-leg or triangular).
Distance along a set line.

Launching may be by winch, car, or aero-tow. If mixed launching is used, pilots having winch or car launches will receive a bonus of 5 miles on distance flights. The starting order will be by pilot selection—each pilot, after briefing, marking the take-off time of his choice on the starting board.

Speed flights will start and end with the crossing of a line arranged by the organisers. If the start line is not crossed or seen to be crossed, the time will be taken as the release time.

Turning Points will be manned by Official Observers, who will put out markers, and change them at irregular intervals. Pilots must bring back sketches of the markers, and the time of observation.

The marking system will be very similar to that used in the last Nationals. Each flight will be awarded a number of marks, and at the end of the day these will be reduced to points. The best glider will receive 100 points, and the others in direct proportion. If there are more than four contest days, the worst day of each glider will be disregarded. The speed marking has been modified so that the proportion of marks for distance and speed are now equal, whereas previously 40 marks were given for distance and 60 for speed.

Here are a few points from the Supplementary Regulations, Part 1, of the participating Clubs.

DERBYSHIRE & LANCASHIRE.—All launches by winch or bungey at 4s. per launch. No accommodation is offered, but tent and caravan space will be available, as will be meals for competing teams.

LONDON GLIDING CLUB.—All launches will be by aero-tow at 15s. a launch to 2,000 ft. Owing to the configuration of the site, it is necessary that competitors should have done 20 aero-tows before arrival. Camping space will be available, and probably some tents. All meals can be obtained in the clubhouse. There will be a Closing Party at the end.

YORKSHIRE GLIDING CLUB.—All launches will be by winch at 3s. each. Pilots must have some hill-site experience. Camping space and some tents available; all meals will be available on the site.

SCOTTISH GLIDING UNION.—Launches

will normally be by winch at 3s. (single seaters) and 4s. (two-seaters) each. Under some conditions aero-towing will be used, and this will cost 15s. to 2,000 ft. Camping space will be available, but it is expected that most competitors will stay in the local hotels. Refreshments will be available on the site, but full meals cannot be arranged. There will be a party on the last evening.

KENT GLIDING CLUB.—Launching will be by winch and aero-tow at 3s. and 15s. a launch respectively. Camping space will be available, and breakfasts for teams will be served on the aerodrome. There will be no other meals, although refreshments will be arranged.

BRISTOL GLIDING CLUB.—Launches will be by aero-tow at 16s. each to 2,000 ft. If the weather is unsuitable for this, winch launches will be provided and cost 4s. a launch. Hill-soaring experience is essential. Camping space will be available, and a few caravans may be hired. All meals will be served in the clubhouse.

It is hoped that full results from all the Centres will be published in the October issue of SAILPLANE & GLIDING.

A.W.

The AV-36 Mk. II

by Charles Fauvel

Now in production under this name is an AV-36 incorporating various improvements and advantages:—

Very powerful brakes, of the type used in the two-seater AV-22 No. 2, allowing very short landing runs: sink 2.5 m./sec. at 60 km./h.; 8 m./sec. at 100 km./h.; 28 m./sec. at 155 km./h.

Moulded shapes at each wing tip. Enlarged ovoid fuselage. Blown bubble canopy, giving excellent visibility and allowing quick escape from the cockpit—similar to that with which German AV-36s have been equipped for the past two years.

Special launching hook on the nose; exclusively for towing. Fixture for oxygen bottle. Increased efficiency of directional control.

Exceptional strength: safety factor 12 up to a total weight of 215 kg. (457 lb.), including 105 kg. (210 lb.) of disposable load, or 10 for cloud-flying up to 258 kg. (569 lb.), including 138 kg. (304 lb.) of disposable load.

Resulting improved performance: maximum glide ratio 26 (like that of the AV-22 two-seater); minimum sink reduced by 5 cm./sec. to 0.74 m./s. (2 ft. 5 in./sec.) with average pilot.

Price on delivery at Cannes, Alpes Maritimes: 1,350,000 fr., in complete flying order, without instruments or pilot's harness.

Gliding Certificates

SILVER C CERTIFICATES

No.	*Name*	*Club*	*Date*
712	B. Masters	Surrey Gliding Club	17.2.58
713	G. H. Daniels	Bristol Gliding Club	18.2.58
714	R. A. Hellewell	Yorkshire Gliding Club	16.2.58
715	P. J. Bulman	Cambridge University Gliding Club	24.3.58

C CERTIFICATES

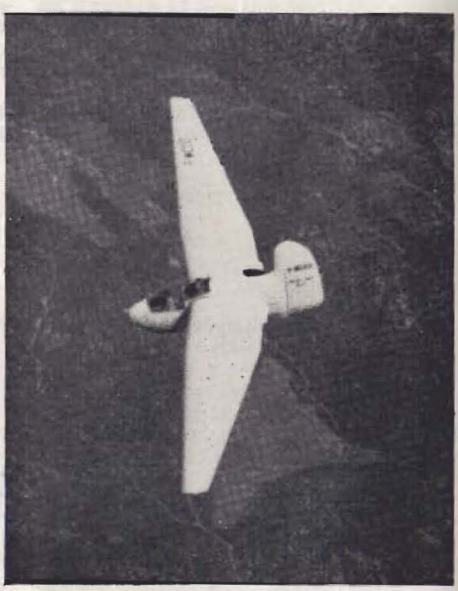
Name	*Gliding Club or A.T.C. School*	*Name*	*Gliding Club or A.T.C. School*	*Name*	*Gliding Club or A.T.C. School*
E. M. Black	London	B. Hollingworth	Derbyshire & Lancashire	B. H. Illston	London
R. Bishop	Bristol	M. A. Kelly	RAF Geilenkirchen	C. Moore	Kent
D. L. E. Parkin	Kent	N. C. Westwood	London	A. F. Thomas	Bristol
S. J. Easton	621 G.S.	J. C. Lennard	I. of Wight	E. F. R. Smith	Surrey
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AV 22 Two-seaters

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AV 22 No. 02. St. Auban Centre, August, 1957. In production.

AV 36

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Westward Ho!

by David Ince

By flying 315 miles from Lavenham, Suffolk, to Land's End, in the Olympia 419 which A. J. Deane-Drummond is to fly in the World Championships, David Ince not only beat the United Kingdom local distance record set up the day before by Nicholas Goodhart, but came within three miles of the latter's British National distance record set up in Texas in 1955.

APART from the inevitable $n+1$ years of winter planning, it all really began at about 6.30 p.m. on the night of the 12th April. News had reached Lasham of Nick Goodhart's successful dog-leg flight and there was every indication that similar conditions, although cloudless, would persist during the following day.

Although its A.R.B. flight test programme had been completed, the Olympia 419 was festooned with a variety of pitot and static heads and total-energy blisters, and the cockpit was liberally filled with coils of rubber tubing. I even had the advantage of two A.S.I.'s! Our programme was roughly as follows:—

SATURDAY

6.45 p.m. Warned tug pilot for early start—ostensibly calibration total energy venturis.
7.00 p.m. Left Lasham.
8.30 p.m. Arrived Ealing.
9.00 p.m. Rang private met. man—sufficiently optimistic forecast to maintain plan.
9.30 p.m. Food.
10.00-11.30 p.m. Drawing lines on maps.

SUNDAY

5.00 a.m. Wife out of bed.
5.15 a.m. Self out of bed—strato cu.—rang private met.—no forecaster—decided to press on.
5.30 a.m. Harry Midwood out of bed.
5.45 a.m. En route for Lasham.
7.15 a.m. Arrived Lasham.
7.30-8.45 a.m. Waking tug pilot, D.I., fumbling and breakfast.
8.50 a.m. Airborne.

The next two hours were wearing in the extreme as, with Cliff Dowdall up front, we ground our way towards Bury St. Edmunds at about 2s. a mile. The strato-cu was still there and its base remained stubbornly at about 2,500 ft. a.s.l., with the amount increasing from 3/8ths at Lasham to nearly 8/8ths at Watford as we followed our route to Bury St. Edmunds.

Flying in the turbulent sandwich between IMC and the ground, my thoughts grew blacker and, although I was not thinking of this at the time, Cliff's fuel contents got lower and lower. Near Stradishall, Cliff started to make frantic signs which suggested to me that either I was giving him a very rough ride (which I was) or he was lost (which he was).

Just then the clouds started to break up and my spirits lifted, only to drop into my boots again as the tug started a long let-down towards Lavenham. Lavenham I knew to be roughly on my 500-km. circle centred on St. Just, and by the time we arrived over the middle of the airfield at about 1,200 ft. I was beside myself with rage. Casting off just after 11.00, I flew eastwards for a short distance and was fortunate to pick up a good, though rough and narrow, thermal on the far side of the airfield. Consigning Cliff to a fate worse than death, I climbed fairly rapidly away to about 3,000 ft. a.s.l., drifting in the strong north-easterly wind, which I judged to be about 25 knots.

For the time being, in view of the low ceiling of the thermals (which did not exceed 3,200-3,300 ft.), I contented myself with remaining airborne and endeavoured to take stock of the situation. All was well with the Olympia 419 except that the lack of a ventilator—yet to be fitted—meant that I had to fly with the clear-vision panel open. This was no hardship, apart from the loud noise which tended to mask all other sounds.

As I passed over Wethersfield and then south of Harlow New Town, it became clear that some more positive action was required if I was to avoid a journey across the centre of London, which would have carried me

with the wind far south of the intended track. As an added incentive, conditions towards and on track looked slightly better. I therefore turned starboard near Waltham Abbey and, crossing several small cloud streets, I reached Watford at 12.25, just under 1 hr. 25 min. from release.

At this point, with a sky of about 3/8-4/8ths thin and flattish cumulus lying in streets down the north-east wind and with visibility of about 20 miles, things looked fairly promising. I had the never-ending problem, however, of a maximum height not exceeding about 3,300 ft. with strong sink in the areas between the cloud streets which I was forced to cross. An additional problem was the very broken nature of the thermals below 1,500 ft. above ground. It was the sort of day when one was forced, at low altitude, to return continually towards the thermal source, and where small wisps of cloud were continually forming upwind of the main cloud body. Fortunately, at this stage, as the barograph trace shows, the thermals were plentiful and I steamed on with only moderate anxiety, aided by the splendid north-easterly wind. There was a slight hiatus between High Wycombe and Maidenhead when the Thames got a little close below, then on past Reading and Hampstead Norris to Welford at 13.12.

It was after passing over R.A.F. Yatesbury and deciding to photograph Calne that the trouble began. It was now about a quarter to two; I was at a relatively low altitude, up-sun of the town and well established in a thermal, and a photograph seemed a good idea. Sufficient to say that a few minutes later I was scraping the barrel in the lee of the hill south-west of Calne with every prospect of an early landing. So much for photography!

At this point the magnificent 419, aided no doubt by her pilot's anguish at the thought of his crew's exertions and a vastly expensive aero-tow, somehow managed to remain airborne. Fortunately, after several pathetic efforts to climb away, each followed by an upwind dash towards the thermal source, a tiny cloud shadow drifted over the ground, a reasonable thermal collected itself, and I was tossed back to sanity 2,000-odd feet higher and some miles downwind of Lacock Abbey, which I had lately been admiring from such close quarters.

It was about this time that the whole character of the flight both inside and outside the cockpit underwent a marked change. On the one hand, the distance already covered and the time of day, together with the strong tail-wind blowing, suggested that Diamond C distance might be possible, provided that one could remain airborne. On the other hand the very shallow unstable layer and the lack of cloud in the sky ahead suggested that it might well be quite impossible to remain airborne for very long.

If the thermals, which until now had been frequent, became fewer, larger and further apart as the day wore on, it might be equally impossible to bridge the gaps between them. The technique therefore became that of staying as high as possible at all costs, without making any effort to travel fast, relying on the wind to look after that aspect of things. It also seemed likely that the best lift would now be found on the lee slopes of hills which were facing direct into sun.

Thus fortified, or otherwise, there was in fact no difficulty in remaining airborne over Trowbridge and Frome, and although the Mendips were rather close for comfort they provided a wind-shadow thermal which carried me well on the way across the low ground towards Taunton. Here again, after creeping over the south-east corner of the Quantocks I was saved by a wind-shadow thermal. Aiming for a point slightly north of Okehampton, the southern edge of the Brendon Hills and the high ground north-west of Tiverton were equally good sources of further wind-shadow thermals.

By this time I was working exclusively on a combination of small puffs of steam in the sky and wind-shadow sources on the ground. Unfortunately neither of these were evident between my present position some five miles west of Tiverton and the northern edges of Dartmoor about 30 miles away. Another long straight glide, ending up virtually in a gully and straight into a great hiccuping wind-shadow thermal.

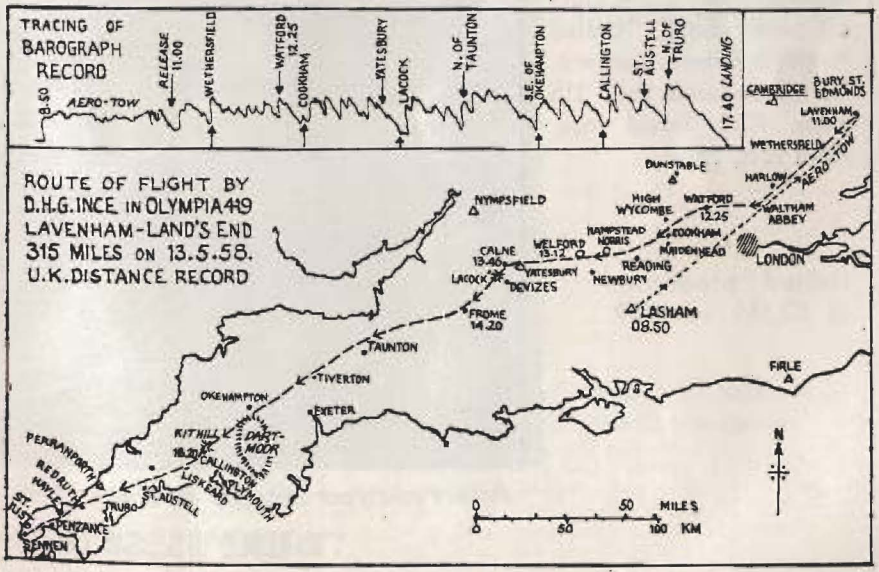
And so, with two more well-spaced thermals in the lee of Dartmoor, I was carried to another less drastic low point in the lee of Kit Hill north-east of Callington at 16.20. This worked up into one of the best thermals of the day and carried me to over 4,000 ft. approaching Liskeard. From there two more great strides with a short climb and some zero sink north of St. Austell, and another climb to over 4,000 ft.

drifting downwind north of Truro, and we were home—or were we . . .?

Between Redruth and Hayle is a memory of strong red ball and final glide charts until, as Penzance hove in sight somewhat horizontally ahead, the red ball settled down to a more normal figure. Fortunately for my morale, someone was having a large bonfire on the moors north of Penzance, and I was able to float along in the smoke for some distance. This had the double merit of concealing the nearness of the ground and persuading me that I was extending the final glide. Finally even the smoke gave out and I was left looking up at the wireless masts of Land's End ahead, meanwhile dreadfully aware of the small stone-walled fields below and my responsibility for the safe-keeping of Tony Deane-Drummond's World Championship aircraft.

My goal, the airfield at St. Just, cunningly safeguarded and concealed by its protecting barrier of high ground, was quite out of the question. The field I finally selected almost on the coast, two miles south-south-west of St. Just airfield, was satisfactory, the landing (at 17.40) fortunately in keeping with my responsibilities; but when Anne and Harry Midwood arrived at 23.30 it took us until 03.00 to get the car and trailer into the field, load the glider and get out again—and this only with the help of the farmer and his tractor. One can only conclude that the best sailplanes have too long a span and the best trailers are too wide!

Driving back on Monday morning, there was time to appreciate and be grateful for the many contributions to the success of this flight. First and foremost the Olympia 419 and all the long development behind it—a wonderful aircraft for the Championship pilot which must surely go into production. Lasham Gliding Centre, without which the long aero-tow north-eastwards would have been impossible. Who could imagine an expedition of this sort from any British gliding club a few years ago? Finally, and not least, Anne and Harry Midwood for encouraging me in my foolishness, for getting up at an unearthly hour on a Sunday morning, for driving hundreds of miles and for going 40 hours without sleep. Without them it would have been quite impossible.



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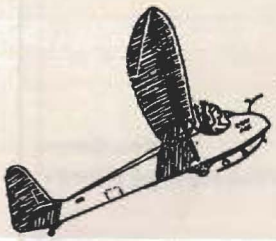
OLYMPIA EON 415

15 metre wing span. To be flown by Cdr. G. A. J. Goodhart R.N., 3rd in British Nationals, 1957.

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TION IN ACHIEVEMENT



ITS - ALL - YOURS

For and About Instructors



by Ann Welch

THE B.G.A. Instructors' Conference was very well attended, about 100 people turning up. The main subject for discussion was accidents and how they could be avoided, and not only did everyone have their say, but it was clear that a great deal of intelligent thinking had gone into the sense that was talked. It was obvious to me that in the Club C.F.I's. we have people who fully understand the problem and are quite capable of dealing with it.

Unfortunately, the answer to field landings damage is not wholly in the hands of the instructor, because he is trying to do something for which he has not got adequate equipment. To teach pilots to land in fields in the most satisfactory way requires (1) an instructor who is experienced in field landings, (2) proper briefing, and (3) dual instruction in a cross-country glider actually landing in fields. Unfortunately the majority of clubs have not got suitable two-seaters, or if they have they cannot spare them for this sort of work; further, the majority of instructors are so hard-worked at their club that they find it difficult to do adequate cross-country flying themselves. The result of this is that instruction in field landings is often academic, and the briefing on the actual day sometimes inadequate.

Until the facilities for cross-country training can be improved, it is vital that the theoretical instruction, and above all the sense of discipline in the pilot, must be as good as possible. The pilot must be really *used* to flying locally with his altimeter set a.s.l. and, in addition, without any altimeter at all under 1,000 ft., so that he will be able to choose his field and break off his further attempts to soar at the height stated by his instructor. Most pilots do not deliberately leave their approach planning until too late in their first cross-countries, but because they fail to realise in time that they have got confused over their altimeter setting and reading. It is only the minority that allow themselves to chase elusive thermals low down in opposition to their briefing, although this tendency may increase with growing confidence!

Pilots flying locally prior to their first cross-countries should also carry maps, and use them. This will not only give them a better understanding about variations in the height of land, but will have taught them to control the large and unmanageable pieces of paper which often litter the cockpit during the first real field landings.

Even if the instructor has never done a cross-country flight himself, he should realise that his pupils sooner or later will do so, and he should take every opportunity to train their (a) powers of observation, and (b) sense of responsibility from the very first time that they go into the air. They should be persuaded to study fields and what grows in them, to search for wind indications, and for distant landmarks. At all times, within the limit of their experience, they should have responsibility and the need for proper planning thrust upon them. Landing in fields safely, every time, is not easy, and adequate preparation and training is needed for success.

A further case, in which the lack of material facilities prevents the best method from being employed, is that of first solos. While agreeing that the ideal was to solo the pupil on the two-seater in which he had done his training, most instructors stated that this was not possible with the equipment at their disposal. It was felt that as long as the first single-seater was similar in

character to the two-seater, the existing method was adequate for normal use. The argument for solo-ing on the two-seater was put in the December 1957 issue of SAILPLANE & GLIDING, and I do not propose to repeat it here; but there is one point which was not raised, and which is particularly applicable to those at flat sites who want to get the longest time in the air from all their gliders. It is this. If the early solo flying is done on the two-seater, it is possible to cut out all secondary gliders of low or medium performance. Transferring the pupil after, say, 12 solos on a T-21B to an Olympia is entirely practical and safe, and the inexperienced pilot gets more flying from each launch—the glider soars better, and glides down slower. This is not to suggest that any secondary gliders the club possess should be sold, but when the time comes for replacement, this point should be given due consideration, particularly in view of the difficulty in getting new secondaries at the present time.

Another point brought up at the Instructors' Conference was the desirability of declaring goals for all cross-country flights, so that farmers would only have uninvited visitors if the flight failed in its intention. I have therefore collected some relevant information on gliding clubs, as a start, assuming that soaring visitors will be welcome! This information takes the place this month of the featured C.F.I. He will be back in the next issue.

The Accident Analysis Report by Air Commodore Paul was the basis for discussion at the Conference, and the lively argument which followed was the direct result of the careful preparation by its author. Unfortunately, he wasn't really able to get a word in edgewise afterwards, and so just had to sit and think. His thoughts follow in the form of a letter; further letters from any instructors with bright ideas will be welcome.

EXPERIENCE AND JUDGMENT

To The Editor, SAILPLANE & GLIDING.

Sir,

Having been privileged to hear the views of the Instructors gathered in Conference before the Annual General Meeting of the British Gliding Association, I have naturally given them much thought, and would be grateful if I might now express some opinions of my own.

I am particularly interested in the relationship between pilot experience and judgment, which is, of course, of considerable importance in accident prevention. In the discussions which arose from my statements that the Approach to Land had proved the most costly phase of flights in 1957, varying views were expressed on how best to remedy this defect. I gained the impression, however, that differences were more in semantics than practice, and that were it possible to put each speaker into the flight situation being discussed, their reactions would all have been very similar. This is, of course, to be expected of pilots who have achieved a skill of judgment which permits constant and automatic re-assessment of a changing situation, and well-gauged adjustment of the flight path to match it.

A pupil, however, cannot possess such judgment. Consequently he must be persuaded to accept some set rules which he can follow whilst his own judgment is developing. In the case in point he needs to follow a planned approach pattern, which will ensure his safe arrival back at the landing point. There is, however, more than this; for wherever traffic is dense, pilots must conform to pre-determined and known rules of the air; without this a collision risk exists. This applies both to airfield circuit patterns and to ridge-flying; but clearly, there is little other air traffic to compel a lone cross-country pilot to approach a small field using a fixed pattern of approach that may be essential at his home base. There seemed to me to be a tendency to present this business of approach planning as a conflict between rigid adherence on all occasions to a standard pattern, versus uninhibited individual enterprise everywhere. Like most things the answer is, I suggest, "Judgment." Until he has it, a pilot must follow pre-set rules. When he has it, he will know when and how to apply the rules; the wise Instructor will himself judge the progress of his pilots by observing the growth of their judgment. In fact, I now believe that Accidents on the Approach which gave rise to such expense in 1957 were to a great extent due to inexperienced pilots being allowed "off the leash" before their Instructors had made certain that they had acquired the necessary judgment.

Development of judgment is involved in a further point of interest. Can an Instructor be allowed to do things with his aeroplane which would not be permitted to a pupil? I think he must; for in no other way can he either extract the maximum performance from it, or achieve and maintain the agility in his own flying necessary to be certain that he can recover successfully from the awkward positions that his pupils will from time to time put him into. An Instructor whose flying is never enterprising becomes dull, stuffy and uninspiring; and ultimately, one who takes over control from his pupil before he should. This is neither licence to indulge in enterprising flying at the wrong moment, nor to fly dangerously. Neither can there be any deviation from orthodox methods when demonstrating to a pupil. Again, to achieve this balance requires judgment; and a pilot however skilled cannot become a good Instructor without judgment also. This is not the sort of thing that shows up in a categorisation test, which by its nature is a test of the skill and knowledge of a pilot on his best behaviour. It is something which can only be adequately assessed by the C.F.I., exercising his own sound judgment.

On another point, I remarked upon usual repetition of accidents due to spoilers unlocked, and canopies blowing off in the air. Most cockpit checks depend upon some sort of mnemonic. CISTR, TAFIOH, BAUFF, all have their uses and advocates. How about a new one for sailplanes?

H Hood, harness
I Instruments
S Spoilers
T Trim
C Cockpit (flying) controls operating freely and correctly.

Appropriately, do you agree, "HIST, Cock"?

CHRISTOPHER PAUL.

THE ADVENTURES OF JOE

JOE had been waiting impatiently for at least two weeks to try for his Silver C cross-country, but it had always been someone else's turn. On this particular morning he was out of luck again, and sadly watched the club glider floating away into the distance. It didn't go far, however, and within a couple of hours was back again with a rattle of trailer and a screech of brakes. Everyone jumped out and started to rig, because there were others on the list after Joe, and they did not want to waste a moment. The rush and scurry round the glider to get it rigged was phenomenal, and pins and safety-pins were going in and out faster than the eye could follow. Joe really felt his chance had come at last; a cable was actually waiting, and, better still, a beautiful cumulus floated over just as he got airborne. Soon he was up and away, but all too soon had landed again some 20 miles down the road. Joe parked the glider, telephoned, and in due course the trailer came. The crew jumped out and started to de-rig. Unfortunately it was an instructor who removed the wing root fairing strip, and a glassy stare came over his face.

Then something clicked in Joe's brain. "Oh dear", he said, ruefully, pulling the rear spar pins from his pocket, "I must have completely forgotten to put them in when we rigged. I suppose that explains why the thermals creaked."

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Name of site	*Club(s)*	*Telephone No.*	*Position*	*Height ft. a.s.l.*
LASHAM	Surrey, Army, Imp. Coll., Crown Agents, Polish A.F.A.	Herriard 270	Between Alton and Basingstoke	600
NYMPSFIELD	Bristol	Uley 342	3 miles S.W. Stroud	400
CAMBRIDGE	Cambridge University	Cambridge 56291	Marshall's 2 m. E. Cambridge	50
BAGINTON	Coventry	Toll Barr 3176	3 m. S.E. Coventry	270
EDGEHILL	Coventry		5 m. N.W. Banbury	640
CAMPHILL	Derbyshire & Lancashire	Tideswell 207	8 m. N.E. Buxton	1,350
DETLING	Kent	—	4 m. N.E. Maidstone	600
DUNSTABLE	London	Dunstable 419	2 m. S.W. Dunstable	500
LONG MYND	Midland	Linley 206	4 m. S.W. Church Stretton	1,500
USWORTH	Newcastle	—	3 m. W. Sunderland	120
WESTON ON GREEN	Oxford	—	10 m. N.E. Oxford	260
PORTMOAK	Scottish G.U.	Scotlandwell 43	1 m. S.E. Loch Leven	400
FIRLE BEACON	Southdown	—	4 m. N.E. Newhaven	700
SUTTON BANK	Yorkshire	Sutton 237	6 m. E. Thirsk	900
SHERBURN-IN-ELMET	Yorkshire		13 m. S.W. York	30
DYCE	Aberdeen	—	6 m. N.W. Aberdeen	340
WOODFORD	Avro	Bramhall 1291	5 m. N. Macclesfield	300
SQUIRES GATE	Blackpool & Fylde	Southshore 43529	2 m. S. Blackpool	30
CRANFIELD	College of Aeronautics		8 m. S.W. Bedford	360
PERRANPORTH	Cornish	Perranporth 3177	7 m. N.W. Truro	320
RADLETT	Handley Page	Radlett 5651	2 m. S. St. Albans	290
SANDOWN	Isle of Wight	Sandown 646	1 m. W. Sandown	60
SYWELL	Northampton	Moulton 3198	6 m. N.E. Northampton	430
TEBAY GILL	Lakes			
POLEBROOKE	Perkins S.A.G.C.		4 m. S.E. Oundle	220
DUNKESWELL	Taunton Vale		5 m. N. Honiton	840

THE UNITED KINGDOM

Lat. and Long.	*Description*	*Aero-tows*	*Service or Civil*	*Days operating*	*Slopes*
51.11 N. 1.02 W.	3-runway aerodrome, some aeroplanes	Yes	Civil	Every day	None
51.43 N. 2.17 W.	Grass strip N.E.-S.W. on hill top	No	Civil	Weekends and summer courses	N. & W.
52.12 N. 0.11 E.	Large grass airfield with single tarmac runway, aeroplane traffic	Yes	Civil	Weekends and most weekdays	None
52.22 N. 1.29 W.	Grass field, light aircraft.	Yes	Civil	Weekends and some weekdays	None
52.05 N. 1.28 W.	3-runway aerodrome		Civil		
53.18 N. 1.43 W.	Grass strip N.-S.	No	Civil	Weekends and some weekdays	W. & S.
51.18 N. 0.35 E.	Grass airfield ¾ mile from ridge	Yes	Civil	Weekends and summer courses	S.W.
51.52 N. 0.32 W.	Undulating grass field at foot of Downs	Yes	Civil	Every day	W.
52.31 N. 2.53 W.	Heather covered hill top	No	Civil	Every day	W. & E.
54.55 N. 1.28 W.		No	Civil	Weekends	None
51.53 N. 1.14 W.	3-runway airfield	No	Civil R.A.F.	Weekends	None
56.12 N. 3.20 W.	2 grass strips N.W.-S.E. W.-E.	Yes	Civil	Weekends and summer courses	W. & N.
50.50 N. 0.7 E.	Undulating grass field on hill top.	No	Civil	Weekends	N. & NE.
54.15 N. 1.13 W.	Heather field on hill top	No.	Civil	Weekends	W. & S.
53.46 N. 1.13 W.	Runway aerodrome, light aircraft	Yes	Civil	Weekends	None
57.13 N. 2.11 W.	Runway aerodrome		Civil	Weekends and summer courses	None
53.20 N. 2.09 W.	Used for testing		Civil	Weekends	None
53.46 N. 3.02 W.	Runway aerodrome, other aircraft		Civil	Weekends	None
50.04 N. 0.37 W.	Runway aerodrome, training flying			Weekends	None
50.20 N. 5.11 W.	Runway aerodrome on cliff top	Yes	Civil	Weekends and summer courses	W.
51.39 N. 0.19 W.	Runway aerodrome, test flying		Civil	Weekends	None
50.39 N. 1.11 W.	Grass airfield, light aircraft		Civil	Weekends and summer courses	None
52.18 N. 0.48 W.	Used by light aircraft		Civil		None
52.28 N. 0.22 W.	Runway aerodrome	No No	Civil Works	Weekends	None
50.52 N. 3.14 W.	Runway aerodrome	No	Civil	Weekends	None

FO(U)RTH TO PERRANPORTH

by Wally Kahn

With this flight in the Slingsby T-42C of which Wally Kahn is part-owner, he and John Williamson beat the British National and U.K. Local two-seater goal-flight record of 131 miles previously held by the latter and David Kerridge, and also set up the first United Kingdom Local two-seater record for speed to a 300-kilometre goal. The Regal Eagle is red and white—hence its name.

It really was the day of days. The angel in charge of the weather was obviously very gliding-conscious and 12th April, 1958, must rank with 27th May, 1957, in the annals of gliding weather. It was just perfect—I had collected our new Eagle from Slingsby just two weeks before, it was a Saturday, and the unstable north-easterly had arrived at last. Lasham that early morning was a hive of activity. Nick Goodhart was rigging and soon he and his faithful tug pilot were ready to go. John Mackenzie had grabbed his tug pilot, which left me with two gentlemen who could not tow me to Cambridge because they had appointments later that day or something.

So there it was. That distance diamond flashed by like one of those new Television advertisements you cannot see. That left a nasty taste and the realisation that the only thing left was to try for the two-seater goal and speed records. My wife Margaret had been ill during the week and decided not to come with me, so I offered the back seat to John Williamson, who had just flown in from Malta on a week-end pass. The flight itself was ludicrously easy. After releasing over Odiham, which is four miles from Lasham, we covered 90 miles in the first two hours. John Willie navigated and worked out our rates of climb.

I fumbled over Exeter whilst John worked out that with 4,500 feet of height we could go straight across Dartmoor which would cut out that long but safer detour to the north round Okehampton. There are certain areas in this country which have bad gliding reputations, of which this is one, but I would like to place on record that Dartmoor did us proud that day—almost.

Dartmoor is famous for its prison and forbidding yet magnificent scenery. The spot-height by the prison is 1,761 ft. a.s.l., and by the time we were over it, our altimeter read 2,200 ft. a.s.l. Near the prison is a 750-foot radio mast, and one day I am going back to look at it from above. I despaired and wanted to join the convicts, but John encouraged me with tales of a valley full of thermals four miles on. Halfway there, the father and mother of all thermals picked up all 1,200 lbs. of Eagle and crew and wafted us up to cloud base. Another scrape (John said "No flight is worth while unless you have a good scrape") north of St. Austell did our nerves a power of no good, but again a 550-foot-per-minute thermal rescued us and gave us enough height for the final glide to Perranporth. After a dive at the maximum permissible speed over the aerodrome, we landed at 14.20 hrs., having covered 194 miles at an average speed of 43 m.p.h. The maximum height reached was 5,100 ft. a.s.l., which was just in cloud. The threat of ice and the lack of blind-flying instruments had decided us to stay out of cloud if possible.

Once on the ground, the very kind members of the Cornish Club took over and nothing was too much trouble for them. If you are thinking of a gliding holiday, Perranporth is the place for you. What could be better than this haven where you can enjoy cliff soaring, Cornish cream and sea bathing? Where the C.F.I. owns an Olympia, a Tiger Moth with a hook, a private beach and the key to the bar? Anne Burns joined us after an hour, having gained her Gold C and Diamond and set up five new records compared to our three. This being England, I felt almost indecent for having covered Gold C distance before 14.30 hrs. It does seem to show that on good days you cannot start too early. My crew broke other speed records in getting to me, and we returned to Lasham after a meal at that "Glider driver's Café" east of Exeter which stays open all night, arriving back at 05.00 hrs. on Sunday.

What advice dare I pass on? Buy an

Eagle! They are wonderful and really work. It is the only glider I have ever met which will accommodate all my six foot four inches and allow me to sit on a cushion as well. Having a really competent navigator like John Willie in the back is almost cheating, but well worth it. Always carry a loaded pistol in case the tug pilot has other engagements, and marry a wife like mine who does not feel well enough to fly but will retrieve without a murmur. Last, but not least, make sure you land on a gliding club site like the Cornish one, because the hospitality is out of this world.

Correspondence

GLIDERS OVER WARMINSTER

Sir,

I really must rise in defence of the good people of Wiltshire, particularly those in the Devizes and Warminster area who, according to Michael Stather Hunt, wander around seeing gliders all over the place like spots before the eyes. I can't help feeling that Michael was being just a little presumptuous in imagining that no other sailplane was using the same air at that time. There was at least one other Olympia over that artillery camp within 30 minutes of his visit on 28th May. I should know. I was in it. CHARLES ELLIS.

PARACHUTES IN SAILPLANES

Dear Sir,

I read with interest Mr. Stratton's letter, concerning the carrying of parachutes in sailplanes.

Cu-nims in this country go up to 50,000 ft. and in England probably to 40,000 ft. on occasions. Has Mr. Stratton considered what he would do if his canopy blew off in heavy hail at a speed of 50-60 knots and maybe a height of 25,000 ft.? Apart from fairly rapid deep-freezing, and exposure, he would probably be blinded fairly quickly, and his parachute would be his only hope.

Whilst I don't suppose all pilots will rush into large cu-nims at the first opportunity, the carrying of a 'chute gives you a safety factor if the chance appears. As for comparing gliders with civil aircraft and flying clubs, how often do light aircraft fly over 3,000 ft. and enter clouds, and why do airliners carry storm-warning radar?

Personally I will continue carrying a chute, as, if ever I need it, I am sure I will have little opportunity to go back and collect it! R. H. PRESTWICH.

Salisbury, Southern Rhodesia.

Dear Sir,

Your correspondent J. R. Salmond replies with some fervour to my letter on this subject and, in doing so, confirms my own impressions, that we carry "brollies" more for peace of mind than for technical reasons!

Since this correspondence began, two incidents have been reported in the Press which promote further thought. A glider was attacked by a large bird in Spain, and someone "ditched" off the coast of North Wales at Easter. The former reinforces the case for parachutes, but the latter suggests that "Mae Wests" would be more useful in this country at least, having in mind the numerous cases of fatal accidents which are reported annually amongst those who use the sea more intentionally as bathers or boating enthusiasts! R. B. STRATTON.

[In our own comments on this correspondence when it first began (February, 1958, p.37), we mentioned a parachute descent by the occupants of a Viking II sailplane during the war. Recently a correspondent on *The Field* wrote that "there is no record of a pilot flying a British glider ever having to bale out;" but J. C. Neilan wrote to correct this with a statement that he and R. F. Stedman once had to bale out of a military glider during its prototype testing programme.—ED.]

"SAILPLANE" OR "GLIDING"

Sir,

"Icarus Modernus", in support of his argument for the use of the word "GLIDING" as a title for your magazine, said: "Surely the world knows our sport as Gliding, our machines as Gliders and us as people who glide". This has not been my experience. I now find acquaintances who, when they

hear of my week-end activities, ask: "Are you a glider?"

Both the words "Sailplane" and "Gliding" may not be very good ones, and I should like to suggest that if it is essential to change the title of the magazine there is only one possible word we can use that is really descriptive of our sport. I mean "Skysailer". CHARLES ELLIS.

GOLD C DISTANCE

Dear Sir,

Laws governing Gold flights must be carefully framed. The law recently refused recognition to a flight of two legs because the second was less than the shortest leg recognisable (80 km.). But the first leg exceeded 300 km. alone and the start and end of this leg were authenticated. Although the pilot exceeded the Gold Distance his flight cannot be recognised. The Law is an Ass!

I hope the B.G.A. has already tabled an amendment to the rules of the F.A.I.

A. H. YATES.

[F.A.I. regulations about 80-kilometre legs and photographs of turning-points were framed to allow Gold and Diamond distance flights to be made over a two-legged or three-legged course, and for no other purpose; so it is not surprising that an attempt to apply them to a different kind of flight (300-km. in a straight line) has led to absurdity.

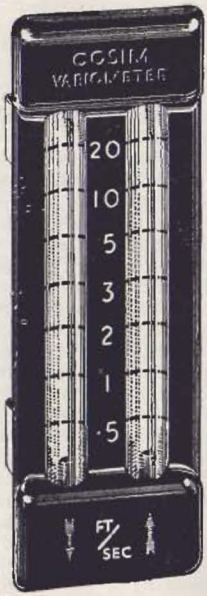
Before a new F.A.I. regulation can be voted upon and then promulgated, it must be proposed by some individual delegate at the F.A.I. Gliding Commission, and before that by some individual member of the body which instructs the delegate (e.g. the B.G.A. Council).

If there was such obvious need for a regulation allowing a pilot to photograph his 300-km. destination instead of landing there, why was it not proposed to the B.G.A. Council by the writer of the above letter, or by the representative of the club whose pilot made the flight in question? True, the Ruritanian delegate to the F.A.I. showed the same lack of foresight, but does that make him an ass?—ED.]

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Ninth Argentine National Contests

by Gilberto Riega

This account is condensed from a report by the Director of the Contest, kindly translated by José Ortner, who won it with his Skylark III and became National Champion. Mr. Ortner flew in the British National Contests of 1949, and in most World Championships, but business will unfortunately prevent him representing Argentina this year in Poland.

THE Club Argentino de Planeadores Albatros had charge of the organization of this National Contest, which eventually turned out to be one of the rainiest ever.

Once again the Air Ministry collaborated with the loan of three Piper PA-18 and one Aeronca, apart from the other tow craft which were brought by the clubs. All expenses relating to petrol and oil were also covered by the Air Ministry, and besides this it donated the prizes for the first six pilots in the general classification, and also for the first three of each event. As if this were not enough, the Air Ministry donated to the winning club a Sky sailplane, and loaned for the period of one year a second Sky to the club who was classed second.

WEDNESDAY, 5TH FEBRUARY.—Should have been the opening day, but we were awaiting the arrival of a team from Brazil, which in the long run did not materialize.

THURSDAY, 6TH FEBRUARY.—During the afternoon the inauguration ceremony was held, and the Director of the Contest, Gilberto J. Riega, received from the Argentine Champion, José Cuadrado, the Band of the Argentine Champion which was to be once again at stake.

FRIDAY, 7TH FEBRUARY.—The task was a race along a dog-leg line Merlo-Brandsen-Veronica; total distance 154 km. The aerological sounding made during the morning revealed a stable atmosphere in the lower layers with an unstable gradient above 1,000 m.; this atmosphere would turn unstable with surface temperature of 29°C. As the temperature increased during the day to 31.5°C. cloud base rose to 1,500 m.

Flights began at 14.30 hrs., following the method stipulated by the contest rules—i.e. pilots choosing time of take-off. Actually this system failed on the first day due to deficiencies of pilots, tows, helpers and the organization as a whole. After launching the 26 gliders, the tow-planes started for Veronica, to be there when the first gliders arrived in order to make immediate returns to base. But only the seven high-performance sailplanes made it, the first to arrive being Ortner. Unfortunately not all the gliders were retrieved that day.

Leading scores: J. S. Ortner, 895; C. Zurborn, 890.

SATURDAY, 8TH FEBRUARY.—Delays in the retrieves decided the Sports Committee to declare this a non-flying day.

SUNDAY, 9TH FEBRUARY.—The Met. report said that an inactive cold front would pass over Merlo around 14 hrs. and would modify the conditions fundamentally, as a cold and damp mass of sea air would irrupt over the flying zone, displacing the warm dry air. These conditions in fact did take place, making it a good soaring afternoon, as it broke the great inversion which had us grounded. The Sports Committee decided on a short race from Merlo to San Antonio de Areco, 78 kms. The first to arrive was Araoz, who, with his Skylark III, made it in 74 minutes. Ortner took 3 minutes longer, but the winner of the day was José Cassais, who with his Grunau Baby took 85 minutes, and with the handicapping system employed displaced those who got there faster. Thirteen pilots made the goal. Mention must be made here that the Sports Committee always tried to choose tasks for the medium type of glider, i.e. not for Skylarks, nor for Babys, but rather for the Meise type.

Leading total scores: C. Zurborn, 1,710; A. Araoz, 1,694.

MONDAY, 10TH FEBRUARY.—Met. Report: an anticyclonic zone over Patagonia Province bringing maritime unstable air to the contest zone. Cirrus clouds from a stationary front south of Brazil invaded the zone at times, especially during the return, but without much influence. The task was an out-and-return: Merlo-

Navarro-Merlo, total 116 kms.; all gliders were in the air in 33 mins. 15 secs. A total of 17 gliders made it, the winner (with handicap) being Hossinger, flying a Sky, although Ortner was the first to cross the line with the shortest time of 128 mins. Five Grunau Babys also returned.

Leading total scores: J. Ortner, 2,430; A. Araoz, 2,418.

MONDAY, 11TH FEBRUARY.—Rain throughout the day; "hangar flying".

TUESDAY, 12TH FEBRUARY.—The sun shone and the met. report was: "Due to heavy rainfall during the last 24 hrs. (66 mm.) the morning would see the sky covered by very low stratified clouds; surface temperature with very little positive tendency; the condition of fields for landing very bad." Notwithstanding this, around 11 hrs. stratified clouds began to disperse slowly with a soft S.W. breeze. Although the original task set was a race round a 108-km. triangle, the small cumulus which had formed previously began to stratify, covering the blue. The task was therefore changed to a short out-and-return, Merlo-Lujan-Merlo, total 64 km. Six gliders completed it, with Ortner in the first place and stealing a lead on Araoz.

Up to this moment the Albatros Gliding Club was going to win without a doubt the "Fat" prize (the Sky sailplane). The Club de Planeadores Condor looked like getting the 2nd "Fat" prize (a Sky for a year's lease), but as will be seen later on, the races finish at the finishing line and not before, and this club would eventually lose to the Club de Planeadores Junin at the eleventh hour.

Leading total scores: J. Ortner, 3,318; A. Araoz, 3,244.

13TH, 14TH AND 15TH FEBRUARY.—Rain . . . rain . . . Camphill . . . Camphill . . . rain. Long faces, wet feet, wet spirits, wet everything.

SATURDAY, 16TH FEBRUARY.—Although the flying field appeared to be full of small lakes, the gliders were taken out of hibernation. The met. report said that a secondary cold front which had passed Merlo around 7.30 hrs. had swept away the low and medium clouds which were preventing ground heating. At 13.00 hrs. the temperature was 27.3°C., which assured the existence of utilizable thermals, which were eventually reported as being between 1½ and 2 m./sec., with isolated cases, inside cloud, of 4 m./sec. The task was the 108-km. triangle which could not be done on the 12th., i.e. Merlo-Lujan-Las Heras-Merlo; 23 gliders took off, 6 arrived back. Araoz won this event, followed by Hossinger 8 points behind and Ortner 8 behind Hossinger. Ortner, however, was the first to arrive back. Sadoux, with his 4th placing, managed to get the second Sky leased by the Air Ministry for a year for his Club (Junin).

Flights were now over and there only remained the prize-giving to finalize this Ninth Argentine National Contest. Ortner was given the Band of Argentine Champion, and then came the distribution of cups, plaques and medals.

In the midst of the toasts, Ortner was surrounded by burly helpers, bodily picked up and dumped in the pool. Araoz did not give the crowds the pleasure of "walking the plank"; he committed "harakiri" by plunging head first (hat and all) into the pool after a running dive. This fiesta ended with most of the committee, pilots and crew in the pool, getting wetter than they had got during those very wet, wet, wet contest days.

Final Positions

	Pilot	*Sailplane*	*Points*
1.	J. S. Ortner	Skylark III	3,458
2.	A. Araoz	Skylark III	3,422
3.	J. A. Sadoux	Sky	3,391
4.	R. Hossinger	Sky	3,350
5.	R. Bocksch	Sky	3,339
6.	C. Zurborn	Meise	3,096
7.	R. A. Bazet	Skylark II	2,713
8.	J. C. Ompre	Kranich 2	2,699
9.	J. C. Arteman	Rhönbussard	2,476
10.	R. F. Frene	Grunau IIa	2,250
11.	M. A. Conde	Rhönbussard	2,180
12.	C. Rodriguez	Grunau IIa	2,142
13.	J. A. Balbi	Grunau IIa	1,827
14.	C. Penna	Rhönbussard	1,822
15.	J. O. Casais	Grunau III	1,801
16.	C. Laperne	Meise	1,631
17.	E. C. Turchi	Grunau III	1,564
18.	J. F. Aracil	Grunau IIa	1,465
19.	J. Cuadrado	Grunau III	1,342
20.	H. Scheidhauer	I.Ae.41	1,272
21.	H. Macarron	Meise	1,194
22.	I. Corti	Grunau IIa	966
23.	L. J. Stanley	Fauvel AV-36	959
24.	R. Barreira	Grunau II	633
25.	E. Horhammer	Horten	407
26.	R. Ramil	Grunau IIa	401

Handicaps:—Skylark III, 0.61; Skylark II, 0.66; Sky, 0.70; AV-36 and Horten Clen Antu, 0.77; Meise, Kranich 2 and I.Ae.41, 0.80; Rhönbussard, 0.88; Grunau Baby, 1.00. (Tailless: AV, Horten and I.Ae.)

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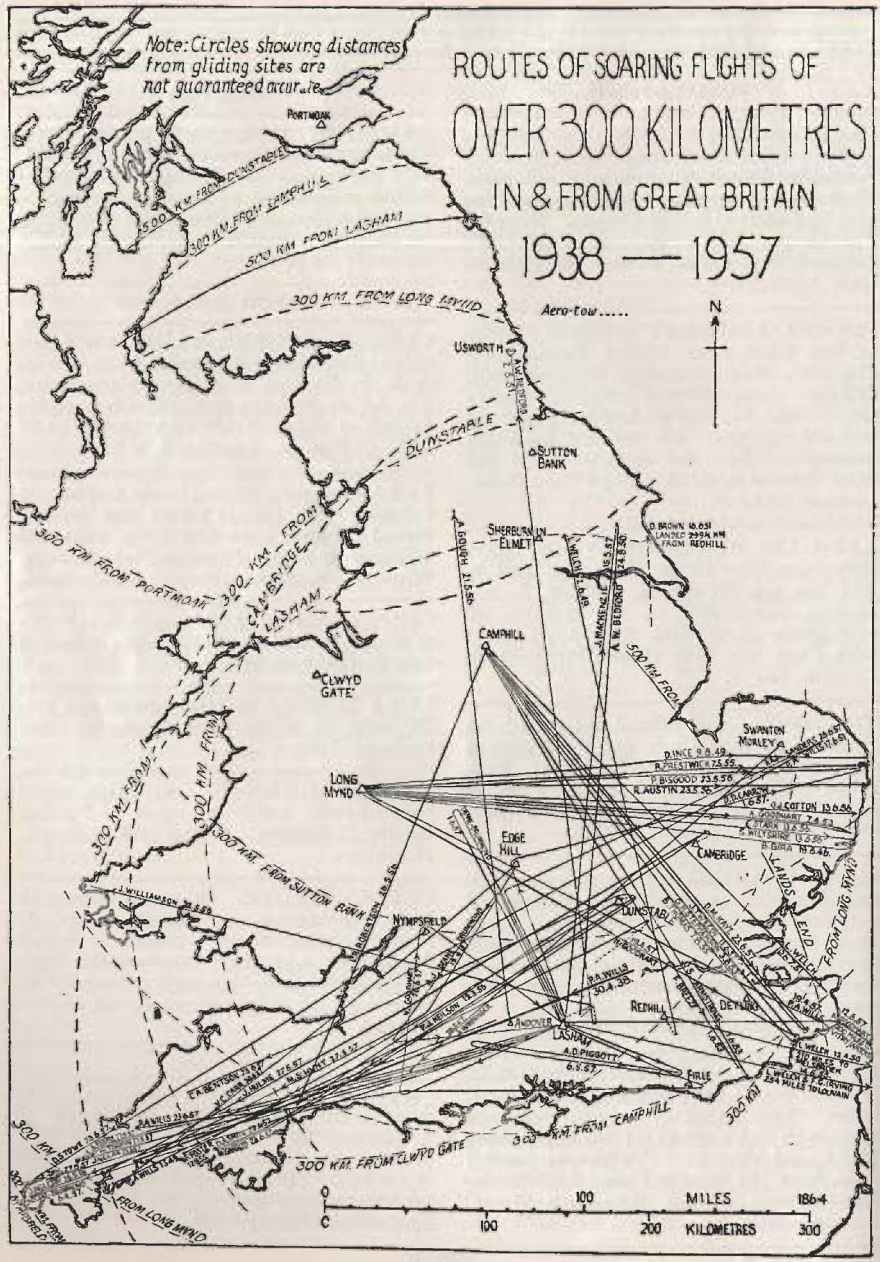
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DETLING
FIRLE
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500 KM FROM DUNSTABLE
300 KM FROM CAMPHILL
300 KM FROM LASHAM
300 KM FROM LONG MYND
300 KM FROM PORTMOAK
300 KM FROM CLWYD GATE
300 KM FROM SUTTON BANK
0 100 MILES 1864
0 100 200 KILOMETRES 300

DISTANCE FLIGHTS EXCEEDING 300 KILOMETRES IN GREAT BRITAIN: 1938-57

Date	*Pilot*	*Sailplane*	*Route and Remarks*	*Miles*
30.4.38	P. A. Wills	Minimoa	Heston-St. Austell (Br. dist. record)	209
18.6.46	B. Bira	Minimoa	Long Mynd-Aldeburgh(landed short)	187
1.5.49	P. A. Wills	Weihe	Hatfield-St. Gerrans (Brit. dist. R.)	230
2.6.49	L. Welch	Olympia	Redhill-Elvington	197
9.8.49	D. H. G. Ince	Olympia	Long Mynd-Caister (Goal)	193
12.4.50	L. Welch	Weihe	Redhill-Brussels	210
24.8.50	A. W. Bedford	Olympia	Farnborough-Gt. Driffield (Br. alt. R.)	193
2.5.51	A. W. Bedford	Olympia	Farnborough-Usworth (Br. dist. & goal record)	257
17.6.51	P. A. Wills	Weihe	Lulsgate-Coltishall (Goal)	196
26.7.51	L. Welch	Weihe	Camphill-Manston	190
7.4.53	G. A. J. Goodhart	Mü-13a	Long Mynd-Leiston (Goal)	189
1.6.53	J. S. Armstrong	Olympia	Camphill-Hastings	197
1.6.53	F. Breeze	Gull 4	Camphill-Icklesham	190
3.8.53	G. H. Stephenson	Sky	Camphill-Lympne (Goal)	193
7.5.55	R. H. Prestwich	Skylark 2	Long Mynd-Gt. Yarmouth	192
14.5.55	Welch & Irving	T42 Eagle	Lasham-Louvain (Br. 2-seat. dist. R.)	254
7.8.55	B. Thomas	Sky	Camphill-Ferryfield (Goal; UK spd. R.)	197
12.8.55	F. Foster	Skylark 2	Dunstable-Tideford (Goal)	194
19.3.56	P. J. Neilson	Skylark 2	Cambridge-Exeter	188
21.5.56	A. Gough	Olympia	Andover-Grassington	199
22.5.56	J. S. Williamson	Weihe	Lasham-St. Davids (Goal)	197
23.5.56	A. R. I. Austin	Olympia	Long Mynd-Lowestoft	192
23.5.56	P. L. Bisgood	Sky	Long Mynd-Gt. Yarmouth (G., UK speed record)	192
26.5.56	L. R. Robertson	Olympia	Camphill-Exeter (Goal)	195
26.5.56	J. Inglesby	Olympia	Thruxton-St. Just	189
13.6.56	E. Stark	Skylark 2	Long Mynd-Leiston (Goal)	190
13.6.56	S. R. Wiltshire		Long Mynd-Leiston (Goal)	190
13.6.56	O. J. Cotton	Skylark 2	Long Mynd-Southwold	194
6.4.57	Deane-Drummond	Skylark 3	Lasham-St. Just (Goal)	215
19.4.57	Deane-Drummond	Skylark 3	Lasham-Kingham-C. Cary-Lasham (UK speed record)	188
19.4.57	P. A. Wills	Skylark 3	Long Mynd-Folkestone	198
19.4.57	G. A. J. Goodhart	Skylark 3	Long-Mynd-Lympne	193
30.4.57	V. C. Carr	Olympia	Edgehill-Mevagissey	190
6.5.57	A. D. Piggott	Weihe	Lasham-Lewes-Salisbury-Lewes	199
15.5.57	J. K. Mackenzie	Skylark 2	Lasham-Gt. Driffield (Goal)	202
27.5.57	J. Hulme	Skylark 2	Cambridge-Truro (UK distance R)	268
27.5.57	E. Day	Sky	Lasham-St. Ives	216
27.5.57	W. N. Tonkyn	Kite 2	Lasham-Perranporth (G., UK spd. R)	190
27.5.57	E. A. Moore	Skylark 2	Lasham-Perranporth (G., UK spd. R)	190
27.5.57	M. S. Hunt	Olympia	Edgehill-Gillingham-Liskeard	187
28.5.57	A. H. Warminger	Skylark 3	Swanton Morley-Purse Caundle	189
1.6.57	Deane-Drummond	Skylark 3	Lasham-Kidderminster-Lasham (UK goal-and-return record)	197
1.6.57	D. D. Carrow	Skylark 3	Lasham-Edgehill-Gt. Yarmouth	204
11.6.57	J. Tweedy	Sky	Camphill-Hawkinge (Goal)	195
12.6.57	G. A. J. Goodhart	Skylark 3	Lasham-Dover-Vitry en Artois	188
23.6.57	P. A. Wills	Skylark 3	Lasham-Firle-Tarrant R.-Wadebridge	281
23.6.57	D. M. Kaye	Skylark 2	Camphill-Hawkinge (Goal)	195
23.6.57	D. A. Smith	Sky	Dunstable-Plymouth (Goal)	190
23.6.57	M. P. Garrod	Skylark 2	Dunstable-Plymouth (Goal)	190
23.6.57	C. A. Bentson	Olympia	Dunstable-Holsworthy	188
23.6.57	J. C. Neilan	T42 Eagle	Lasham-Perranporth (Goal)	191
23.6.57	D. Stowe	Olympia	Nympsfield-Land's End (landed short)	187
25.6.57	H. C. N. Goodhart	Skylark 3	Lasham-Cerne A.-Nympsf.-Las. (spd. R)	192
26.6.57	A. A. J. Sanders	Skylark 2	Lasham-Chipping Norton-Coltishall	192

190 Miles in a Gull I

by Norman Preston

On that outstanding record day, 12th April, three members of the London Gliding Club flew down to Plymouth for their Gold C distances. One had a Skylark III, one a Skylark II, but Norman Preston, with his good, old-fashioned Gull I, helped it to set up a private record of its own.

NOWADAYS a Gold C distance flight is becoming a fairly common occurrence, and the route to Cornwall in particular is becoming a well worn groove. This flight is only of interest because it was done in an intermediate type glider, a Gull I. It does show that a Gold C is possible without laying out vast sums of money for high performance. This article, then, is dedicated to all those impecunious people that cram in the hours on vintage machines and have ambition.

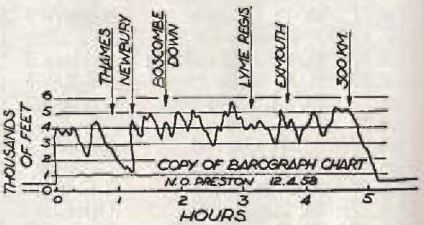
However, I should admit that, having risen early on Saturday, 12th April, and rushed out to Dunstable, I hoped to bag a Skylark for the day. All the machines were booked by 6 a.m., apparently, and so I rigged the old Gull. The Gull I, for those who do not know, is a very photogenic aircraft with gulled wing and struts. It has a best glide angle of nearly 1 : 20, has little penetration but is wonderful in thermals. This particular Gull was built in 1938, has a redesigned nose and is owned by a group of four.

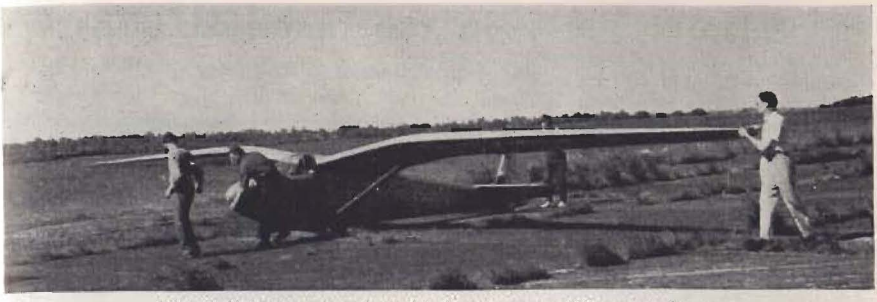
As I was flying the slowest machine, I was first to be airborne of those trying for the distance, and the tow-rope was released at 3,000 ft. a.s.l., 5 miles upwind (north-east) of the club. The time was 10.40 a.m. (G.M.T.). After a shameful fumble, lift of 6 to 8 ft./sec. was found. Things went pretty well and, forgetting my flight plan to go slowly at the beginning and end of the flight, I tore off downwind (45 m.p.h. in the Gull). The cumulative effect of acting like a bull at a gate and having to stay away from cloudbase in the airway soon got me down to under the release height. Relief came, and just outside the airway I was able to climb to 4,500 ft. I found I was already south of my correct course, there being a lot of north in the wind. I crossed the Thames at Pangbourne, the sky ahead looking completely dead. Several people noticed a lack of lift over this stretch of country within the next hour, and two people in fact landed. I found myself scratching around at 900 ft. indicated, and circled in 1 ft./sec. up to 1,200 ft. I was eventually obviously sunk, and as a last chance "S-turned" on the downwind side of a large harrowed field preparatory to landing. At about 700 ft. above the ground the thermal started and I got my best lift of the day with 10 to 15 ft./sec. back to cloudbase.

All this effort made me perspire very much and my tongue dry. I discovered that I had forgotten to bring sweets and drink. The inside of the canopy, due to my exertions, had steamed up and this was now turning to ice.

I found that navigation was causing me a lot of trouble, as I was fully occupied flying the machine. In a machine like the Gull one loses a lot of height between thermals, and to miss one often means that you are on the







The Gull I gets around, and is here seen on Wing aerodrome

ground in a very short time. I decided, therefore, not to let navigation interfere with my efforts to keep the machine in the air.

In the two hours from Newbury the flight was perfectly straightforward and nearly 90 miles were covered. Although at times the sky looked particularly blank, there was no difficulty in connecting. I generally lost about 1,500 ft. between thermals with maximum altitude of 5,000 ft. When flying straight and level I endeavoured to set a course slightly north of west and flew at 45 m.p.h. I took little interest in the ground, but eventually recognised Yeovil to the north and then sighted the coast. My greatest worry, that of being forced to do a cross-wind beat up the Chesil Bank, was then over.

I came close to Lyme Regis and flew parallel to the coast trying to keep about two miles inland. Exmouth came up out of the haze and I became painfully aware that there was now much to lose if I made a mistake. According to plan I stopped hurrying and hung around over Exmouth trying to get as much height as possible to cross the estuary. I thought that lift would be meagre on the downwind side of the Exe, and this is how it, in fact, turned out. I spent a very uncomfortable 20 minutes circling towards Newton Abbott but eventually got away to 4,800 ft.

I had very foolishly nominated my home at Kelly Bray, Cornwall, as goal, and I now had to decide whether to go straight over Dartmoor to the goal or to go around. I recalled some theory about wind shadows and sun-facing slopes, and the sight of blue sky over the Moor and a crescent of clouds around the south compelled me to make sure of the 300 km. first and then try for the Diamond. The clouds mentioned, like all the clouds that day, were flat, miserable looking things and quite unlike the forecast of instability to 9,000 ft.

After a climb to 5,300 ft., I crossed the 300-km. arc, flying straight in reduced sink over the Yealm estuary. I then started the cross-wind beat to my goal, passing over east Plymouth at 4,000 ft. I continued flying north and outside the 300 km. arc but called it off just north-west of Roborough and went back and landed.

My time for the 300 kms. was 4 hrs. 50 mins. and I touched down 20 minutes later. I estimate that I spent about two hours in straight flight.

Later I greeted the other successful pilots, Charles Ellis and John Westhorpe, on landing. They, incidentally, nominated Roborough as their goal. Finally the flight was rounded off by a smooth retrieve, and my thanks are due to Irene Sweet and Cedric Vernon for their patience and untiring efforts to get the Gull home.

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Poland's Entry in the Standard Class

by Adam Zientek

RECENTLY the *Szybowcowy Zaklad Doswiadczalny* (Polish Soaring Institute) brought its prototype "22" to Bielsko for the first trials. The SZD-22 "Mucha-Standart" is a development of the famous Mucha (Fly), which is used in great numbers in Polish gliding groups and has made several Diamond and record flights. Muchas are also well known abroad; they are built under licence in China, some are flying in East Germany and Switzerland, and one has passed its type tests in France.

In the design of the Standard version, the object has been to improve the performance and at the same time to take account of the regulations applying to the Standard Class, so that the machine can take part in the forthcoming World Championships. The general design is by W. Nowakowski; the detailed design was under the direction of R. Grsywacz.

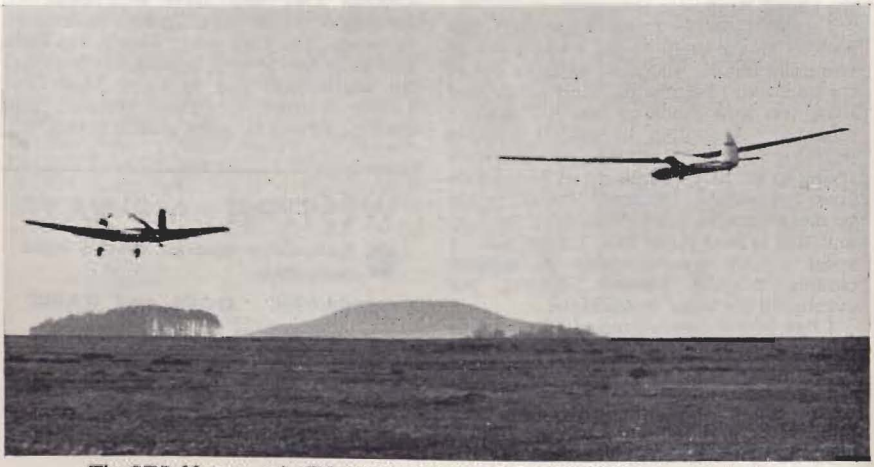
The SZD-22 is of wood construction in the conventional manner; it is suited for aerobatics as well as high-performance soaring. The chief data are:—

Span, 15 m. (49 ft. 3 in.).
Length, 17 m. (23 ft.).
Wing area, 12.75 sq. m. (137.2 sq. ft.).
Aspect ratio, 17.6



Adam Zientek, in the cockpit of the SZD-22, has a few words with the designer, R. Grsywacz

Empty weight, 210 kg. (463 lb.).
All-up weight, 320 kg. (705½ lb.).
Wing loading, 25.1 kg./sq. m. (5.14 lb./sq. ft.).
Max. permitted speed, 250 km./h. (155 m.p.h.).



The SZD-22 is towed off for its test flight, with Adam Zientek as test pilot.

OBITUARY

ROBERT SYMONS

It is with deep regret that we report the loss of Bob Symons in a glider accident on 19th April at El Mirage, California. Bob was manager of a flying operation at Bishop and was one of the first pilots to explore the Sierra Wave. He was looked upon as the most experienced mountain pilot in the U.S.A. and has made numerous rescue flights in the High Sierras.

B.W.

W. O. MANNING

William O. Manning, whose death on 2nd March we regret to report, was in at the beginning, both of powered aviation and of organized gliding in this country. Starting in 1909, he was one of the "Brooklands Community"; he joined the Naval Air Service in 1914 and left it to design the famous "F" class flying boats. He was a member of the Royal Aero Club's accidents investigation committee during the whole of its existence.

For the Lympne meeting of 1923, described as a "motor glider" contest, which followed the first British soaring contest of 1922, Mr. Manning designed a machine on up-to-date sailplane lines called the "Wren", with an incredibly low petrol consumption. He was in at the formation of the B.G.A. and was on its Council for a time up till 1935. Recently he gave the London Gliding Club a fascinating lecture on the early days of aviation.

Mr. Manning's son, Gerald, was active in the Dorset and then the London Gliding Clubs, and attended a gliding course in Poland in 1938; he unfortunately lost his life in an accident to an H-17 in 1946.

A.E.S.

G. P. OLLEY

Gordon Olley, who died on 18th March after a life in commercial aviation, once put up a World's gliding record when, on 21st October, 1922, he soared a two-seater Fokker biplane glider over the Itford-Firle ridge on the South Downs for 49 minutes with a passenger. Later that day he soared Fokker's single-seater biplane for 38 minutes. He was one of only six competitors to succeed in soaring during the week's contest.

How to get "SAILPLANE AND GLIDING"

Owing to increased postal rates and rising publication costs, the Association regrets that postage must now be charged in full. From 1st October 1957, new and renewal subscriptions obtained through the Association will be 17s. ($3.00) per annum, both home and abroad. The price of the magazine remains unchanged at 2s. 6d.

"Sailplane and Gliding" can be obtained in the U.K. at all Gliding Clubs, or send 17s. (post free) for an Annual Subscription to:—The British Gliding Association, Londonderry House, 19 Park Lane, London, W.1. Single copies and most of the back issues are also available, price 2s. 10d. post free. Enquiries regarding bulk orders of 12 or more copies, at wholesale prices, should be made to The British Gliding Association.

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CLUB AND ASSOCIATION NEWS



I recently asked Press Secretaries for photographs which could be included in SAILPLANE & GLIDING. The response has been encouraging but unfortunately the standard of photographs, good as they may be for interest, does not come up to standard for reproduction and the ultimate result would be very poor in print.

With the summertime now with us, opportunities should arise for some interesting pictures of club activities which may be of interest to SAILPLANE & GLIDING readers but remember that clear, sharp, contrasted "glossy" prints give the best results for half-tone printing.

This also brings me to my next request. A number of clubs are fortunate enough to possess club ties, car badges, blazer badges etc., and it would be interesting to show these.

I hope, starting next issue, to include pictures submitted by clubs, so will Press Secretaries kindly send their photographs of these items to me with a short description as soon as possible.

Will Press Secretaries also please note that club news for the August issue should be sent to S.E. Ambulance Station, New Cross Road, London, S.E.14, by first post 18th June, typed and double spaced.

COLIN MOORE,
Club and Association News Editor.

ABERDEEN

THE past six months have seen a complete change in our flying site and future outlook. Our move from Inverallochy to Dyce has all the attendant advantages of having the majority of members within a distance of ten miles from Dyce compared with the forty-five miles previously involved.

Our thanks go to Sir Roger Conant who did considerable negotiating to enable the change of site, the actual "flitting" occupied two weeks and was accomplished at the expense of much hard work, at least one axle being bent due to overloading and a considerable amount of hilarity, the main convoy resembling a cross between a mobile scrapyard and a circus.

The hangar doors have now been modified to allow the entry and exit of the T-31 without de-rigging, with this hangar, an excellent flat site, a T-31B, 2 Tutors and a Cadet all with C.'s of A., two winches (one a two Drum), a tractor and a jeep we look forward to our best year to date. As the

Easter course proved such a success there will be another eight during July and August.

G.P.W.

ANDOVER

We don't know what else the C.F.I. (Andy Gough) has up his sleeve but he has certainly organised a variety of surprises for us. Whilst continuing to operate from Andover Airfield, we also visited Oare Hill for ridge-soaring The trip was followed up by another to Nympsfield site where such excellent hospitality and facilities were provided by the Bristol Club that we were able to chalk up the following results:—

Wilf Shepherd, Ernie Baker, Roger Burton, Harry Gray and Katie Cater each gained a C certificate.

Wilf Pickles and Ken Newholme both gained their Silver C for a duration flight of over five hours.

This is a shining example of good co-operation between clubs and much credit is due to the Bristol Club for their kindness and hospitality.

On the home pitch at Andover, Miss Jean Letch and Jock Gregg both qualified for their C and Aircraftsman Greenwood went solo.

Having completed 1,000 launches in March we are now getting well into our stride again for the season. News travels far these days and we were pleased to see a two page write-up of the club in the Finnish aviation journal ILMAILU.

J.D.

BRISTOL

Three members were encouraged by conditions on Saturday, 12th April, to declare St. Just via Yeovilton, and all got away from winch launches. None reached their goal, but Peter Scott in his Sea Eagle got past Penzance, and subject to the usual ratification, should become the first club pilot with a Gold C. Peter Collier in the new club Skylark II was unfortunate to cover 185 miles before being let down short of Penzance, whilst Derek Stowe in the club Olympia landed short of the turning point at Yeovilton after 55 miles. The next day, Doug Jones in the Red Olympia tried the same route, and found mainly clear skies beyond Yeovilton and landed eventually at Exeter after covering 92 miles.

During the same week end, two aircraft from the Tiger Club came down to provide 42 aero-tows in a strong east to north-east wind. The T-21, T-31, and T-42, were all towed successfully, as were the single seaters, and many members were initiated into aero-tows. We operated two winch lines simultaneously with aero-towing, and had no trouble, despite the rather restricted width of field. It is hoped to have aero-towing facilities provided regularly, and in particular, during the National Gliding Week at Nympsfield.

During the early part of the year we were able to take advantage of the long spells of northerlies to soar our two main ridges and in the first three months, logged over 200 hrs., compared with half that amount in 1957. Harry Daniels froze out his five hour duration leg in February, and completed his Silver C, whilst on 6th March, Peter Scott made a 28 mile goal flight to Shrivenham where he was due to give a talk. The R.A.F. Wessex Club had a successful camp during the same week, and logged over 60 hrs., and later the College of Aeronautics held their third camp at the site.

Our annual Easter camp produced very little soaring, Monday being the best when at one time, everyone was able to stay up at 3,500 ft. above the site. Otherwise flights tended to be short and lift restricted, as Mick Kaye found on the Tuesday when he scraped in from Long Mynd in the Derby and Lancs. Skylark.

We had a good attendance at our twelth post-war annual general meeting which was the first formal meeting to be held on the site.

Elections of club officials for the current year brought no great changes, the major posts being filled by John Cochrane as Chairman, Alwyn Sutcliffe as Vice-Chairman and C.F.I., Tom Parkes as Secretary, Alan Smith as Treasurer, and Doug Jones as Ground Engineer, for the ninth consecutive year.

M.G.

CAMBRIDGE

The flying activities of the Club in March and April have been a blend of the glorious with the not so glorious.

In March, John Griffiths, Anthony Edwards and Peter Bulman set forth with the Skylark II to soar the Helm Wind from Cross Fell in the Pennines. However, the

wind blew from an unexpected quarter and they found themselves exploring the S.E.-slopes of the Lake District, including the well-known Blencathra. Launching from Priest's Crag, they logged 22 hrs. soaring on 7 days. John Griffiths completed a 50 km. triangle in hill-lift, and Peter Bulman had the refrigerating experience of a climb to 10,000 ft. in a wave above this magnificent scenery.

The Camp at the Mynd just before Easter was completely fouled by the weather. The whole Club fleet did no more than 107 circuits almost without any soaring whatever. The hospitality of the Midland Gliding Club was therefore appreciated all the more. The Skylark II remained at the Mynd for the Easter Task Flying where Ann Mari Neumann earned most marks of the modest score of the team. On the same occasion, Bryce Smith enjoyed a very subtle wave flight at 7 o'clock in the morning which brought the flying time of the team up to 4 hrs.

The Olympia was taken to North Wales over Easter by Mike Gee, Barbara and Lionel Alexander. Some of the details of this expedition have already been vaguely indicated on page 65 of the April edition of SAILPLANE & GLIDING (with apologies to Lewis Carroll and to Bill Crease). The Olympia not being soluble in sea water, the matter found its way into the National Press.

Another way of getting one's name into the paper is to get a good weather forecast, have a tow upwind into East Anglia and then go a long, long way beyond Lasham. Well, John Hulme did all that in the Skylark II on Saturday, 12th April, but he did not go far enough to retain the Distance Record he set up last year by going to Truro. Still, John Hulme covered 165 miles from Thetford to Sturminster-Newton in Dorset, and this ranks among the best flights of the Club. John has not given up; he keeps talking about the geography of East Anglia, but thank goodness, he does not talk about aircraft carriers beyond Land's End.

G.S.N.

CORNISH

THE weather this Winter—yes, even on the Cornish Riviera—has not allowed us to fly as much as we should have liked but in spite of this we can report three more C certificates, three more A and B (one of them being the first by one of our *ab initio* lady members), and a further two duration legs for the Silver C. In the past we had thought that our cliffs would only produce really good soaring with W. to N.W. winds, but recently we have proved that at other points on the perimeter of the airfield there is lift right through N. to N.E.—and with an aero-tow, in the right conditions, it is easy to reach wave lift from hills away to the East.

In spite of our finances not being all that we should like, the Club has ordered a Tutor with canopy and full spoiler mods., and the private syndicate owning the Olympia has agreed to a scheme by which we shall purchase it on an instalment system, financed from the fees of those who fly it.

One of our Instructors who is shortly leaving the Forces has agreed to work full-time for the Club during the summer months. This will be of great value to us in that, with a seaside resort on our doorstep, we must be unique in having amenities for non-flying members of the family, while the enthusiasts are being catered for every day of the week.

Even now—though still flying regularly on Thursdays, Saturdays and Sundays—a very willing team is always ready to turn out on specially good days to get members airborne, particularly for those aspiring to their C and Silver C certificates.

C.M-H.

COVENTRY

DESPITE poor weather, the first three months of 1958 have given us even better flying than the corresponding winter months of the two previous years and our first quarter score was 1,255 launches and 155 hrs. Encouraging features have been a steady influx of new members (our membership this year already tops the 100 mark) and a steady flow of new solo pilots; A's and B's go to:—Messrs. Meakin, Deakin, Jenner, Jackson, Glover, M. J. Smith, F. Neale and May.

We date the real opening of our soaring season from the first 3,000 ft. climbs, and these came early in March, with the new Prefect keeping well up with the Olympias and yielding a batch of C's to Messrs.

North, D. Wright, O'Cleary, J. Brook, and M. J. Smith.

The Easter week-end proved most disappointing, though we flew both at Baginton and at Edge Hill. We were, however, able to get aero-towing started again and a few pilots had their first experience of towed flight, while we were very glad to see the rejuvenated Viking, after months of hard work, emerge from the workshop for successful test-flights.

Then, to compensate for the poor Easter weather, came that wonderful next week-end of soaring weather, 12th-13th April, when the pundits from "*The 'Ub*" were making and breaking records with such *élan*. We at the *Centre* of British Gliding did our little bit to keep the flag flying, for we logged some 350 miles cross-country flying in the two days. On the Saturday, Ivor Tarver took the green Olympia 130miles in search of Cornish Gold, but had the bad luck to get blown too far South and landed at Bridport after going three miles out to sea in the bay; he found later that three other sailplanes from the Midlands came down close to him, having also decided that this part of the Channel is a bit too wide to get blown across "by accident"! The same day John Greenway flew the syndicate red Olympia to Cirencester and Norman Bell the Prefect to Gloucester; next day Louis Glover landed the red Olympia at Great Malvern and Peter Berthelson the Prefect at Tewkesbury; all four pilots thus completed their respective Silver C's. This was indeed a great weekend for the Club and has created great enthusiasm, whetting our appetites for many more cross-country miles this season.

A third syndicate has now been formed—John Colvin, Brian Gilbert and John Brooks have acquired a Kite II all the way from Edinburgh—so that our present strength is six Club and three syndicate aircraft.

On the domestic side, having long since outgrown the small Clubhouse hut presented to us by our President when the Club started, we are investigating the possibility of buying a secondhand "prefab." Though we are usually too busy flying or working to worry overmuch about such amenities, it will be nice to be able to offer a more comfortable welcome to our visitors, of whom we are all glad to see more and more coming to Baginton.

H.N.G.

CROWN AGENTS

THE Club's annual "social evening," hitherto held as a New Year event, was deferred until 11th March when some 40 members, honoured Patrons and Guests were present. The consumption of cocktails and light refreshments was interrupted by a 20-minute interval during which A. Gehriger's beautiful colour film of gliding in the Swiss Alps was shown and greatly appreciated.

On the occasion of the B.G.A. Ball on 14th March, the Seager Cup for best two-seater performance—100 km. triangle at average speed of 35 m.p.h.—was presented by the wife of the Polish Charge d'Affaires to A. David Marshall, a member of our committee. He was second pilot in the Gull II to Dr. D. Brennig James who was unable to be present to receive the award in person.

Dick Kuyper and family have arrived from Kenya and will be residing at Lasham for several months.

The Annual General Meeting was held at the Crown Agents' Offices in London on 14th April, and the Chairman's and Hon. Treasurer's reports revealed steady progress, in spite of the undoubted handicap of so many members being stationed in various overseas territories.

J.E.G.H.



D. G. Kuyper, B.Sc., a member of the Nairobi G.C., on leave from the Ministry of Works, Kenya

DUBLIN

OUR season opened on Sunday, 6th April with a 16 mile dash by Ken Mellor in the Kite II and our new Hon. Secretary, Roger McCraithe made his C in the Grunau.

The following unforgettable Sunday Mike Harty, also in the Kite, took the Irish distance record with a four-hour flight going the long way to Tipperary (90 miles). He worked six thermals and topped 4,200 ft. for his Silver C height.

The main feature of the flight was the presence of thermals over the Irish bogs. Until now most of us had thought these would prevent long thermal flights in Ireland. Of course, during the last few years a lot of drainage has been done in many of the bogs and cultivation has begun. No doubt, the black ploughed turf soil makes a good thermal source.

Con McNulty took the second launch on the same Sunday and set off after Mike in the Grunau. He had a great start from the top of the launch but struck a bad patch in front of some hills near Ardee and had to land just 34 miles out.

Just as plans were settled for going ahead with a hut to house the Kranich and Tutor the Government Department concerned with buildings at Baldoyle woke up and the possibility of our using one of the main hangars has again come up for discussion. We hope now that before the season is out we will be able to keep all our aircraft permanently rigged.

K.J.M.

EAST AFRICA

GLIDING in Kenya received a severe blow in April, 1957, when Buttercup, our T-21B, stalled severely and started a mild spin at the top of a low and slow launch and was not able to recover in the 150 ft. available. She came in wing first and broke off some six feet of tip. No damage to the occupants but the air was blue for miles around from their remarks!

Flying continued for the remainder of the year in the Cadet Mk. I and Grunau IIB, but no instructing was attempted. One or two good flights were recorded, notably a climb in the Grunau to 16,100 ft. a.s.l. in a clear air thermal—a gain of height of 8,600 ft. (one needs oxygen for Gold in this country!) On another occasion a smooth powerful lift of 15 metres/sec was experienced in a cold front. There is no doubt that the surface of soaring possibilities in this country has not been scratched yet.

Buttercup came back to us fully repaired in December, 1957, and instructing started again in earnest. Public interest is slowly awakening and the Association is once more almost on its feet.

The Kitale Flying Club have inaugurated a Gliding Section (affiliated with E.A.G.A.) and a group of enthusiasts, led by John Crampton, are busy completing a kit T-31B. They also intend rebuilding a bent Cadet.

Dick Kuyper, who has been a moving spirit in the gliding movement in this country since its inception, is on overseas leave at present, and intends to spend some 6-7 months in a caravan at Lasham sampling English conditions. He has thought up a meteorological theory in connection with soaring, which he hopes to prove in this time. He is very mysterious about it however, so we will have to wait and see!

Mention must be made of Johnny Womack, without whom the movement would have collapsed in the past year. He not only instructs every week-end but has also taken on himself the safety of our machines, spending long evening hours patching and painting and doing C's. of A., ably assisted by Bim Molineux.

P.B.E.T.

FOUR COUNTIES R.A.F.

IN mid-April we moved all our gliders and equipment from Wittering to R.A.F. North Luffenham and have already begun gliding from our new site. During our two years at Wittering we flew 472 hrs. and 4,771 launches, mainly using auto-tow on the single runway and a fleet of three aircraft. At North Luffenham we are blessed with three runways, a capacious hangar and several club rooms. Our present fleet of four aircraft has been increased to five by the addition of a Cadet I rebuilt by J/T Hosey who has also become an assistant instructor.

Cdt. Cole and Cpl. Webb got their C's in March; T. A. M. Bradbury, our Met. Officer, and P/O Ken Jones their B's in December.

During Easter, eight members took the Grunau to the Mendips to get in some ridge soaring on S.W. facing slopes. Unfortunately the wind was almost consistently N.E.,

and thus we flew only 8 hrs. and 44 launches in six days, but Mich Coton managed a flight of 1 hr. 44 mins. on Bleadon Hill in an 18 kt. north-easterly.

T.J.B.

HALIFAX

OUR flying activities closed down on Sunday, 12th January, when we had a mishap to our T-31, but by the time these notes get into print we are all hoping to see it back with us from Fred Breezes' workshop.

We had plenty of activities on the engineering side by our engineer, Gordon Hoyle and his team of hard working members who have done a wonderful job, giving the winch a complete overhaul. The engines have been serviced, new tyres fitted and finally, the winch has been painted a brilliant yellow. Our Ex W.D. Standard Towing Truck has had an overhaul and also painted yellow. We thank our President, John Haigh for the use of his workshop. It has been a big help in enabling us to get overhauls completed.

Through negotiations by our President and the committee with the Yorkshire Gliding Club and the Yorkshire Aero Club, we will be able to fly from their site at Sherburn. We shall also share hangar and garage space for our equipment. The move will improve our training facilities after Crossland Moor which was a difficult site for *ab initios*.

On Easter Sunday all our ground equipment was moved to Sherburn. Now we are waiting to commence flying once again. The possibilities of a soaring site in the Halifax area are still being investigated and we hope that eventually a suitable one will be found.

R.M.

HANDLEY PAGE

OVER the winter the Rhönbussard has been stabled at Dunstable. We would like to extend our thanks to the London Club members for tolerating us for so long; and often helping to rig an awkward machine. Although not used quite as much as it might have been, Ron James and Alan Vincent gained their 5 hrs. on consecutive week-ends in February.

The Rhönbussard was returned to Radlett at the end of March, and Louis Dowdall, who has done most of his previous gliding at "The 'Ub" has been converted onto it.

Over Easter the Rhönbussard managed some local soaring. On Easter Monday the Lasham bound cloudstreets that were visible early in the morning gave way to the overcast at 9.30 a.m. This was a pity, as the first launch was at 9.45 and the maximum height attained was only 2,600 ft. Later in the day Peter Elwood flew his A and B in the T-31. Peter was bitten by the gliding bug on one of his early flights last year when he was taken up to 5,000 ft. in the two-seater. He now realises that this doesn't happen every week-end!

An open trailer has been bought by the club and should be able to carry almost any two piece wing machine. This will replace the original Rhönbussard trailer, which failed to survive a Long Mynd expedition some time ago! Towing attachments are now appearing on members' cars, so there should always be a choice of towing vehicles.

Although our club is forced by security to be a restricted one, three quarters of the full members are solo pilots and two-thirds of these fly the Rhönbussard. In the summer however, we usually double our membership with temporary members, who

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unfortunately never survive the following winter, but can often be seen reappearing in the following spring, after the C. of A's. have been completed. An intensive campaign is being launched this year to catch these members!

This year a soaring league is in operation, working on a points system. It is hoped that this will create a competitive spirit without too much "needle" creeping in. Points will be awarded for certificates gained, Silver C legs and local soaring. If the scheme is a success it will become a regular feature.

Over the "Diamond" studded week-end of the 12th April, Tony Newton gained his C in the T-31 and Mike Wilson flew the Rhönbussard a few miles south of Woodley to complete his Silver C.

M.W.

ISLE OF WIGHT

BAD weather, together with modifications to the runways, severely hampered training and general flying activities on our Sandown site during the early part of the year and, to date, only a few hours have been flown in our recently acquired T-31, which, as you may have read in the last issue of SAILPLANE & GLIDING, we obtained in a part exchange transaction with the Coventry Club for our sadly missed T-21. However, a new technique of training is now developing and even the diehards are coming round to accepting the new aircraft.

March 9th was highlighted by an aero-tow session. Nepean Bishop paid us a visit with a Tiger Moth and, in the resulting flights, most members of the Club were able to experience their first aero-tow training. A tow in the Grunau to 2,000 ft. enabled the writer to gain his C certificate with a flight of 30 mins., a none too brilliant achievement considering that the T-31, in the hands of our C.F.I.—B. J. Rees, had to be deliberately dived after 23 mins. in order to reduce the flight time so that everyone would have a chance to fly.

Good Friday and Easter Sunday saw our Grunau being loaded onto the trailer and towed on an exploration of various hill sites throughout the Island. On Easter Monday we were able to operate from our Sandown site and we had the honour of giving Duncan Sandys his first experience of glider flying.

We are very pleased to welcome Pat Whelan, formerly of the Dublin Club, as a full-time flying member and not just a visitor as in the past.

As you saw in the last issue, *ab initio* courses have now started at Sandown and apart from the full-time Monday to Friday courses we are also able to provide accommodation for mainland members or any other interested persons during the week-ends.

J.L.

KENT

EASTER, as with everybody else proved to be very disappointing and Good Friday was the one day that any soaring took place. Micky Gilbert in the syndicate Skylark II stayed up for 2 hrs. joined occasionally by the T-21 which had half-hour flights.

The week-end April 12–13 which was so good for some, was for us killed by a strong wind which reduced flying to circuits, all that we achieved was in the T-21 which when headed into wind could be seen to fly backwards! The Olympia was flown but could only find delayed sink for short periods.

Two more members have recently gained their C; J. Coupe and J. Sendles flying the Prefect. The T-31 is having a C. of A. which has curtailed further solo training of late.

Prefects pilots are gradually being passed out to fly the Olympia, so we are hoping soon that cross-countries will become the order of the day, rather than the exception to the rule.

C.M.

LAKES

THE Westmorland Winter is never very severe by some standards, but this past one has seemed more bitter and prolonged than usual. The same familiar group of members have been standing by each week-end, gradually witnessing the growth of the club hangar—the fruits of several weeks' struggle against time and climate. Fortunately, we have Lady members to share the discomforts and provide hot meals on such occasions.

Now, as we negotiate the rough track up to the site, the gaunt outline of the yet-roofless building dominates that particular area of bleak moor. No doubt certain local hill-farmers will already have made mental estimates of its sheep-holding capacity, or other such rural use.

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With the sudden approach of Summer weather, and with the completion of the hangar in sight, hopes of a not-too-distant resumption of flying are stirring in many breasts. The Venture 2-seater is undergoing C. of A. at the moment, but one of the two Tutors will be at readiness at the word go. The winch sounds healthy after lengthy "Paley" treatment.

As a dual-purpose function of raising club funds, and bringing together our widely-scattered members, we held a successful social in the R.A.F.A club in Kendal on the 14th March. Especially welcome was a strong contingent from Dumfries.

Club Funds—AH! If only our financial resources matched the enthusiasm of some of these members!

J.W.A.

LASHAM

TRAINING and testing have been plodding along when the weather was kind. Easter was almost a disaster, although Good Friday gave us local Lasham weather which was reasonably soarable. By Saturday skiing was the only sport available!

But compensations arrived on the week-end of 12th-13th April. Saturday was obviously a day of days and members were out on the field shouting for aero-tows at 7.30. By about 11 o'clock we had managed to get everything off the ground and could sit back and wait for results.

Nick Goodhart managed 500 km. to Penzance in his Skylark III—"legalising" his foreign diamond and of course, covering that spectacular distance for the first time in the U.K.—establishing a distance record of 295 miles.

Wally Kahn and John Williamson (on a week-end leave from Malta) took a T-42B to Perranporth from Odiham at 43 m.p.h.—a 2-seater goal record. Frank Irving overflew Perranporth and missed a diamond but collected his Gold C distance in his new Skylark III—while the rest of the syndicate did some super-efficient retrieving. Ann Burns in her Skylark III went to Perranporth—the first feminine U.K. diamond for a goal flight, first feminine U.K. Gold C and the feminine U.K. distance record.

Less fortunate were John McKenzie, Jill Walker, Rika Harwood, Ann Welch and John Corbett, but we managed to get Peter Baker off on a 40 miles trip to Ringwood in John's Skylark II after retrieve—two cross-countries in a club machine in the same day.

On Sunday the 30 m.p.h. wind dropped a bit and there was almost no cloud, so we offer special "blue thermal" congratulations to David Ince for his 315 mile flight to St. Just from Lavenham where he released from a two hour upwind tow. Flying the prototype Olympia 419, he broke Nick Goodhart's record of the day before by 20 miles.

Courses at Lasham are now under way and we are very glad to welcome two new instructors to the staff, John Messervy and Gordon Cornell. John appears at week-ends in the role of permanent duty instructor which must be dreadful for him but is splendid for everyone else.

B.H.

LONDON

SINCE our last notes the season has really got under way.

Easter was on the whole very poor, only Good Friday producing anything, with Silver C distance for John Westhorpe, a goal flight to Lasham for Philip Wills in the Skylark II that he will use in Poland, and another flight of about 40 miles by Freddie Phelps. By noon it had begun to cloud over and the rest of the time it either rained. snowed, sleeted or blew.

On the 12th April, however, it really was cracking and the results were quite something. John Westhorpe made gliding history by following up his previous week-end's Silver C distance with his Gold C distance and a goal Diamond! He flew the Skylark II to Plymouth, 193 miles in 6 hrs. Norman Preston in the elderly Gull I declared boldly for his family home nine miles from Plymouth and reached Plymouth Airport in 5 hrs., Gold C distance, a masterly performance in a strutted sailplane. Charles Ellis in the Skylark III hurried along the 193 miles to Plymouth, his goal, in 4 hrs., to collect Gold C distance and a Diamond. Godfrey Lee in his Olympia was unlucky and started later; even so he got to Newton Abbott about 170 miles. Philip Wills after an upwind tow in the Skylark II went 246 miles to Oakhampton Jeff Butt took the Sky to Shalbourne near Newbury, Dick Ruffett took the Olympia to Newbury, Mike Fairman and his Meise got to Exeter. Finally Ron Tull flew the Grunau to

Princes Risborough. This day produced 1,325 miles of cross-country flying.

Sunday, 13th April for us was not nearly as good. Most people found the going much harder. However, John Drake took his Kite I to Benson, 30 miles, Roger Pollard completed his Silver C distance by flying the Sky 48 miles to Welford, Harry Simler did the same by taking the Olympia to South Marsden, near Swindon, and finally Roger Bradford flew his Petrel to Blewbury, about 50 miles.

The week-end total was about 1,500 miles which is a good start to 1958. One flight which deserves a mention took place on Friday, 11th April, to Stonehenge by our C.F.I. John Everitt, in the Skylark III. There is no truth whatever in the rumour that he used one of the stones as a wing tip weight!

P.F.

MIDLAND

The main item of interest since our last report is the Easter Rally, featured on page 137.

J.H.

NORTHAMPTONSHIRE

In spite of snow and easterly gales, two more members have qualified for their A and B Certificates. They were W. Mason and J. Swann, on the 13th March. This gives us a total to date of 19 *ab initios* trained in just over seven months of flying time. Several newcomers have appeared in the last few weeks, and will shortly commence training on our Saturday afternoon sessions.

The Tiger Club visited us for the first time during the week-end 15th-16th March, and their appearance (in tight formation) was very welcome. We kept them busy with aero-tows, and even persuaded them to take up a Press photographer so that we could have a record of a Tiger in action. They are to come again for the week-end 19th-20th April, and we look forward with pleasure to their arrival.

Easter week-end brought us two visitors, one from the Coventry Club, and one from Bristol, and at about the same time the club put into action a new plan which may have far-reaching consequences.

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At one of the local schools a group of boys has begun training to qualify for the Duke of Edinburgh's Award. Four of them wished to take up gliding as the activity which they were to pursue during their six-months' training period, and the club was asked if facilities could be given. A scheme of training was worked out, giving them adequate theory and ground work, with some flying. They will not be able to go solo, as they are under 16, but will have to pass a test in the two-seater. The theory is being taken care of at school, and they are now commencing their flying training under the direct care of our C.F.I., Ken Pearson.

B.C.H.

NEWCASTLE

LIKE the rest of the country the North-East has recently been suffering the worst weather for years and as a result our flying has been taking place as and when the weather permitted. These notes, however, have been saved from being completely "grounded" by the occurrence a few weeks ago of the first, and so far, the only thermals of the season, which gives me at least two soaring flights to write about. The first was by Andy Coulson in his Skylark III who was airborne for 1¼ hrs. and the other was made by Alan Pratt who gave one of our new members his first experience of thermalling by taking him to 2,000 ft. in the T-21. The only other noteworthy flight was an attempt by Dave Wilson to do his five-hours in the Tutor on Easter Monday. The wind which was a strong Northerly one, tempted him across the river Wear to Penshaw Hill, a local landmark about three miles S.W. of the airfield which has a low ridge running in an easterly direction parallel to the river. His attempt only lasted for an hour and five minutes however, as he was forced to land at the bottom after a very good try.

The Skylark II syndicate (Ian Paul, Doug. Collinson and Les Kiloh) have taken delivery of their machine and have nearly completed their trailer which is finished, like the Skylark, in grey and red. The Skylark incidentally has started thoughts of finding "Gold" in one member of the syndicate at least, who was seen recently, hopefully studying the F.A.I. regulations for Gold C distance flights. The Sky trailer is also nearly completed; the only things remaining to be done being the fitting of the wheels and the internal "hardware".

The final sign that the thermal season is in the offing is the large number of members that has been brought out of hibernation by the good weather we had last week-end, so we're hoping it continues to provide a few extra bods. for winching in addition to the hardy annuals.

L.A.C.



Dave Wilson (left) and H. Blayden (right) in the Newcastle T-21 before take-off from Usworth

PERKINS

SINCE our last notes we continued to operate both Daisy-May, our T-21B and the Red Tutor.

The routine we had settled into, however, has been "slightly" upset by the sudden materialisation of a small tree in the landing approach area one lunchtime—Colin Donald flying the Red Tutor was the first of us to notice it.

The work to install spoilers in our second Tutor is being hurriedly, but carefully, completed.

Meantime, Daisy-May is taking us round, two at a time and if anyone has a second-hand machine of the Tutor or Prefect class for sale, our Secretary will be pleased to hear from you.

Gordon Cornell has left our happy band and has passed on to the green fields beyond, he is a full time instructor at Lasham now, our best wishes go with him.

S.W.H.

SCOTTISH G.U.

FREQUENT easterlies and much rain have rather reduced our flying hours lately, but we nevertheless managed 50 hrs. during February and March.

A. S.E.-facing slope on the lee side of Benarty, which can be reached from the site by a short aero-tow, was successfully soared on 16th March by both Olympias and the Prefect. The only local slope still not tried is the south slope of Bishop Hill; if this proves feasible, we shall be able to hill-soar at Portmoak in any wind from N.N.E. through West to S.E.

Aero-tows are now a regular feature of Club flying and present no problems for the man in the glider, though the Tiger suspension is taxed at times on landing. From aero-tows on 23rd March, John Hendry and Charlie Ross both soared in blue thermals. John came down after 1½ hrs., but Charlie, after a three-hour tour, landed for tea at Scone airfield, the home of a local flying club, about 20 miles from Portmoak. The airfield manager took a dim view of gliders cluttering up his airfield, and said he wanted no more of it. However, he allowed the Tiger to tow Charlie off again, a performance watched with great interest by the flying club members.

This year's first course began on 6th April, with Portmoak largely under water. The ground dried out quickly, however, and 214 launches were logged for something over 10 hrs. flying. Instructor Jack Alcock reached 8,000 ft. with a pupil and left the lift while still romping up to be sure of getting back to the airfield. Ansgar Sambale reached 7,000 ft. in the same wave but got involved with cloud in hilly country and landed at Sherriffmuir, 22 miles from Portmoak.

The Lawson Eagle arrived on 13th April, and everyone was duly awed by the sumptuous splendour of the cockpit, particularly the chromium-plated sticks. It was obvious from the beautiful expression of tenderness on the rugged Lawson countenance when he landed after his first aero-tow that he had had a great emotional experience, and that the Eagle fulfilled his fondest hopes. Another new arrival is a Grunau belonging to the R.N.G. & S.A. at Arbroath. The Club fleet has also been augmented by another Tutor, currently being fitted with brakes.

We are hoping to arrange to have groups of members operating at Portmoak throughout the summer, and if any groups from other clubs would like to fly at Portmoak, they will be very welcome. It would be most helpful if they would let the Secretary know some time in advance when they expect to arrive.

W.S.A.

SOUTHDOWN

THE spell of northerly winds in March and April has resulted in a substantial increase in flying hours. Apart from the extensive hill soaring which these winds give us, thermal activity has also been exceptionally good and heights between 2,000 ft. and 4,000 ft. have been reached on a number of week-ends, with Brian Buckley in the Olympia and Chris Hughes in the T-21 leading the field.

An east wind wave from Wilmington Hill, just to the west of Eastbourne, has also been contacted on two week-ends, giving heights of up to 2,000 ft. and we hope to be able to explore this more widely.

Honours for first solos this year go to Laurie Martin and Clive Hunt.

The Marquette, our "vintage" towing vehicle, has now been retired in favour of a newly reconditioned 15 cwt. which will make our operations considerably more mobile.

The club's President, Sqdn. Ldr. Furlong, has recently given to the club a most generous monetary gift, which it is hoped will be used in the form of some permanent investment as soon as possible.

An expedition has been arranged to the Mynd in June through the courtesy of The Midland Gliding Club, and the Olympia and a Tutor will spend two weeks there—two weeks which we always look forward to.

R.M.

TAUNTON VALE

THE Club held its first Annual General Meeting in Taunton on the 1st April, 1958. Mr. Hobkirk is kindly continuing as Chairman for another year with Sam Tolman as Vice-Chairman. Mr. White was re-elected as President and has generously presented the Club with a Trophy, to be awarded for the best annual pupil or the best flight of the year.

It was agreed that the Club finances were in order and the subscription was to remain unaltered, but some restraint was still

needed before greater expansion was envisaged!

At the end of March, Mr. Hobkirk test flew his Tutor which handled very well—the Club hope to buy it from him in the near future.

Morris Morey recently returned from a 1,200 miles marathon when he collected a Tutor from the Newcastle Club at Usworth. It also entailed collecting and returning a trailer from the Cornish Club and three almost sleepless nights.

We contacted our first thermals of the year on Sunday, the 21st March, when Sam Tolman soared the T-31 to 2,100 ft. on three occasions. The thermals were very rough and the temperature at that height was well below freezing, in fact one or two of our members were relieved to be back on "terra firma".

Within the next couple of months we hope to have another Tutor flying and perhaps a syndicate "Swallow"?

P.E.B.

YORKSHIRE

THE winter cold has made life very difficult for us at Sutton Bank, but at last we are thawing out, and the thermals have started popping.

Cross-country flying started early this year, when on the 16th February, in the Kite II, Ron Helliwell reached 10,000 ft. in wave lift. Deciding that he had better do something with this height, he flew off downwind and landed at Cottingham, near Hull. This flight got him his Silver C. On the 10th of April, Henry Doktor got away from Sutton Bank, again in the Kite II, and made 41 miles to Oxenholme, near Keighley He had a height gain of 8,500 ft. over Otley. The flight finished up on moorland, and we understand that Henry had quite a long wait for the rescue party. He has been trying to get his Silver C for five years, and nobody deserves it more.

At Sherburn, we had our first cross-country flight of the year in March, when Toni Ripley, one of our new B pilots, flying the Tutor, got a thermal to 2,800 ft., in strong wind, and found it hopeless to get back. He flew downwind for 16 miles, and then spotted a field he knew and made a good landing. He then hopped over the fence and had tea with his parents, whose house adjoined the field! When the trailer arrived, there was quite a party. This flight lasted 35 mins., and Toni got his C. On the same day, Chris Riddell flew to Knaresborough, and also called home for tea.

Chris again took off from Sherburn on 11th April, in the Skylark I, and got to Alton, near Ashbourne, distance 75 miles. He made splendid progress in the first stages of the flight, but was finally forced down by the belt of industrial haze.

Our new Dexion retrieving car has now been in use for some weeks, and is a great success. The frame is showing no signs of failure, in spite of very rough treatment, and we seem to have achieved complete reliability. It is very fast, and cheap to run, and our launching rate has increased considerably. In spite of being very light, it tows the winch easily.

The Halifax Club has brought over their winch and tow car, and will soon be ready to start operations.

At Sutton Bank, preparations for National Gliding Week are well advanced. The Holiday Courses are also well booked up, so we look like being very busy.

E.H.

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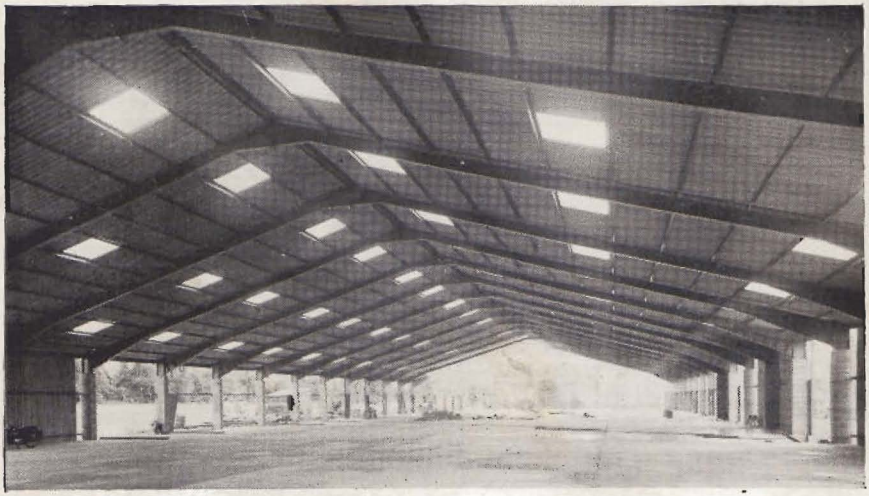
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